THE

INTERNATIONAL CONFERENCE ON EDUCATION

HELD AT

PHILADELPHIA, JULY 17 AND 18,

IN CONNECTION WITH THE

INTERNATIONAL EXHIBITION OF 1876.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION.

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LETTER.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., April 3, 1877.

SIR: The International Educational Conference, held in connection with the International Exhibition at Philadelphia last summer, passed the following resolution:

Resolved, That, in the opinion of this conference, it is desirable that there should be held at the next universal exposition an international educational congress, and that the United States Commissioner of Education is hereby requested to take such steps, whether by correspondence with foreign governments or otherwise, as to him shall seem most proper to bring about that result.

It seems most essential, in the execution of the purpose committed to me by the conference, to have printed copies of its proceedings, as the basis of correspondence with foreign powers. The information concerning the state of education in other countries, as it was given informally by the residents of the different countries who were present during the session of the conference, will be of special interest to the educators of this country.

I therefore recommend that the report of the proceedings be published.

I am, sir, very respectfully, your obedient servant,

JOHN EATON,
Commissioner.

The Hon. the SECRETARY OF THE INTERIOR.

Approved, and publication ordered.

C. SCHURZ,
Secretary.

[On the evening of June 26, 1876, a number of persons interested in education met by invitation in the judges' pavilion, to consider the project of holding a series of more or less formal conferences upon education during the progress of the Exhibition. Several subsequent meetings were held in the parlors of the Pennsylvania Educational Hall, and many interesting statements were made by both foreign and American educators. Among those who spoke were Dr. Philip da Motta, of Brazil; Professor Meyerberg, of Sweden; Hon. J. H. Smart, superintendent of public instruction for the State of Indiana; Rev. Dr. Jacokes, of Michigan; Hon. J. P. Wickersham, superintendent of public instruction of Pennsylvania; Dr. S. P. May, of the educational department of Ontario, Canada, and others. At these preliminary meetings Dr. J. P. Wickersham, of Pennsylvania, or Dr. J. W. Hoyt, of Wisconsin, usually presided.]

THE INFORMAL INTERNATIONAL CONFERENCE ON EDUCATION.

It will be observed that the following pages, which contain the reports of the daily transactions of the educational conference held in Philadelphia during the progress of the International Exhibition, do not purport to be anything but the verbatim reports of an informal assembly.

Owing to a variety of causes, the formal international conference which had been suggested by the United States Commissioner of Education early in January, 1874, as a desirable feature of the exhibition in 1876, and which had met the approval of many distinguished American and foreign educators, had proved impracticable; consequently no official notice that such a congress was to be held had been sent to foreign governments. It follows that no authorized delegates were appointed by these governments, and that the gentlemen—among them distinguished educators and friends of education from foreign countries—who participated in the proceedings of these conferences were present in their private capacity, attending only as especially invited or as attracted by their interest in the subject of education. This explanatory statement is due to those gentlemen who took part in the proceedings and debates.

Their position was fully understood by their fellow-members of the conference, and also the fact that their statements about the condition of education in their respective countries were in no respect official.

Their presence, however, was warmly welcomed, and added greatly to the interest of the sessions; and while the conference at Philadelphia was not itself, as it had been hoped that it would be, the first world's educational congress, it is believed that it will prove, in accordance with the formal resolution by it adopted, which is printed on the preceding page, the origin of the first international educational congress, to be held during the progress of the world's exposition in Paris in 1878.

All endeavors for advancing man's welfare by increasing his intelligence are directed toward the diffusion of a knowledge of the best methods which have been devised, and a consequent enhancement of the benefits which those methods may secure. In this purpose education is not behind. Central as a cause in its relation to other agencies, like them it encounters limitations of language and intercommunication. Educators, though speaking of the one subject, man, and his divers phases of development, do not use terms by which they can understand each other. Commercial enterprise, in the prosecution of its plans

among all nations, encounters similar difficulties, and seeks to overcome them by much going to and fro and by many conferences, hoping that terms on essential points, or descriptive of the great commodities of trade, may be adopted, with a meaning sufficiently common or universal to render the comparison of prices and quotations trustworthy. Christian statesmanship, inspired by the same motives, seeks in a similar way, by enlarging the scope of international law, to avoid bloodshed. The philosophical student of education feels the force of this lesson. He would draw his arguments from the experience of all people, and accord to all the benefit of their conclusions. This is especially true in our country, where neither precedents nor decrees give direction to affairs, but where their course must follow the average sentiment of the whole people. This feeling, wide spread among our teachers and school officers, has exacted of this Office an acquaintance with educational facts wherever education or the lack of it has taught a lesson that may be to their advantage. Speculation upon the topics of human development, though as ever useful in its suggestiveness, is more than in any previous age, perhaps, compelled to come to the test of facts. The demand is not, what is conjectured, but what is the fact.

In the discharge of this duty this Office has come into delightful intercourse with the great centres of organic educational action. The conditions that may improve this intercourse and the great benefits that may result from it have deeply impressed me. With a view to its further promotion, I took the liberty to suggest, in January, 1874, among other objects to be aimed at in connection with our Centennial, that an international educational congress be held. The project was uniformly received with favor.

A statement of the steps which led finally to the conference at Philadelphia will be found in the following pages:

INTERNATIONAL EDUCATIONAL STATISTICS.*

Preliminary to the reports of the proceedings of the daily sessions of the conference, it has been thought important, as bearing directly upon the subject of international educational statistics, to insert here the following free translation of a paper written by Dr. Ficker, imperial counsellor at Vienna, Austria, which is taken from the introduction of an article in Schmid's Pedagogical Encyclopedia. The distinguished author is acknowledged to be one of the most eminent statisticians of Europe.

School statistics include an exhibit of the actual state of education, and its results at a certain given moment, with a view of ascertaining the laws which regulate them. The very name, which perhaps had better be "educational statistics," shows the importance as well as the difficulty of the subject, which during the last decade has more than ever before occupied the attention of statisticians.

It may well be asked whether there can be any educational statistics, and it has seemed doubtful whether statisticians, with the means at their command, could successfully enter a field where the exhibit of mere facts would least of all seem sufficient.

* Circular of Information of the Bureau of Education for August, 1870.

Education, however, is not altogether beyond the statistician's reach. Tables are certainly the most important, but not the only, element of his exhibit. He may also give existing facts and results obtained in the form of a brief summary, only it should be borne in mind that he has to deal with a summary of *facts* and the development of *acts*. On no other field of inquiry, perhaps, will he have to weigh each expression so carefully, in order to avoid even the appearance of mixing individual opinions with his exhibit of facts, or of merely coloring them according to his own point of view.

The fact that there are limits beyond which statistics cannot go must not deter the statistician. Even in that part of statistics which occupies itself most with mere figures — financial statistics — there are points which the statistician cannot reach. The mere income and expenditure, the debit and credit of a state, do not fully show its financial capacity; they do not show in how far the property and the income of a nation are placed at the disposal of the government through the patriotism of the people and their sympathy for the government, or by the administrative machinery, and what confidence these two powers enjoy in the great market of the world — which elements are yet required for a just estimate of a country's financial power. Military statistics become unavailing at the point where the spirit animating an army, that most important source of great and glorious deeds, comes into question. Should no attempt be made to give educational statistics, because they also have their limits? because it will be difficult, if not absolutely impossible, to give all the individual methods of instruction, or the free form of scientific activity at a university? Most assuredly not; for even if only attempts are made, the way may be cleared, and the limits of inquiry more clearly defined.

The development of statistics as a science has convinced statisticians that there is only one admissible method of giving facts, viz: the comparative method, the results of which gain all the more trustworthiness the wider the range from which facts have been gathered. The question as to whether there can be any educational statistics naturally leads to the question of the possibility of *international* educational statistics.

It cannot be denied that the best and noblest blossom on the tree of human culture — the development of the intellect and of morals — blooms in every country, on its own ground, and under peculiar conditions. The educational system of a nation bears, therefore, in every country its own distinctive impress, to understand which thoroughly would require a retrospective view as well as a study of the present condition. The same difference observable in the financial, military, or commercial state of nations may also be seen in their different educational systems.

It does not, however, seem impossible to compare the school statistics of different nations. For no other object did the statistical congress meet but to compare the statistics from different states and find a common system of statistics applicable to all. Comparative statistics also devote attention to the peculiar institutions of each nation, and their aim is to fix those expressions of national life which are common to all nations as a lasting result, as something independent of external differences, as the true expression of the eternal laws that govern the life of all nations. If it should prove impossible to find and apply common statistical forms to different nations in those respects where more uniformity exists, international statistics would have to remain an unexplored field for centuries to come. The possibility of international educational statistics, however, is guaranteed, if by nothing else, by the solidarity of nations and states with regard to all the powers of maintaining or destroying a solidarity which no philosopher has as yet been able to argue away.

The way in which education develops itself in a country will be the only sure standard of measuring the intellectual development of its inhabitants. The gathering and exhibiting of the facts which express this development are therefore synonymous with the statistics of a nation's most cherished treasure — its intellectual development. And as there is only *one* true intellectual development, though showing itself in different forms, thus there can also be only *one* way of statistically representing it. Educational statistics must, therefore, besides schools, in the proper sense of the word, also include all other institutions for the promotion of science and art.

International educational statistics must, therefore, have regard to institutions which may exist in one and not in another state, where, it may be, education has not yet reached a sufficiently high degree of development, or where peculiar circumstances prevent the establishment of certain institutions of learning; provided only that such facts form really essential points in the educational system of a nation, for educational statistics are not to be a mere curiosity shop.

Since there is no doubt, then, as to the feasibility of exhibiting the educational statistics of a country, it will much less be doubted that such an exhibit will exercise a beneficial influence on education itself. Here, also, as in so many other respects, it proves true that good statistics are the common property of the whole nation. Napoleon said: "Statistics mean the keeping of an exact account of a nation's affairs, and without such an account there is no safety." And Gœthe said, "I do not know whether figures govern the world, but this I do know, they show *how* it is governed."

Good educational statistics will show the present generation occupied with caring for a future one; they will faithfully depict a nation's hopes and fears connected with this care, and will thereby enable states and individuals to preserve the intellectual heritage of centuries long gone by, and transmit it to the coming generations. Educational statistics alone can show the way out of the bewildering maze of different educational systems. They will be of more than ordinary importance in a state occupied with a reform of its educational system; all such reforms would build on a very unsafe foundation if they had not been preceded and were not constantly accompanied by most exhaustive educational statistics.

INTERNATIONAL STATISTICAL CONGRESSES.

As pertinent to the article of Dr. Ficker, from which the preceding citations were made, there is subjoined a brief account of the consideration which the various international statistical congresses have bestowed on the subject of educational statistics.

The first congress met at Brussels, in 1853. The subject of school statistics came up too late to be seriously discussed. The second congress met at Paris, in 1855; the programme for educational statistics was referred to the next meeting, and only a schedule for school statistics in larger cities recommended for general adoption. The third congress met at Vienna, in 1857. Very full schedules for educational statistics, embracing primary, secondary, superior, special, and professional instruction, prepared by Dr. Ficker, were laid before the congress and almost unanimously recommended. Most of the European states adopted these schedules to a greater or less degree. The fourth congress, which met in London, in 1860, and the fifth, which met at Berlin, in 1863, did not discuss school statistics, considering that the subject had been exhausted by the results of the congress at Vienna. The sixth congress met at Florence, in 1867; the subject of statistics of schools of the fine arts and music was discussed, and schedules adopted for such schools, as well as for statistics of libraries, archives, museums, &c. The seventh congress met at the Hague, in 1869; the subject of a common system of educational statistics for all the European states was discussed, and Dr. Ficker was charged to prepare comprehensive schedules for international educational statistics to be laid before the next meeting of the congress. The eighth statistical congress met at St. Petersburg, in 1872; a paper was presented on American educational statistics.

The informal nature of these conferences, precluding for the most part any possibility of elaborate preparation by those who participated in the proceedings or took part in the extempore debates, should be borne in mind by the reader, as well as the fact that it has been no part of the purpose of this report to test the statements so made by comparison with official educational reports of the various governments.

FIRST SESSION.

JUDGES' PAVILION, CENTENNIAL GROUNDS,
Philadelphia, Pa., July 17, 1876—3 p. m.

The international educational conference convened at 3 o'clock p. m., Monday, July 17, 1876, in the judges' pavilion.

Commissioner EATON said that, the hour for the assembling of this conference having arrived, as chairman of the committee on organization, he was instructed to call the body to order. He then called upon Rev. S. S. Laws, D. D., president of the University of Missouri, to open with prayer.

At the conclusion of the prayer Commissioner Eaton read the names of the gentlemen nominated by the committee on organization to act as officers, viz:

President.—Sir Redmond Barry, of Australia.

Vice-Presidents.—Hon. William F. Phelps, president of the National Educational Association; Hon. J. P. Wickersham, State superintendent of education for Pennsylvania; Dr. Philip da Motta, of Brazil; Hon. J. George Hodgins, of Canada; Hon. Fujimaro Tanaka, of Japan; Sir William Thompson, of England; Mr. G. Videla Dorna, of the Argentine Republic; Hon. H. R. Hitchcock, of the Hawaiian Islands; Prof. C. J. Meyerberg, of Sweden.

Secretaries.—Dr. Charles Warren, chief clerk, and Prof. C. H. Pluggé, translator, of the Bureau of Education.

Stenographer.—Mr. C. A. Spofford, of the Bureau of Education.

After reading the list of officers, Commissioner Eaton said that, in the absence of the president, Sir Edmund Barry, he would request one of the American vice-presidents, Dr. Phelps, president of the National Educational Association, to take the chair.

Dr. PHELPS then took the chair, and said, as had already been announced, that in the absence of the distinguished gentleman who had been invited to preside over this congress, he was called upon to act until his arrival. He wished, briefly, to congratulate the conference upon the assembling in this spot of the first international educational congress ever convened in this country. That its deliberations would be fraught with the deepest interest to us as American educators, and also prove of great benefit to our foreign co-laborers as well as ourselves, he had not the slightest doubt. We desire, as the educators of the youngest nation in existence, to learn from those who are older, and who by their experience have gathered those rich fruits of wisdom which grow in this field. He thanked the conference for calling him to preside in this place, even temporarily. He said he would not occupy time with any extended remarks, but would call upon Hon. John Eaton, Commissioner of Education, to state the purpose of the conference.

Commissioner EATON said many were aware that the educators in the United States have been anxious since the prospect of this exhibition

was before them that education should receive a new impulse; and, while they desired an exhibition as perfect as possible from our own and from foreign countries, they also desired that the educators gathered here should have opportunities for free conference, and that out of these conferences should not only grow results in the way of papers, discussions, collections, and suggestions, but that there should be organized a permanent international conference to meet periodically on such occasions as might be determined. The first thought of the gentlemen who were discussing this subject was, that it should be a formal congress, embracing perhaps two weeks' work; and correspondence was had in this direction. A report was to be made to a meeting of the Superintendence Department of the National Educational Association expected to be held in Washington last winter. That meeting did not occur; the report was not made, and the whole plan, of course, passed by. But a body of State and city superintendents and other officers of the association met informally in this city in connection with the preparation for the Centennial Exhibition, and the plan was submitted to them. They informally agreed that a committee then organized upon the subject of the exhibition* should go on and make the best of this preparation, seeking to organize an international conference in connection with the National Educational Association meeting appointed for Baltimore in July, which has just closed. When the time for the Baltimore meeting came, we found that quite a number of our foreign friends were so occupied with their duties here connected with the exhibition that it was impossible for them to be present. Moreover, none of them had any directions from his government to participate in an international educational congress. It was then decided that those who could on their own responsibility and without preparation participate with us in these conferences, should be invited to do so; and that an attempt should be made to organize, in a most informal way, an international meeting here if a sufficient number would agree to come forward and coöperate.

It was believed that a sufficient number of pledges were had, and we are here as the result.

The circumstances, the conditions, the objects of our assemblage need no extended announcement or description. Our purpose is that these hours shall be hours of work—work, not on the machinery of the meetings, the selection of officers, the preparation of rules, but work in the consideration of the great problems of education; and with a view to carrying out that desire as thus expressed this programme has been prepared. The committee is authorized to announce that foreign and

*This committee consisted of the following gentlemen: Hon. John Eaton, United States Commissioner of Education; Hon. John D. Philbrick, superintendent Boston public schools; Hon. J. P. Wickersham, State superintendent of public instruction, Pennsylvania; Hon. W. H. Ruffner, State superintendent of public instruction, Virginia; Hon. Alonzo Abernethy, State superintendent of public instruction, Iowa.

American gentlemen will take part in the exercises to-morrow and on future occasions.

It was useless to prepare a programme of names of persons who could not be here; and on account of the absence both of foreign and American educators, and in the uncertainty as to who will be present at any particular session, it was thought advisable to print simply a schedule of the topics which have been selected for discussion, leaving the names of the speakers who will take part in the formal debate of the succeeding session to be announced at the close of each meeting.*

*The following schedule was printed as a preliminary announcement: An international educational conference will be held in the hall of the judges' pavilion on the grounds of the International Centennial Exhibition, Philadelphia. The first session will open on Monday, July 17, at 3 p. m.

1. Opening exercises.
2. Topic: Courses of study.
   First speaker, Dr. W. T. Harris, superintendent city schools, St. Louis, Mo.
   Second speaker, Dr. da Motta, of Brazil.
3. Volunteer speeches.

Further announcements of topics and speakers will be made as promptly as possible. The following additional topics have been selected for consideration:

1. Methods of instruction.
   A. Elementary.
   B. Secondary.
   C. Superior.
2. Supervision of instruction.
3. Pedagogical museums or cabinets.
4. Statistics of education.
5. Technical education.
6. The teacher in different countries: preparation, status, salary, and tenure of office.
7. Kindergärten, Crèches, elementary instruction.
8. University and professional education.
9. Compulsory education.
10. Consideration of the organization of an international educational congress.
11. Woman in education.

All educators and persons interested in education are cordially invited to attend the sessions of the conferences. The committee in charge of the organization invites the fullest and freest suggestion and coöperation on the part of the friends of education as to topics and speakers.

It has been found necessary to adapt the conduct of the conferences to the circumstances under which they are held. Topics will be announced and two speakers from different countries will introduce the discussion, after which the subject will be open for general debate.

The opening speeches will not exceed thirty minutes; voluntary speakers will be limited to five minutes, except by unanimous consent of the conference, when the time of any speaker may be extended to ten minutes.

It will be more convenient if the discussions can be held in the English language, but if any speaker desires to use any other language, arrangements will be made for translation on due notice. In view of these and other circumstances, those proposing to volunteer in the debates are desired, when convenient, to give notice of their intention to some member of the committee at least as early as at the previous meeting.

It is hoped that by compliance with this suggestion a full report of each address can be obtained, and publication of the entire proceedings effected.

The committee are extremely desirous that, after the designated speakers have expressed their views, every moment which remains shall be occupied by members on questions before the conference.

We hope that these conferences, informal as they are, will thus be made of interest and value to educators; for while we recognize that in fact this magnificent exhibition, with all its countless treasures of industry and art, is in itself but the result of the power and marvellous adaptability of education, we also see that there is here presented an exceptional opportunity for the study of the appliances and methods of education as a technical science; and, further, that the coming together at this time here in Philadelphia of so many distinguished educators from our own and foreign lands gives to each of us, as educators, an opportunity for obtaining the results of wide observation and experience in the varied methods and systems of education throughout the world which is not likely soon to recur and ought not to pass unimproved.

We hope, then, that to the interests of education in the United States, as to those of other arts and industries, lasting advantages may ensue from the opportunities of this Centennial Exhibition, and we hope by means of these daily sessions, in informal conference, to secure valuable and enduring results.

The chairman then announced that the first paper to be presented to the conference was on "Courses of Study," by Dr. W. T. Harris, of St. Louis, who was then introduced.

Dr. Harris said that he had been requested by the managers of the organization of the present body to read the following report prepared by a committee for the National Educational Association on the subject of

COURSES OF STUDY.

As chairman of a committee appointed to report a course of study for all grades of schools, from the primary school to the university, I beg leave to submit herewith the results of our deliberations on this important theme.

At the outset, your committee found it necessary to investigate a number of difficult questions, all of which have a practical bearing upon the definition of a course of study, its extent, and the relations of its several parts. In most instances these questions were suggested by real collisions shown to exist between the views held by the expounders of the various educational systems established in this country.

A brief review of these questions is essential as a preliminary introduction to the grounds which have influenced your committee in the recommendations which they venture to make.

1. The first question relates to the proper beginning of a course of study: At what age should the pupil be admitted to school? Upon this depends, in a large measure, the character of the studies and the temper of the discipline in the primary school. It is important here to consider the modifying effects of climate and the nature of parental training at home. In the northern sections of the country, children may attend school one or two years earlier than in the southern sections. A child may be safely placed in school at the age of five, or even less, in the cooler climates, and assigned the ordinary tasks in reading and arithmetic at once; while in warm climates he must begin school at six or seven years of age, or if earlier, his tasks must be of a less severe character and not so prolonged.

To some of your committee the Kindergarten has commended itself as a desirable beginning of the primary course. At the age of five years, possibly at four, the child may be brought under its training. The principal objects aimed at in the Kindergarten course of instruction are, (1) Skill in the recognition and production of forms. The hand and eye are disciplined in the most effective manner by the several occupations of cutting out shapes in paper, weaving patterns in different colors, perforating card-board, and working pictures in colored threads, construction of geometrical and other figures by means of sticks and softened peas, modelling of designs in clay, ruling paper, and drawing symmetrical figures. (2) The theoretical knowledge of form and number is trained by the use of blocks representing the elementary geometrical solids; counting, the elementary rules of arithmetic, the use of fractions, are taught by means of these blocks. (3) Besides this, the child is taught valuable lessons in manners. He eats his lunch at the table spread in a proper manner, and learns neatness, cleanliness, and the conventional etiquette that marks polite behavior at meals. (4) In the games which are played, the imagination is exercised in a lively manner, and the healthful training of the body is secured. The session of the Kindergarten usually lasts for about three hours per day, and may continue for one or two or three years, according to the age of the pupil upon entrance. It is to be remarked that the element of play is not so prominent a characteristic of the Kindergarten as is claimed by some of its advocates. Moreover, the nurture of the child's individuality and orginality of character, which is obtained in play, is not to be expected from the play that is permitted in the Kindergarten, so much as in the untrammelled exercise of his faculties when outside of the school room. Play involves a negative exercise of the will in caprice and destructiveness that is essential, no doubt, to the development of the feeling of independence and original power which forms the basis of character. But the school must always direct the pupil's efforts into special rational channels of activity, and hence act as a restraining influence upon the untamed will. The Kindergarten restrains, though in the gentlest manner possible. It furnishes a training nearest approaching that of the family; and is the proper transition from family to school. A year spent in cultivating manual skill, and in the acquirement of a familiar knowledge of geometrical form and numerical computation, as well as a training in polite habits and usages at so early an age, must be a powerful influence in molding the future life of the child.

2. Where the Kindergarten does not precede the ordinary course of primary instruction, the first studies of the course are reading, writing, and arithmetic.

The second difficult question that met your committee in their investigation was to determine the precise value of these and other elementary studies both as regards discipline of mind obtained in their acquirement, and their usefulness to the individual in gaining further knowledge. It was necessary to compare one branch of study with another. While some educational writers contend that the art of drawing, or oral lessons in natural science are of more real importance than reading and writing or arithmetic, others contend that the latter studies are of a fundamental character, altogether unique, and not to be compared with the former, for the reason that these studies (reading and arithmetic) are of universal use and value, while such studies as drawing and the natural sciences are special in their character. The arts of reading and writing enable their possessor to participate in the treasured wisdom of the race. Without them he can gain knowledge only through his own senses and the oral tradition of his companions. By the aid of reading and writing he can avail himself of the senses of all mankind in all ages of the world and transmit his own contribution to the race in turn. By arithmetic he is able to measure the quantity of the world about him, at least so far as he can reduce it to number. Deprive man of the power of counting and calculating, and the world of things recedes into a vague and uncertain relation to him, so that his power over it diminishes to zero. With numerical calculation he can divide and conquer it; he can rule matter by spiritual might; without this art his relation to the world is that of the savage to his fetich.

In whatever form this question has been viewed by your committee, the paramount value of reading, writing, and arithmetic over all other branches in the course of study has been manifest.

But this has not fully decided the question. The most useful studies do not of necessity altogether exclude less useful studies.

3. Here, accordingly, your committee met another difficulty, to wit: how to decide the amount of prominence to be given to industrial branches in comparison with those chiefly productive of theoretical culture.

That which seems to lie nearest to the realm of usefulness to the individual is his special trade or vocation. His culture studies are not so directly useful, but are useful at more points in his life and for a greater period of time. In late years we have seen the whole course of study challenged. The primary school has been called upon to fit the pupil for the actual demands of life. The college and university have been asked to dispense with certain of their disciplinary studies and adopt others of greater immediate usefulness. Less Latin and Greek and more science of nature and man, has been the demand. The course of study has received great modifications; the number of elective branches

has been increased. Still the proper adjustment between culture studies and practical studies does not seem to have been found. Now that education, as an element of national strength, has excited so much attention and become the object of so frequent legislation, we are the more perplexed by this problem. Indeed, there are many problems here.

4. The question of public and private schools meets us first. On the one hand it is contended, in the interest of productive industry, that the public schools, being for the masses who are destined to fill the ranks of common laborers, should give a semi-technical education, and avoid purely disciplinary studies. The latter should be reserved (it is thought) for academies and preparatory schools founded by private enterprise and open to such of the community as can afford to patronize them. This means a division in the course of study, one branch of it tending toward the arts and trades—the education of the laboring classes; the other branch tending toward high culture—"a liberal education," as it is called. This important question, therefore, met your committee in this shape: Is the best course of study for the future common laborer a part or portion of the longer course of study designed to educate the professional man? Is the complete course of study the same for culture and business and the professions, so that whatever section of it be cut off from the beginning furnishes the best course up to that point, whether regarded as preparatory to a continuation of the course of study, or as a completed course fitting one for business? To settle this point it was essential to consider in detail the nature and effects of such differences in the course of study as had come to exist in our educational systems, and especially the tendency to separate the preparatory course for colleges and universities from that pursued in the common schools.

The course of study as originally planned for our colleges was a continuation of that in the so-called "grammar school," in which Latin grammar was the most important branch of the curriculum. The common school course was very meagre, and that of the grammar school and college was well enough as a continuation of it. At that time very little development had taken place in the sciences of nature and man; English literature had not yet become a great power among the people; the printed page in the form of the newspaper and magazine had not yet opened to the individual the great possibilities of continuing his theoretic education. What was then a "liberal education" is inferior to a common education now. Although higher education demands only the same disciplinary studies as preparatory to it that it did formerly, merely increasing the amount, and has recognized the modern growth of literature and science and history by additions to the end of its course, in the common school so much has been added to the disciplinary studies as to completely change the course. The branches which initiate the pupil into the sciences of man and nature are better and better provided for year by year. The curriculum is continually

modified so as to adapt it more fully to the wants of the individual in this epoch. But the higher education has yielded far less to the demands of the age. It has succeeded in repelling the collateral and information giving studies from its preparatory course, and it admits them only in the form of a supplement at the close of the course.*

The course of the common school tends to take the pupil through the elements of the collateral studies before his preparation for college, while the course of the college and its special feeders, the academies and classical schools, does not reach those studies until after five to seven years' apprenticeship in the purely disciplinary studies is completed.

This difference appears most marked in the course of the public high school, as contrasted with that of the special preparatory schools. In the district school are taught reading, writing, arithmetic, geography, grammar, and history of the United States. In the course of study in the public high school, we find Latin and Greek, French and German, algebra, geometry, natural philosophy, physical geography, physiology, universal history, English literature, and rhetorical work. But a preparation for college usually omits all except the Latin, Greek, and mathematics. Hence the public high school is obliged to provide for a classical course and a general course, if it would continue the common school course and at the same time prepare its pupils for college. The influence of higher education upon the lower is to force the latter to drop its collateral and information giving studies.

Meanwhile the demand of the age upon the college to curtail its disciplinary and culture studies, and to give more prominence to the natural sciences, is met only by the increase of these branches in the latter part of the course, as well as by the establishment of scientific schools separate from the regular philosophical course; when these separate schools require as a condition of admission to them the completion of

*The forty-eighth annual report of the president of Harvard College announced certain changes in the requirements for admission to that university which indicated very clearly a perception of the difficulty herein described. A better preparation in English literature, natural science, and modern languages (French or German) was required. Upon this the report remarks as follows:

"In all changes in the preparatory course of study which have been here set forth, the single aim of the faculty has been to make that course correspond more nearly with the best possible course of study for young men, up to an average age of eighteen, who propose to pursue non-professional studies for four years more. As the learning given in American colleges has been predominantly classical and mathematical, it is not surprising that the proficiency of a candidate in classics and in mathematics has been the point chiefly considered in examinations for admission. That teachers and pupils in preparatory schools should direct their efforts mainly to meeting these specific demands of the colleges, and should subordinate the intrinsic importance of studies to their serviceableness in securing admission to college, is the only result that could be expected. Neither teacher nor pupil could be much blamed, for instance, for practically setting the writing of good Latin above the writing of good English. It is plain that the only remedy for this grave evil is for the colleges to show by the nature of their admission examinations that they will not accept the rudiments of *scholarship* as

the regular college course, they do not fulfil in a direct manner the popular demand; when they admit pupils without such preparation, they omit the culture and discipline which they claim to be essential to success in the pursuit of higher science.

5. In view of these facts your committee proceed next to consider the question of classical culture. Are Latin and Greek essential to a course of study that shall give thorough discipline to the powers of the mind? What special advantage to culture is derived from the study of Latin and Greek over that derived from the study of modern languages, say French and German? That these ancient languages have no advantage as regards their form or capability of expression, one may convince himself by comparison. But when it is remembered that English speaking peoples derive from a Teutonic source only those words expressive of special and familiar relations and ideas, while for all the fine shades of thought and generalization they resort to the Latin and Greek vocabulary, it will easily be seen how important is a direct knowledge of those tongues to us if we would understand readily the language of thought and express with ease the results of reflection and generalization.

The scientific method prevailing in our time tells us that to know a subject properly we must study it in its history. We must be acquainted with its embryology and growth. In this insight we have also a clew to the nature of the much prized disciplinary value of classic study. The classics of a people include the earlier writings belonging to the period of the evolution of its civilization. A study of its classics places one in possession of the seeds and elementary phases which have expanded and grown into its later life. The civilization not only of the Anglo-Saxon people, but of the Romanic, Teutonic, Sclavonic, and Celtic peoples of Europe is a Roman and Greek civilization. Greece and Rome originated the stock of ideas that form the basis of our institutions.

amends for deficiencies in the rudiments of *education*. The colleges, as the representatives of the value of the study of the classics, should be especially careful not to give plausibility by any act or neglect of theirs to the groundless assumption that the discipline of mind secured by the preliminary classical training must be purchased by the sacrifice of some knowledge which a well-educated young man of eighteen ought to possess. Coöperation on the part of the leading colleges is much needed in enforcing upon teachers, and in enabling them to enforce upon their pupils, the necessity of thorough training in all the elements of a sound education. As soon as those colleges unite in demanding of candidates for admission a thoroughly good training in English no less than in classical subjects, the schools which feed the colleges will in turn be able to exact from the lower schools an efficiency which they now greatly lack. The service which American colleges could thus indirectly render to American education it is difficult to over-estimate. Were a good degree of proficiency *in a well constructed course of English studies* strictly enforced as a condition of admission into our leading colleges, the quality of education received by all pupils in all schools directly or remotely affected by such action would be sensibly improved. Hitherto a too exclusive concern for proper preliminary training in the classics and mathematics has cut off the higher institutions for education in this country from a part of that influence upon the lower which it is both their interest and their duty to exercise."

The Greek mind explored the domain of theoretic and æsthetic culture, and science draws its categories to-day from the Greek language, while art points to Greek literature and Greek sculpture and architecture for perfect models. What culture we have in these directions cannot be well acquired by the individual nor fully comprehended by him without recourse to its original fountains. Rome furnished the organizing forms of our civilization, and our jurisprudence and legislation still pronounce their edicts in Roman words; and the form of our institutions in which we live and move and have our being as a civil community—as a State, a municipality, a corporation, a free citizen endowed with rights—is Roman. To know ourselves, to realize our past history, and to make alive within ourselves the consciousness of the development of our civilization, we must for a period come into close contact with the literature in which Greece and Rome portrayed their national life. Language is the clothing of the ideas of a people, a garb woven of poetic phantasy and prose reflection. In it we reach the germinal cell-growth of the ideas of a people. In this respect the study of Latin and Greek furnishes to a European or an American a far higher means of culture than does any modern language. No one modern language is an embryonic type of another, nor does its literature portray the embryonic form of the civilization of another people, even though it may be an "arrested development" of some type of civilization. To study the embryology of the butterfly we must begin with the caterpillar and not with the house fly. So to understand the frog we must study the tadpole rather than the turtle. French and German have their own evolution and their own embryology.

6. Pursuing this thought we come to inquire why it is that language in general should furnish so large a portion of the course of study. The spirit of protest demands, "Why not *things* rather than *words?*" And yet education goes on dealing with *words!* If thought, scientific thought, be the end of culture and education, it is not strange afcer all that so much is made of the word that expresses it. Things are only transitory phases of processes in nature, the temporary equilibria in the great movement of forces. Science seizes the eternal laws or forms of the process itself, and thus deals with what has more validity than the mere things. Words express not things alone but also forces, processes. The verification of the word is therefore not through things alone, but through the synthetic activity of thought. Words stand for more than mere things.

Looked at as an object of knowledge the world is twofold; (*a*) the world of man—including his realizations in art and literature, in his political and social institutions, in his science and history; (*b*) the world of nature, including the inorganic aspect, and the organic one of plant and animal. In the study of language we find the threefold world of man as theoretical, practical, and æsthetic. If we go so far as to call the world of man the most important of studies for man, we shall certainly call language the most important study of the course—the one which gives most clearness of insight to the mind and the most discipline to its powers. But while the perfection of man is the object and end of civilization and consequently of all other culture and education, on the other hand nature is the instrumentality by which this end is achieved. To the savage man nature is master and tyrant; to civilized man nature is servant and thrall. To omit the science of nature from any course of study is to do wrong to the supremacy which man holds by reason of his empire over nature. To slight the science of language in a course of study, is to insult the object of all study itself.

7. The final difficulty which your committee encountered in their investigation is the one of the natural and proper order of development of the topics of the course of study in the mind itself. Such questions were met as these: "Why not get discipline of mind first before taking up collateral branches, such as the natural sciences, the national literature, and history?" "These topics involve the highest reach of the mind to be understood properly." Or the counter position: "Why are not the natural sciences, history, and literature as valuable discipline studies as Latin, Greek, and mathematics? and, if so, why not begin with them in a course of study?"

Upon consideration of this question of the order of topics, your committee is of opinion that each one of the several fields of the objective world of man and nature should be represented at each point in the course of study—nature in its organic and inorganic forms, mind in its theoretical, practical, and æsthetic forms. To those who object to collateral and information studies side by side with the discipline studies it may be said that they lay emphasis on the inorganic phase of nature by the exclusive study of mathematics and physics; and on the theoretical phase of mind, to the exclusion of the practical and æsthetic phases by the too exclusive study of grammatical forms and constructions.

To those who object to the study of topics that are too difficult to be understood in the most comprehensive sense until the close of one's disciplinary course, it is sufficient to point out the fact that every subject has its abstruse side, and that no phase of natural or of human history can be completely comprehended except in and through the world itself. Even the disciplinary studies themselves treat of topics that are not fully explicable until one has mastered the other studies.

The child seizes more vaguely whatever subject he studies than the adult. His active phantasy is his chief organ. Hence the descriptive phases of science can and should be learned early. In secondary education the classifications and relations come properly to be considered; reflection is then the chief mental activity. In the highest phase of education objects are studied as organic wholes—each individual is seen through the perspective of its history.

Without previous familiar acquaintance with a subject obtained by

studying its first or descriptive phases, one gets very little insight into the philosophy of it, even though he listens to the exposition of a Huxley or an Agassiz.

That mathematics and the classic languages are justly regarded as disciplinary studies in a sense that will not apply to the other studies, is pretty evident from the reasons already given. Discipline is the process by which the will is purified from the sway of appetite and caprice. In his infantile state, as child or savage, man's will is implicit—not separate from his desires or appetites. A child or savage is a creature of impulse. To become rational he must substitute principle for caprice; moral forms for impulses. The training requisite to emancipate the will and elevate it from the stage of impulse to that of moral activity, must needs possess the following essential characteristics:

(*a*) It must occupy the pupil with what is remote from the interests of his every-day life. Self-alienation is necessary to self-knowledge; in order to see our own dwelling in its relations to surrounding objects it is necessary to go out of it and stand at some distance. The atmosphere of the classic people of Greece and Rome furnishes the broad contrast to our every-day life which enables us to discriminate sharply the motives which unite to form our impulses.

(*b*) Inasmuch as the civilization of those classic peoples is the embryonic form of our own, as has already been pointed out, the student of the classics has the advantage of seeing the universal or regulative forms of his life (the laws, institutions, and usages which define his status as a human being,) in their special forms and applications. He learns more readily the universal by studying it, at first, as a typical instance. The invisible cloak of forms wrapped about his life, invisible because of its general or abstract nature, thus becomes visible to him, and he acquires the ability to separate his deed from his impulse by the insertion of general motives. Reflection takes the place of instinct and caprice. By studying that which has no direct and obvious relation to his immediate interests, but which is allied to the general forms of his rational activity, the youth obtains breadth and perspective of practical insight. The disciplined mind makes its purpose a general one, and does not allow caprice (likes and dislikes, weariness of the body, curiosity, love of ease or amusement) to hold sway. Mathematics as the science of the general relations of time and space, the conditions under which the existence of nature is possible—has the same relation to man's physical existence as classic study has to his humane culture.

This mental discipline is not a matter of perseverance and industry simply, so that whoever studies any subject thoroughly will get the same amount of discipline as another, but the object studied must stand related to the student's general and rational forms of life and thought.

Assuming the division already indicated, our course of study will fall under five subdivisions, each of which must be represented at every stage of progress. A careful survey of this ideal standard discovers the

fact that with the exception of the divergence already mentioned between preparatory schools and the public high schools, there is a close conformity to the educational system generally adopted in the country. Were the college or university to require for admission a knowledge of the elements of natural philosophy and physical geography, (the former a compend of physics and the latter of natural history,) universal history, and English literature, and slightly less of Latin and Greek, it would remove the necessity of two courses of study in the high school.

The five subdivisions are:

I. *Inorganic nature*, treated in (*a*) mathematics, the science of the general form of nature as existing in time and space, and hence as quantitative; (*b*) physics, molar and molecular, including the science of the contents of nature in their quantitative aspect.

II. *Organic nature* or *cyclic processes*, treated in natural history and in all natural sciences which have for their object a cyclical process, whether that of life or not; hence, astronomy, meteorology, geology, botany, and zoölogy, and kindred sciences.

III. *Theoretical man* or *intellect*, treated indirectly in (*a*) philology, or the science of the instrument invented for the reception, preservation and communication of thought; treated directly in (*b*) philosophy, which investigates the universal and necessary conditions of existence or the forms of the mind that appear in logic, psychology, ontology, and other spheres more concrete. The study of grammar is the propædeutic to this field.

IV. *Practical man* or *will*, treated in (*a*) civil history, which portrays man's progress in realizing forms of freedom by means of political organization; (*b*) social and political science, which investigates the evolution of institutions of civil society and their logical basis.

V. *Æsthetical man* or *phantasy*, as developed in the fine arts, and especially in literature, as the symbolic portrayal of man to himself, the collisions of his real world with his ideal, and the reconciliation of the two.

In mapping out the provinces which shall be investigated, only a small portion of the work of preparing a course of study has been accomplished. It remains to select those branches of study which are to be pursued continuously from year to year throughout the course, and likewise to decide the amount of time to be given to the other branches, as well as their exact order in the course. In this difficult and delicate part of the task it becomes evident that, within certain limits, very much freedom may be allowed to the teacher and pupil, and in fact must be allowed. It is necessary to have each one of the five departments well represented in the course. But a choice may be made, for example, in the department of the study of organic nature, between botany, zoölogy, physiology, and geology, each one of these studies being a fair type of the rest as regards effect on the mind in culture or discipline. It must not be forgotten, moreover, that the age of pupils and the amount and

quality of previous preparation will determine whether the course shall be very full or whether it shall embrace only a few of the representative branches; whether the special branches shall be continued for half a year each or for a whole year.

In the more important branches there should be no option left to the pupil in the high school; for example, all should be required to take Latin, algebra, and geometry, universal history, Constitution of the United States, history of English literature, rhetoricals, natural philosophy, and physical geography.

Omitting the phase of physical training, except in so far as the art of drawing secures it in the form of a culture of the hand and eye, a general propædeutic of manual skill, and not including the ground covered by the Kindergarten which would precede, or that of the special trades or professions which would succeed this general course, your committee present the following tabulated scheme for a general course of study from primary school to university:

DISTRICT OR COMMON SCHOOL.

TOPICS RELATING TO NATURE.

Inorganic.—Arithmetic, oral lessons in natural philosophy.

Organic or Cyclic.—Geography, oral lessons in natural history.

TOPICS RELATING TO MAN, OR "THE HUMANITIES."

Theoretical, (Intellect.)—Grammar, (reading, writing, parsing, and analyzing.)

Practical, (Will.)—History, (of United States).

Æsthetical, (Feeling and Phantasy.)—Reading selections from English and American literature, drawing.

HIGH SCHOOL OR PREPARATORY SCHOOL.

TOPICS RELATING TO NATURE.

Inorganic.—Algebra, geometry, plane trigonometry, analytical geometry, natural philosophy, chemistry.

Organic or Cyclic.—Physical geography, astronomy, (descriptive,) botany or zoölogy, physiology.

TOPICS RELATING TO MAN, OR "THE HUMANITIES."

Theoretical, (Intellect.)—Latin, Greek, French or German, mental and moral philosophy.

Practical, (Will.)—History, (universal,) Constitution of the United States.

Æsthetical, (Feeling and Phantasy).—History of English literature; Shakespeare or some standard author, (one or more whole works read;) rhetoricals, (declamation and composition;) drawing.

COLLEGE OR UNIVERSITY.

TOPICS RELATING TO NATURE.

Inorganic.—Analytical geometry, spherical trigonometry, differential and integral calculus, physics, chemistry, astronomy, (etc., elective.)

Organic or Cyclic.—Anatomy and physiology, botany, zoölogy, meteorology, geology, ethnology, (etc., elective.)

TOPICS RELATING TO MAN, OR "THE HUMANITIES."

Theoretical, (Intellect.)—Latin, Greek, French or German, comparative philology, logic, history of philosophy, Plato or Aristotle, Kant or Hegel, (or a representative of ancient philosophy and also one of modern philosophy.)

Practical, (Will.)—Philosophy of history, political economy and sociology, civil and common law, constitutional history, natural theology, and philosophy of religion.

Æsthetical, (Feeling and Phantasy.)—Philosophy of art, history of literature, rhetoric. The great masters compared in some of their greatest works: Homer, Sophocles, Dante, Shakespeare, Gœthe, Phidias, Praxiteles, Skopas, Michael Angelo, Raphael, Mozart, Beethoven, etc.

The president then introduced Dr. Philip da Motta, of the educational department of the Empire of Brazil, who made the following statement regarding the

ORGANIZATION AND SUPERVISION OF SCHOOLS IN BRAZIL.

Education in Brazil is divided into primary, secondary, higher, technical, religious, and special training.

Primary and secondary education in the capital of the empire and higher education in the whole country are under the direct control of the minister of public instruction, while in the provinces each provincial government has jurisdiction over its primary and secondary schools.

Besides the above mentioned chief authorities in the capital and the provinces, there are inspectors, school boards, and district delegates whose duty it is to superintend and inspect public and private primary and secondary institutions of learning. The inspectors general are the presiding officers of the school boards. They have to visit once a year all the schools under their control, and report annually upon the condition of education in their respective districts.

The school boards have control of the special management of schools, and in order to enable them to exercise this successfully two competent practical teachers are appointed members of each board.

The district delegates visit the schools once a month and report upon the condition of education in their districts every three months.

School taxes are unknown in Brazil. The amount needed for educational purposes is annually inserted in the budgets of the general and provincial governments.

Primary instruction is entirely free, even books and clothes being furnished to the children of the poor. There are compulsory school laws for the whole empire; but these laws cannot be enforced in those parts of the country where the people live at great distances from towns and villages.

The law prescribes separate schools for the two sexes and the employment of male teachers for boys and female teachers for girls.

There are two grades of primary instruction, an elementary course and an advanced elementary course. The former comprises reading, writing, the elements of arithmetic, catechism, the elements of grammar, the comparative study of weights and measures, and needle work for girls. The latter comprises the Portuguese language—reading, grammar, and orthography—Catholic doctrine, sacred history, general geography and history, especially that of Brazil; natural sciences,

arithmetic, elements of geometry, land surveying, linear drawing, music, singing, and gymnastics.

The teachers are appointed by the government. They are selected from graduates of normal schools or from the corps of assistant teachers who have taught three years in public schools.

The branches of instruction in the normal schools are the same as prescribed for primary schools, with the addition of pedagogy.

The assistant teachers are selected from the graduates of primary schools, who, after eight years' attendance, have passed their final examination with distinction. These assistant teachers receive a salary of $15 a month during the first year. After a successful examination, they enter the second year with a salary of $23 a month; and after another examination at the end of the second year, they are appointed for the third year as assistants with a salary of $30 a month. The last successful examination, at the end of the third year, entitles them to a regular teachership.

If, in case of vacancies, no graduates from normal schools are examined, assistant teachers apply for situations, and a competitive examination takes place, which is open to all who desire to enter the school service, and those candidates who prove of sufficient capacity are appointed. In cities the teachers' salaries are generally higher than in the country. The salaries of city school-teachers of the first grade range from $700 to $900 per annum, and those of country school teachers from $400 to $600. Teachers receive, besides, a dwelling house and some land, and an extra premium for every pupil they prepare for examination. After twenty-five years' service, and in case of disability at this period, teachers are entitled to a pension equivalent to their whole salary. After ten years' service, a disabled teacher receives a proportional equivalent.

In the capital of the empire the salaries are never less than $900 a year. Each teacher receives, besides, a good dwelling house and a premium for every pupil above the number of thirty in a school. The premium for boys is 35 cents and that for girls 50 cents per month. After five years' successful work, teachers are appointed for life; and after ten years' service the government grants them the necessary funds to insure their lives, and thus provide for the future of their families. After fifteen years' service their salary is increased 25 per cent., and after twenty-five years' service they are entitled to a pension as stated above. Female teachers have the same privileges and receive the same salaries as male teachers.

Teachers of the second grade receive a salary of $1,200 a year, and have, besides, the extra privileges allowed teachers of the first grade.

All persons employed in schools are exempt from military service. No teacher is allowed to devote himself to commercial or other pursuits while engaged in school service.

Private teaching is allowed in Brazil, but persons who desire to devote themselves to it have to apply for an authorization from the school boards. Certificates of good character and professional capacity must be presented. Ladies, when married, are obliged to have a permit from their husbands, and single ladies must prove that their parents allow them to teach school.

Graduates from the Imperial College of Dom Pedro II and of foreign higher institutions of learning may teach without further proof of their capacity.

Boarding schools can only be established with the approval of school authorities, who examine the buildings and the plan of studies. All private schools are subject to the inspection of school inspectors, as far as the sanitary and moral condition of schools is concerned.

Public school examinations are held in December of each year by the district delegates and a committee of teachers.

Secondary instruction is given in the Imperial College of Dom Pedro II, in the different provincial lyceums, and in a large number of private schools and colleges throughout the empire.

The Imperial College of Dom Pedro II has a day school and a boarding school. The school fees are very moderate, and the children of teachers and of state officers who have been in service more than ten years are admitted free.

In the boarding school each pupil has to pay $200 per annum for tuition, board, and books. After the third year students receive clothing, besides, free of charge. Orphans of soldiers who died in the service of the country are admitted free.

The course of studies, which lasts seven years, comprises the following branches: Catholic doctrine, Portuguese, French, English, German, Latin, Greek, ancient and modern geography, sacred and universal history, history of Brazil, arithmetic, algebra, geometry and trigonometry, natural sciences, philosophy, rhetoric and poetry, general literature, drawing, singing, and gymnastics.

The course of studies in the provincial lyceums comprises Portuguese, French, English, Latin, geography, universal history, history of Brazil, arithmetic, algebra, geometry, rhetoric and poetry. In some lyceums, Greek, natural sciences, book-keeping, drawing, and gymnastics are also taught.

The course of studies in private colleges is the same as in the above named institutions.

The following table shows the number of primary and secondary schools in Brazil, the number of pupils, and the expenditure for public education:

Provinces.	No. of primary and secondary schools.	No. of pupils in 1875.	Revenue of the provinces.		Expenditure of the provinces for public education.	
			Milreis.	*Dollars, gold.*	*Milreis.*	*Dollars, gold.*
Amazonas	59	1,679	575,433$520	287,716 76	66,660$000	33,330 00
Pará	259	11,021	1,533,670 000	766,835 00	346,350 000	173,175 00
Maranhão	163	6,443	831,290 000	415,645 00	125,102 000	62,551 00
Piauhy	73	2,026	346,526 330	173,263 16	40,456 000	20,228 00
Ceará	254	10,861	811,929 655	405,964 83	183,046 666	91,523 33
Rio Grande do Norte	152	6,611	318,682 026	159,341 01	96,350 000	48,175 00
Parahyba	150	3,906	777,232 581	388,616 29	164,303 333	82,151 67
Pernambuco	502	9,917	2,512,449 516	1,256,224 76	478,904 166	239,452 08
Alagôas	230	7,015	773,056 051	386,528 02	137,300 000	68,650 00
Sergipe	175	5,651	697,735 872	348,867 94	119,000 000	59,500 00
Bahia	425	17,362	2,172,433 000	1,086,216 50	363,500 000	181,750 00
Espirito Sancto	136	2,216	300,000 000	150,000 00	82,000 000	41,000 00
Rio de Janeiro	674	18,894	4,221,505 000	2,110,752 50	874,862 000	437,431 00
Municipio da Côrte	211	17,279	.....	.....	658,641 000	329,320 50
S. Paulo	624	16,466	2,539,626 683	1,269,813 34	397,979 330	198,989 66
Paraná	130	3,172	727,985 965	363,992 98	64,720 000	32,360 00
Sancta Catharina	137	3,714	311,492 953	155,746 48	76,720 000	38,360 00
S. Pedro do Rio Grande do Sul	492	14,551	1,702,100 000	851,050 00	275,260 000	137,630 00
Minas Geraes	892	25,104	1,651,640 000	825,820 00	601,600 000	300,800 00
Goyaz	95	2,666	147,787 276	73,893 64	51,550 000	25,775 00
Matto Grosso	57	1,361	167,000 000	83,500 00	48,110 000	24,055 00
Total	5,890	187,915	23,119,576 428	11,559,788 21	5,252,414 495	2,626,207 24

Private schools are not included in this enumeration. There are three times as many private schools and pupils as the above table contains, because all the wealthy people have their children educated in private institutions.

The probable number of all the public and private primary and secondary schools in Brazil is 15,000, and the probable number of pupils 550,000.

The ages of primary school pupils average from five to fifteen years, and of secondary school pupils from twelve to eighteen years.

The latest statistics show an increase of 994 schools and of 20,478 pupils. The number of illiterates decreases very rapidly.

Both the general and the provincial governments give special attention to the education of the masses and provide liberally for the establishment and support of schools. As private persons and associations join their efforts with those of the government, education will soon be diffused among all classes of the population.

Compulsory school laws, great increase of the educational budgets, the large donations of wealthy citizens, the establishment of all kinds of institutions of learning for children and adults, rich and poor, and the foundation of free popular libraries and reading rooms—all this proves that there is nothing of higher importance and of greater interest to the Brazilian people than the educational question.

The higher institutions of learning in Brazil are the faculties of law and of medicine, the polytechnic school, and the theological seminaries.

To be admitted to the faculty of law, the candidate has to pass an examination in Portuguese, French, English, Latin, mental philosophy, algebra, arithmetic, geometry, history, geography, rhetoric, and poetry. Preparatory schools are connected with each faculty of law.

The course of legal studies lasts five years, and comprises the following branches:

First year: Natural law and general public law.

Second year: Constitutional law of Brazil, international law, diplomatic law, Roman law, and canonical law.

Third year: Civil law and criminal law.

Fourth year: Civil law continued, commercial law, and comparative study of Brazilian and Roman laws.

Fifth year: Judiciary practice, political economy, and administrative law.

The degree of bachelor of laws, which is conferred upon graduates from the law schools, entitles the recipient to practise the legal profession.

Professors of law schools are appointed by government for life, and receive a salary of $2,400 a year. They lecture one or two hours a day.

Each faculty of law is under the control of a director and a board of professors.

The staff of professors consists of regular professors and assistants. If vacancies occur, the latter are appointed to regular professorships.

For the admission to the faculties of medicine the same examination is required as for admission to faculties of law.

The medical course lasts six years, and comprises the following branches:

First year: Physics, chemistry, mineralogy, and anatomy.

Second year: Chemistry and anatomy continued, physiology, botany, and zoölogy.

Third year: Anatomy and physiology continued, pathology, and clinics.

Fourth year: Pathology continued, and diseases of females and infants.

Fifth year: Pathology, anatomy, and clinics continued, materia medica, and surgery.

Sixth year: Pharmacy, legal medicine, history of medicine, and clinics.

After the students have passed their final examination successfully they are entitled to practise the medical profession in Brazil.

The pharmaceutical course lasts only three years, and comprises physics, chemistry, mineralogy, botany, materia medica, and pharmacy.

Each faculty of medicine has a chemical laboratory, cabinets of physical apparatus, of natural history and anatomical specimens, and all other necessary appliances used in demonstrating the different subjects of medicine.

The staff of teachers consists of a director and of several regular professors and assistants. The professors receive a salary of $2,400, and the assistants $1,200 per annum.

There is no faculty of dentistry in Brazil. Persons who desire to practice it study privately with a dentist, and pass an examination before the faculty of medical science.

Graduates from foreign schools of medicine or dentistry are allowed to practise in Brazil after they have passed an examination before the aforesaid faculty. Persons who were employed as professors at foreign universities may practise without passing any examination.

In the polytechnic schools, the special branches of study are mathematics and natural sciences.

The general course of study, which lasts two years, comprises algebra, logarithms, geometry, trigonometry, physics, meteorology, geometrical and topographical drawing, mechanics, mineralogy, botany, and zoölogy.

The special course of mathematics and physics lasts three years, and comprises a more advanced study of the branches of the general course and practical application of these branches.

The course of physical and natural sciences also comprises three years. The branches of study are botany, zoölogy, drawing, chemistry, mineralogy, geology, agriculture.

The course of study in the theological seminaries comprises the preparatory branches prescribed for all other higher schools and the theological studies which are prescribed by the bishops for all those who aspire to the Catholic priesthood.

To be admitted to any of the four technical schools the student must have been two years in the general course of the polytechnic school.

The course of study in the technical school is, for geographical engineering, two years, and for civil engineering, for the study of mines, arts, and manufactures, three years.

The staff of teachers consists of twenty-six professors and eighteen assistants and special teachers. The professors receive a salary of $2,400.

Military science is taught in the regimental schools, in the military school of Rio, in the gunnery school of Campo Grande, and in the artillery school. All these institutions are under the control of the war department.

The regimental schools train officers for the different regiments. The branches of study are those of an advanced elementary school, besides the elements of military laws and military duties.

The studies in the military schools are divided into a preparatory and a technical course. The former comprises all the branches of other preparatory schools, and, besides, military drill, fencing, and swimming. The latter comprises algebra, geometry, physics, chemistry, topography, military drill and tactics, strategy, military history, political economy, administrative law, geographical drawing, mineralogy, geology, botany, civil and military architecture, international law, military law, fencing, riding, gymnastics, and swimming.

The Gunnery School of Campo Grande trains instructors for the different regiments. The course of study comprises the theory and practice of gunnery as prescribed by military authorities.

The artillery school has been established for the training of captains for the artillery corps and for the different fortifications in the empire. The course of study comprises religious instruction, the theory and practice of gunnery, military drill, military book-keeping, fencing, gymnastics, swimming, and music.

The following naval schools are under the control of the navy department:

1. The naval preparatory school, in which the following branches are taught: Portuguese, English, French, geography, history, arithmetic, algebra, and drawing.

2. The naval school on board the Brazilian frigate Constituição. Here the following branches are taught: Algebra, trigonometry, naval drill, drawing of landscapes, physics, mathematics, topography, and chemistry.

3. The practical school of naval artillery.

4. The school of naval engineering.

5. The naval artisans' schools.

The school of arts at Rio is supported by private persons and corporations, and receives an annual grant from the government. This school is attended by more than one thousand students, who work during the day, and devote their evenings to the study of art. The teachers of this institution receive no salary.

In the Commercial Institute of Rio the course lasts four years, and comprises the following branches: English, french, german, arithmetic, algebra, geometry, geography, commercial statistics, commercial law, history of commerce, book-keeping, political economy, penmanship, and drawing.

A commercial course is connected with most of the provincial lyceums.

In the Academy of Fine Arts the following course of study is pursued: Geometrical and ornamental drawing, architecture, sculpture, engraving on metal and stone, drawing of figures and landscapes, historical painting, application of mathematics, anatomy and physiology, history of arts, archæology, and music.

The Conservatory of Music is open to both sexes. Instruction in all the different branches is given here by competent teachers.

The Deaf and Dumb Institute is situated in one of the finest parts of the suburbs of the capital, and has at present only 20 inmates, although there are about 12 deaf-mutes to every 1,000 inhabitants of the empire. The deaf-mute pupils are taught the common school branches and afterward different trades.

The Institute for the Blind has at present 35 pupils, who receive a very good education. Music is made a specialty.

Besides the above named schools, there are a great many private institutions for orphans and destitute children of both sexes.

In the Brazilian educational department at the Centennial Exhibition there are several objects exhibited by the literary and technical institutions before described. These exhibits prove that although the empire of Brazil does not hold a first rank among the different countries, she at least deserves great credit for the progress in education in the short period of her existence, and for adopting the best methods of teaching that are known in our days.

At the conclusion of the remarks by Dr. Da Motta, a rising vote was taken, at the suggestion of the chairman, on the question of holding an an evening session at 8 o'clock, and it was determined in the affirmative.

Arrangements were made by which special tickets for admission to the grounds in the evening were issued to the participants in the conference.

The chairman stated that the programme next invited voluntary speeches, it being understood that these speeches were to be five minutes in length. He then called upon Dr. J. George Hodgins, deputy minister of education, Ontario, Canada, to open the discussion.

Dr. Hodgins said that he should not trespass beyond the time assigned him. He took occasion, in the first place, to express his gratification at the preparation of the able paper by Dr. Harris. He thought it would aid in the settlement of disputed points in regard to this very question of "courses of study" in the various schools. In our experience, he said, of these matters in Ontario, we have had more or less difficulty in endeavoring to settle some of those questions with which this paper so ably deals. One great obstacle in the settlement of the questions raised in this paper still remains with us and is very hard to overcome. I refer to the overlapping of studies in our schools. I suppose it occurs here, too, in the various States in which the systems of public instruction are not yet matured. We have given a great deal of attention to the elaboration of the course of studies in the primary or elementary schools of our country. Within the last twenty years we have also given a large share of our attention to the subjects and mode of instruction in the high schools and collegiate institutes formerly called grammar schools, *i. e.*, the class of schools which prepares students for the university.

The difficulty with which we have had to deal arises out of the ambition of the parents to get their children out of the primary or elementary school into the high school. It involves somewhat of a social question, and is, therefore, the more embarrassing. Unfortunately, so strong has been the pressure in that direction that the course of instruction in the primary school has had to be shortened and part of it practically abandoned, and the course of instruction in the high school lengthened;

so that, in point of fact, we have what is called the fourth, fifth, and sixth classes in the elementary school almost identical with the primary classes in the high schools. That is just our difficulty. I should like to hear from gentlemen familiar with the subject in this country, whether or not that difficulty has been practically felt here and overcome; and if so, how.

In the first period of the history of our high schools they were almost wholly supported by legislative aid and subsequently by the proceeds of lands set apart for that purpose by "Good King George," a sovereign whom you do not all hold in as high honor as we do. It was to George III that we are indebted for the munificent grants of lands in the province which, at the present moment, sustains the university and high schools of our country. So you see, that while you felt that he dealt with you with a rigorous hand, we know that he dealt with us with a generous one, in providing a munificent endowment for education. I suppose he felt tenderly to his new colony because that country was founded by the refugee royalists, or "united empire loyalists," as we call them, persons who followed the "red-cross flag" and left this country at the close of the revolutionary war and settled in that country. His Majesty George III set apart a large portion of the then surveyed lands of that province, and these lands to-day richly endow the University of the Province of Ontario. A further grant of lands was made for the establishment and maintenance of grammar or high schools; and in 1854 one million acres of land were set apart by the legislature, in Upper and Lower Canada, for the establishment and maintenance of primary schools in these provinces. These lands are under the control of the Crown lands department, while the course of instruction in each class of schools is prescribed by the education department, under the authority of a minister of education.

There is another question not yet settled with us. Many people in our country are opposed to the teaching of the elements of natural philosophy and natural history in the public schools. Those who have most to do with the progress of education, however, are for giving these schools the most liberal course of instruction possible; and I could not but heartily concur in the forcible remarks of the writer of that paper in regard to the necessity of teaching the subjects of natural history and natural science in the public schools. Like yours, our primary schools are, in point of fact, the colleges of the people. The vast mass of our young men never go into a high school or university, and therefore must receive the whole of their literary education in the primary schools of the country. This material fact is too often forgotten by those who would restrict our public schools to the teaching of the three R's. I hold, therefore, that the course of instruction in these schools (while giving due prominence to those subjects) ought to be as comprehensive in its character as possible, and should include not only reading, writing, and arithmetic, but should also provide means by

which boys could develop a taste for such studies as those of the elements of natural science, natural history, and those other subjects which would best fit them for engaging in the battle of life and its practical every-day duties.

Dr. Hodgins said that he hoped to hear from some of the distinguished educators present as to how they practically deal with this question of the overlapping of studies in the elementary and higher schools.

In reply to a question, Dr. Hodgins stated that the school age in his country is from five to sixteen years.

He was also asked to state the difficulty experienced in the province of Ontario in regard to the overlapping of studies, which he did, and added that persons are not disposed to leave their children in the primary school long enough to finish the course, but are anxious to get them into the higher grade of schools before they are, in many cases, fit for it.

The chairman called upon Mr. John Hancock, superintendent of city schools, Dayton, Ohio, to answer the question raised by Dr. Hodgins.

Mr. HANCOCK said he thought that, as far as his knowledge goes, we are not laboring under any difficulty in that direction. Indeed he was quite convinced that what we term "elementary" or "primary" schools in this country are quite as good as the high schools, and stand as high in the favor of the people. It is the endeavor of all good graded schools in this country to make the primary work so thorough, and to so arrange the course of study for those primary schools, that a child leaving them will have all the elements of knowledge he can be expected to acquire within the first eight years of school life, and at the same time be so taught that the high schools can take up the course of study where the elementary schools left it off, and carry it on for another four years. There is no overlapping of the high school back upon the elementary course of instruction, so far as he knew. We have not met that difficulty, for the reason that the feeling that Dr. Hodgins speaks of does not exist. He thought he was quite correct in this. We do have a difficulty, however, in regard to the high school, and that is there is a feeling among a certain class of our people that the high school is a separate institution, and that it ought not to be supported at public expense.

The chairman stated that the question raised by Dr. Hodgins moved him to say to the conference that, should any question arise in the mind of any gentleman, either in the audience or on the floor, he hoped there would be the greatest freedom exercised in interrogating. As he understood the purposes of this conference, it seemed desirable that there should be very free interchange of opinions. The chairman wished further to say that we are quite anxious, now that we have an opportunity, to draw very liberally upon the distinguished gentlemen here from foreign countries, and they must excuse us if we seem to trespass upon their good nature. He then called upon Dr. Meyerberg, who represents the educational interests of Stockholm, Sweden, to say a few words in reference to the topic under discussion.

Dr. C. J. Meyerberg, superintendent of public schools, Stockholm, Sweden, said that he had not expected to be called upon, but would make a few remarks upon this subject; and he must be excused if what he was now about to say is not relished by the people present. He thought that we are too exacting in our schools in regard to the various grades and courses of study and the requirements of the pupils. In Sweden, and in many other European countries, it has been generally believed that the powers of youth are overstrained; and now as much is expected of girls as of boys. He feared that if girls, who are weaker than boys, were required to take the same studies, sickness would result. He was sorry to say that in Sweden, in other Scandinavian countries, and in Germany, physicians are of opinion that too much is learned in the schools, and that the result of so much mental labor is sickness, both to mind and body. He wished to hear less about the different methods of instruction, and more about how we may educate our children to be sound in body and mind. It is important that the physical as well as the mental powers should be educated, and for that purpose certain exercises are very useful. In Sweden, gymnastics are extensively taught, but not sufficiently so to offset the overstraining of the mind. The true doctrine is *multum, non multa.*

The chairman then called upon Hon. H. R. HITCHCOCK, inspector general of schools, Hawaiian Islands. That gentleman had prepared the following sketch of education in this country, to be read before the conference, and by request it is inserted here in place of his extemporaneous remarks:

One hundred years ago the Hawaiian Islands were unknown to the civilized world. For 50 years from the date of their discovery by Captain Cook the islanders were at the mercy of western commerce, which sowed broadcast the seeds of dissolution, and planted here and there a germ of material good, while enriching itself at the expense of childish ignorance and innocence. Commerce found them a heathen, disintegrated community, and cared not how long they continued so. Fifty years ago Christianity and civilization undertook the redemption of the race. A corrupt civilization had preceded Christianity many years. While that did not seek for the moral or even temporal elevation of the people, yet it effected the union of the whole archipelago under one controlling, irresponsible head. It was in this state that Christianity found the Hawaiian nation, a state of preparation for a higher destiny.

The field was an exceedingly interesting one. It was entered upon and taken possession of by that ardent and aggressive spirit which has always marked the Anglo-Saxon race. The results of the past fifty years may be thus summed up: A nation of heathen Christianized, civilized, and furnished with a rich and comprehensive written language, the vocabulary of which consists of more than twenty thousand words. It is

no small achievement to have furnished a nation with a written language and literature in less than half a century, even in this nineteenth century of lightning-like results.

During the early history of the national existence, education was in charge of private individuals, notably directed by the American mission sent out to the islands, and reënforced at various periods from Boston. The national government was in the hands of the King and chiefs, and was without a constitution or code of laws, being kept under control through fear of that foreign might which in those early days made right. Foreign gunpowder performed the part of foreign diplomacy.

The feudal system of the Middle Ages was represented in the Hawaiian nation, and the road to the popular mind and heart lay through the heads and hearts of the chiefs. What their chiefs told them to do, that did the commons without questioning; consequently, when the chiefs proclaimed themselves pupils to learn the "pala pala," the whole nation enrolled itself on the school lists. Chiefs and commons, men and women, old and young were fired with enthusiasm to learn, and might be seen sitting together in happy school families, taking their first lessons in the "a-e-i" of their written language. As soon as an adult had mastered the wonderful alphabet of 12 letters, and its combination of easy words and syllables, he was commissioned as a teacher, and proudly stepped forth to instruct his less fortunate or more obtuse neighbors. Thus a little leaven speedily leavened the whole lump, and from that time to the present the Hawaiian nation has placed the education of the people in the van, and has nobly supported its national schools.

The independence of the islands was guaranteed to them in 1843, and the department of education was organized in 1846. It was then that the government assumed the responsibility of educating the youth of the nation. Originally the department of education was under the control of the "minister of public instruction," who was a member of the King's cabinet. Later the title was changed to that of the "president of the board of education," and that officer withdrawn from the cabinet. Until 1861 the offices of minister and president were filled by members of the American mission, and thus it came to pass that the national system of education was built upon the broad basis of American principles. The system was well planned and energetically carried out before the government instituted the bureau of education; and when the common schools were surrendered to it, it strove to make them as efficient as might be with the means at its disposal, and by pursuing as unsectarian a course as possible.

In 1847 the wages of the native teachers of the common schools averaged 12½ cents per diem. The qualifications of the teachers and the requirements of the schools were not of a high order, yet they kept pace with the general needs of the people.

In the year 1865 the department of education was remodeled. While

still retaining the main features of preceding systems, its *personnel* was almost entirely changed.

And this brings me to speak of the Hawaiian educational system as it at present exists. The act of 1865, reconstructing the department, provides for, first, a board of education; secondly, an inspector general; thirdly, district school agents; fourthly, district school boards; and fifthly, teachers. I will consider these separately.

The board of education is composed of five members of the privy council of state, appointed by the King and holding office during his pleasure. One of the five is also designated by the King to act as president of the board, and all serve without pay. "No person in holy orders or minister of religion" is eligible for appointment as president.

By law the board "has entire charge and control of the bureau of public instruction; shall superintend the execution of all laws relating thereto; shall have the power to make its own by-laws, not in contravention of the laws of this kingdom; shall keep regular records of its proceedings, and make a report through its president of the business and transactions of the bureau to the legislature at each of its r egular ses sions," and, in fine, "shall have full administrative power in everything connected with education conducted at the public expense." The president of the board is required to keep an office at the seat of government, and his duties consist in "presiding at the meetings of the board, and signing all its official documents in order to their validity." He is authorized to employ a clerk to assist him, who is paid a salary by the legislature.

The inspector general is the executive officer of the board, is appointed by them, and holds office during their pleasure. "No minister of religion or person in holy orders" can be appointed to this office. The law requires the board of education to invest the inspector general "with discretionary powers, such as the opening and closing of schools, the holding of competitive examinations for teachers, the granting of certificates to those found competent, and the cancelling of the certificates of those teachers in service who prove untrustworthy. In these, and in all other matters intrusted to him by the board of education, he shall act temporarily with the same authority as though the board itself were acting in the matter;" and upon reporting his actions, the board may approve or not any or all his actions, as it may deem best.

It will be observed here that, in its constitution, the board is placed beyond the influence of political intrigue, and is entirely independent of it; and further, that its two most responsible offices can have no immediate connection with the church in any of its sects. In short, the unsectarian and secular character of the public schools is secured in the constitution of the department of education. The law makes it the special duty of the inspector general of schools "to make frequent tours of the respective islands and districts; to examine into the condition of the schools supported or aided by government; to inform school

officers and teachers of their several duties under the law, and to foster generally an interest in the cause of education."

District school agents are the next grade of officers in the department of education. These are appointed by the board, and may be removed at its pleasure. They act as treasurers of the district school funds and trustees of all school property in their respective districts. *Ex officio* they are the chairmen of their respective district school boards. These boards are composed of the district school agent and district justice, *ex officio*, and of one member chosen annually by the parents or guardians of the pupils attending the common schools. The district boards have the power to appoint teachers to the common schools in their respective districts; but such appointments can only be made from among persons who hold a certificate signed by the inspector general. They can also remove common school teachers, but cannot cancel their certificates, which can only be done by the board of education or the inspector general; "provided always, that any teacher whose certificate has been cancelled by the inspector general may lay his case before the board of education, in the shape of an appeal from the decision of the inspector general." While the school agents exercise the immediate control of the educational interests in their respective districts, and receive their orders directly from the general board or the inspector general, still the remaining two members of the district boards have a general advisory control, the third member appearing as the representative of the interests of parents and guardians.

Teachers of the common schools hold their certificates from the inspector general. No person can teach in any of the common schools who does not hold such a certificate. "Each teacher shall have the power to administer necessary and reasonable punishment upon the pupils of his school, and shall not in any way be punishable for so doing." The pay of all teachers is determined by the board of education, which has recognized the principle that service is to be recompensed according to merit, irrespective of sex. Thus in the common schools women receive the same as men when they perform the same work; and to-day two of the principals of our union schools are ladies, who receive precisely the same salary as was formerly paid to the gentlemen principals.

I now come to consider the school system as carried on by the board of education. The system comprehends—

1. Primary or common schools;
2. Select schools; and
3. The national college.

At the foundation of the Hawaiian school system is laid this law: "It shall be incumbent on all parents, guardians, and adopters of children to send such children, from their sixth to their fifteenth years, to some lawful school, public or private, to be instructed in good morals and elementary learning." The responsible party who fails to use proper diligence to enforce the child's regular attendance at school may be fined

by the proper judicial tribunal not more than $5, or suffer imprisonment in default of payment of the fine not more than fourteen days. Persistent truancy in a pupil subjects him to a term of imprisonment in the reform school for not less than six months nor more than two years, or to a fine not exceeding $2, or to imprisonment at hard labor for a term not exceeding ten days.

The common schools are all taught in the Hawaiian language, and by native Hawaiians. The average pay per diem is 50 cents for five hours of teaching. The year is divided into four terms of ten weeks each, with five school days to each week. In the year 1874 the legislature passed an act the first section of which reads: "It shall be lawful for the board of education to include agricultural and industrial pursuits among the branches of instruction taught in the public schools of the kingdom." The five hours of daily schooling are divided into three hours of indoor application to books and two hours of manual labor, chiefly agricultural. Where schools are so situated that profitable manual labor cannot be carried on, the five hours are spent by the pupils at their books. The net profit of the pupils' labor is divided among them and their teachers, who are obliged to give as careful attention to the industrial pursuits of their schools as they are to the intellectual advancement in books. If faithful in the performance of these duties, the teachers receive one-fifth of the net profits of the school labor, the remaining four-fifths being divided among the pupils in proportion to the work they do. As a result of the introduction of the branch of manual labor in the common schools, the sum of $2,500 was divided among nearly forty schools, representing 1,200 pupils. This sum was the cash result of pupils' labor for one year; and, in addition to it, crops covering twenty-five acres of area were raised and 6,000 feet of substantial stone wall built around the various school premises. The reflex influence upon both teachers and pupils of this outdoor work, when well performed, has been most gratifying; it has increased mental activity. An active mind does not exist in a lazy body.

The average Hawaiian common school teacher exhibits a great deal of human nature. The problem he daily strives to solve is how to render the least amount of service for the greatest amount of wages. Consequently the invention of excuses to avoid school duties is his constant study. One of the most ingenious of these is the death of his relations or connections. An occurrence of this kind, of course, gives him a good excuse for closing his school for a day or two to bury them respectably. As the pure Hawaiian is possessed of an unlimited supply of fathers, mothers, mothers-in-law, sisters, brothers, etc., deaths and consequent closings of schools are frequent.

The material for common school teachers is gathered from poor sources, as a rule. It cannot be otherwise until the teacher shall be specially educated for his work. Pending the special educating of teachers, the present force is obliged to conform its teachings to the

principles laid down for its guidance by the inspector general, which principles are embodied in a manual furnished each common school teacher, with the approval of the board of education. By means of the manual a uniformity of elementary instruction prevails in all the common schools.

It has been before observed that the unsectarian character of all the government schools has been guaranteed by the constitution of the educational department. This character is enforced by the board. School teachers are permitted to open and close their schools in any method of Christian worship which their consciences may dictate to them. After thus opening the daily session, for which a reasonable time is allowed, the teachers must devote their time and energies to recitations from the various text books approved and assigned to the schools by the inspector general. The board of education believes, and acts upon the belief, that, while it is responsible to the nation for the inculcating of sound morality in the minds of the rising generation, the religious education of the youth of the land is a parental responsibility which cannot be transferred to others; and the result of this action has been such that no complaints from any of the religious denominations in the country have been presented to the board. Teachers' institutes are held semi-annually, for the purpose of instructing the common school teachers actually employed in the current routine of school exercises, and giving them the opportunity of exchanging opinions on various topics connected with their profession. The persons who conduct these institutes are gentlemen of culture, and receive their programme of exercises directly from the inspector general. These institutes hold eight sessions of five hours each during the summer and winter vacations, and all common school teachers are required to attend, unless excused therefrom by their school agents. The pay of teachers attending is kept up during the sessions, and a sum sufficient to cover travelling expenses is also allowed.

The common schools are supported by an annual poll tax of $2 on all males between the ages of twenty and fifty and by special grants from the legislature. The amount of school tax raised in each district constitutes the district's school fund. The unexpended balances of one district school fund cannot be used to supplement the deficiency in the school treasury of any other; consequently, the legislature places at the disposal of the board of education biennially a lump sum, to be used by it to supplement any deficiency which may occur in the funds of the poorer districts. In this manner the common schools throughout the kingdom have been kept open full time. The common schools are free, and the annual cost to the nation of each child educated in them was in the year 1874 $7.40. The census of 1872 gave 8,931 as the number of school children throughout the kingdom, and of this number 8,287, or 92.8 per cent., were in actual attendance.

The select schools supplement the common schools to a certain extent.

The English language is taught in them, whereas the common schools are all taught in the Hawaiian language. The necessity of including the study of English was forced upon the government. Nearly twenty-five years ago the people became imbued with the idea that a mine of gold was hidden in the English language. They began to send their children to the ephemeral English schools which sprang up as if by magic all over the kingdom. English speaking foreigners entered into the school business side by side with natives who boasted a smattering of the tongue, chiefly to reap the harvest of dollars which appeared ripe for their sickles. The common schools were in danger of being closed for want of pupils, the fever for the acquirement of the English language pervading every district in the kingdom. But the people entered upon the campaign of mastering the difficulties of a foreign tongue without counting the cost. The popular idea was that the poorest pupil should be turned out a finished linguist in six months, or a year at most. Consequently, when the children returned home month after month with the well worn primer still in their hands, and tongues unlimbered by the English elementary sounds, the patience of the parents was worn out, and, "wearying of it," they returned them to the common schools. In the meanwhile the children had forgotten what they had been previously taught in their mother tongue, and had to go over the old course again, pulling up weeds in the poorly cultivated tract. At this juncture the department of education stepped in, and organized the class of select schools, wherein pupils could be taught the elements of an English education, provided their parents would agree to keep them at school for a sufficient period. Gradually these were separated into boarding and day schools.

The government school system culminates in the National College, situated on a hill 600 feet above the sea, on the island of Maui. Here, the young Hawaiian, thirsting for a higher education than that to be obtained in the common or select school, may obtain it. There is a course of four years. Students entering are required to pass a satisfactory examination in all the branches of a common school education. The Hawaiian language is the vehicle of instruction, although English is also taught. A normal course of two years for teachers has recently been added to the college.

The legislature of the Hawaiian Islands has prepared, by special act, a "reformatory and industrial" school for the juvenile offenders of the nation. This institution is also placed under the control of the board of education, and is wholly supported by biennial grants from the legislature. The juveniles placed there are compelled to labor, chiefly at agriculture, and are also taught in school three hours daily, Saturdays and Sabbaths excepted. Whenever opportunity affords, the board of education binds out pupils, having long terms to serve, to parties who will teach them a useful trade and have them taught the rudiments of an education.

In addition to its own school system, the board of education is required by law to render all the assistance in its power to the various female seminaries which have been established in the islands. The nation realizes more and more the necessity of faithfully educating its future mothers. A more laborious and self-denying class of teachers does not exist than the ladies who have the immediate control of the education of Hawaiian girls in these boarding schools. The method adopted by the board of education to render aid to these seminaries is by granting them fees *per capita* for all girls entering the schools under ten years of age, and continuing such fees until the age of sixteen. Within these limitations, and provided that an annual fee of not more than $50 is charged for each pupil, to defray expenses of board and tuition, by the trustees of the seminary, the board assists each pupil in proportion to the time spent at school. After six months' attendance at school the school trustees can draw for each pupil the sum of $10, and for every six months' additional and consecutive attendance $5, until the sum of $30 annually is reached, when the amount remains fixed at that figure until the pupil reaches the age of sixteen, when all further aid ceases. In return for this aid on the part of the government the board of education exercises a general oversight, "with the right to visit and to inquire into the general condition and operation" of the seminaries, "and to see that the objects of the public endowment or support are faithfully executed."

Private or independent schools, existing without aid from the public funds, are obliged to hold one hundred and eighty sessions annually, and each session must continue not less than three hours; otherwise, the law does not recognize them as schools, and the children attending them must be sent to a regularly organized school, or be liable to punishment for truancy. This law became necessary in the interests of popular education, to restrain the great number of incompetent persons, native and foreign, from establishing what it pleased them to call schools, keeping them for any time it pleased them, and disbanding them at pleasure. The law at present requires each one who desires to establish an independent school, unless he be a person well known as a competent educator in the community, or has satisfactory credentials from abroad, to appear before the school agent of the district in which he desires to establish his school, backed by a petition from the patrons of the proposed school. The school agent, upon receiving such application, designates a citizen of the district to act upon a board of examination, the candidate for the school appoints a friend, and these two appointees choose a third, and if the resulting examination before this board is deemed by them satisfactory, the applicant is granted a certificate to that effect, and upon his showing this certificate to the school agent he is authorized to open a school.

The registry of marriages, births, and deaths is by law placed under the control of the department of education, as is also the taking of the

census every sixth year. The preparation of text books in the vernacular demands much time and attention, and devolves upon the inspector general, who is generally authorized by the board to employ the assistance of competent persons in the various details of preparation.

The chairman said that he would now pass across the Pacific and call upon Dr. Murray, who represents the educational interests of Japan.

Dr. DAVID MURRAY, foreign superintendent of education for Japan, then came forward. He said the present system of education in Japan is a new departure made necessary by foreign nations (through Commodore Perry and others) forcing their way into that country and making it necessary for Japan to become formally a member of the nations of the earth. Contact and intercourse with those nations has made necessary a new kind of education. The Japanese had a system of education before that, which had grown up during many centuries, and which had grown in such a way that it answered the purposes of civilization and culture in that country; but when these European nations made their way there and the Japanese race was compelled to come face to face with that new civilization, with that new culture, with this new knowledge, then it made necessary a change, and, like a nation of sensible men, they made the change. That change consists in introducing, in place of the old Chinese education, which was carried on to so great an extent, (and which corresponds with the education given in the Middle Ages, when the philosophy of Aristotle and Latin and Greek classics composed the entire course of education,) the new education, which attempts to meet these new circumstances, and the system of schools that has been established, which includes all grades from the lowest to the highest, has been arranged upon this idea.

We have, therefore, a common school system of education which attempts to give an education to every boy and girl in the empire. This is a new departure, a new idea. It is an idea that originated in Europe. It is not long since that these western countries have learned to think that universal education is necessary for a nation. This idea of education, so far as government provision is concerned, pertained to the gentry of the country, to the nobility. But when it was found that this nation had to meet with nations who were universally educated, the idea of universal education also became necessary; so, throughout the whole empire we have scattered schools which are intended to give the elementary education necessary for boys and girls.

Commissioner Eaton desired Dr. Murray to state something of the specific courses of study in Japan.

Dr. Murray went on to say that the course of study is an adaptation of the courses of study that have been found beneficial and serviceable in other countries to the circumstances and language of that country. The written language of Japan is largely in the Chinese alphabet, written in Chinese characters; and hence the early part of the education of these boys and girls is taken up with learning the meaning of these

Chinese characters. The number of Chinese characters intended to be taught in the common schools would, he supposed, be about 3,000; that is, every boy and girl is expected to learn to make with facility, and with some degree of skill, these 3,000 characters, and to be able to know any one of them at sight, just as boys and girls in this country learn to read new words on the printed page at sight. This question of the language is much more difficult there than in any other country that he knows of. Then follow, in their order, the studies that naturally come. The pupils are taught the geography of their own country, and the geography of foreign countries. These about compose the studies of the elementary course. Following this we have secondary schools, intended to fill the place between the higher education and elementary education. The course of study there is a continuation of the study of the language, which in Japan is a constant study and must be followed up from early youth until manhood in order that it may be mastered, and that pupils may become thorough Japanese scholars.

The chairman here announced that Dr. Murray's time had expired.

Mr. JOHN HANCOCK said that there was one point in the report read by Dr. Harris to which he would like to call attention, and that is in regard to the teaching of science in the public schools. He wished to know what has been the experience of those present. Dr. Harris provides a curriculum of study that goes round and round, and the pupil in the elementary school is expected to touch every point in that circle, to have something of mathematics, something of language, and something of natural science. This is a question which has been discussed in this country very largely. As Dr. Meyerberg has said, there is a cry on one hand that we are overburdening the children with a great number of studies; and on the other hand comes up this cry, that the natural sciences are coming into great prominence, and they ought to be taught; that no one ought to go out of the elementary schools without having some knowledge of the elementary sciences. And there is a practical difficulty of so shaping the course of study for elementary schools as that that course shall bring before the pupils of those schools these elements without crowding the study of something else that is equally or more important. He said that was a point he would like to have delegates from foreign countries touch.

The chairman said the subject was still open for discussion, and there was reason to expect that some of the representatives of the different States of our own country might be heard from. He would call upon President E. E. White.

Hon. E. E. WHITE, president of Purdue University, Indiana, addressed the conference. He said he was very much interested in the paper read by Dr. Harris, and he hoped that at some future day there would be a thorough discussion of its central recommendation. The paper states that it is possible to have one course of general instruction as a preparation for all special courses. If that is true, it solves a very difficult problem in American education. A continuous, uniform, general course for all grades of pupils and for all pursuits would greatly simplify the problem. He did not understand Dr. Harris to hold that special courses, as in law, or medicine, or technology, should come out of this general course at the same point, but that the general preparation for all these courses should be the same, though not to the same extent, the different courses coming out at different points.

If this be true, the public school course will be a proper preparation for the college, and also for the scientific school, the technical school, and the professional school, and we shall not need separate courses of study as a preparation for these different higher courses. This position of Dr. Harris should be thoroughly canvassed. He was *inclined* to accept it, (for he had great confidence in the ability of his friend,) but he was not prepared to say that he accepted it without qualification. He believed that a general course of preparation for all special courses of higher education should include all the great representative branches of study. Using Dr. Hill's celebrated illustration, a true course of study is a spiral stairway surrounding the great pillars of knowledge and cutting off a section of each at each round of ascent. He believed that this is true; but should a general course of education leading to the several special courses have these representative branches in the same proportion at each round of ascent? Natural and physical science, languages, mathematics, the science of man, etc., should enter into every general course; but is it true that at every step of these courses these several representative studies should enter *in the same proportion?* In a general course of study leading to technological studies should the languages be taught to the same extent as in a general course leading to professional studies? He was not quite clear on this point. He could see that these great branches of learning should be included in all courses of general education; but he did not see that they should enter into all in the same proportion.

The chairman announced the subject for discussion at the evening meeting, and invited all present to attend, and to extend the invitation to others.

He then declared the conference adjourned, to meet at 8 o'clock p. m.

SECOND SESSION.

JUDGES' PAVILION, CENTENNIAL GROUNDS,
Philadelphia, Pa., July 17, 1876—8 p. m.

The conference was called to order at 8 o'clock p. m. by Vice-President Phelps, who announced that the topic for the evening's discussion was: "The teacher in different countries: his preparation, status,

salary, and tenure of office;" and called upon Dr. J. G. Hodgins, of Ontario, Canada, to open the discussion.

Dr. HODGINS said there are two subjects to which the department of education in Ontario has given special attention during the last few years, both of which affect the teacher. The first is the condition and character of the school-house and its accommodations, and the second is the teacher himself. In both of these respects very great improvement has taken place within the last five years, especially in the condition and status of the teacher.

No person can be employed in any public school in Ontario, even in the capacity of a monitor, unless he shall have been examined and shall have received a certificate from some officer connected with the system of education. He first begins as a monitor in the schools, that is, a person who acts as a subordinate assistant to the teacher. His next position would be that of an assistant, not an assistant teacher, but simply an office of the next higher grade to that of monitor. For both of these positions he must hold a certificate from a county inspector, after undergoing an examination for the particular office. If he should have served an apprenticeship to some extent in either or both of these offices, then he becomes eligible for an examination as a third class teacher. After having served in that capacity for three years he then becomes eligible as a second class, and, in two years afterward, as a first class teacher. But the peculiarity of the system of examination is this, that when he aspires to the office, even of the lowest grade of teacher, he must submit to an examination which is common to all the teachers of that grade throughout the province. That examination takes place on a specified day and hour in every county in the province. Precisely the same papers (those papers having been prepared by a central committee) are sent out under seal to inspectors or county school officers, with special directions that the envelopes shall not be opened until such a day and such an hour, when the envelopes shall be opened in the presence of the candidates and their contents distributed by the examiners. The examination, therefore, is uniform throughout the province, taking place on the same day and at the same hour. The question papers for these examinations have, as I have said, been prepared by a central committee, so that the standard of the examination is uniform throughout the province. Upon the result of the examination the candidate receives a certificate or not, as the case may be, which is valid for three years within his own county, and not valid in any other county of the province, unless specially indorsed by the inspector of that county. He must remain in that grade, at the option of the inspector, at least three years before he can contest for a higher grade; and when he aspires to that grade he is subject to another examination of a similar kind on other papers prepared by the same authority and sent out to all the counties in the province. That examination is much more rigid, and takes a higher range of subjects than

that of the third class or lower grade. He must hold the certificate he then obtains for two years, when he may aspire to the very highest grade, or first class certificate, valid throughout the province. A peculiarity of this third and last examination is this, that while the papers or questions are prepared by the central authority the answers are examined by the same authority, and not by a county authority. All the answers received from the candidates for first class certificates are sent up to the education department at Toronto, and are there examined by a central board appointed by the government. On the favorable result of that examination the candidate receives either a first class certificate of the grade A or B, the purpose of which distinction I shall explain. A person holding a first class certificate of the grade B is entitled, *ex officio*, to become a county examiner of public school teachers. The examination for that certificate is exceedingly rigid; and when I mention the fact that, of the grades A and B first class certificate, out of upward of 5,500 teachers in the province only 250 are either first grade A or first grade B, you will see how exceedingly difficult is the examination for the first class certificate. The reasons for that, I think, you will agree with me, are obvious. From the fact that the holder of the first class certificate, grade B, is entitled, *ex officio*, to become a county examiner, it is very important that his qualifications should be of a very superior order. Then the holder of the first class certificate, grade A, has the right, *ex officio*, to become a county inspector; he requires no further examination, and his qualifications are prescribed in that way. Another reason for maintaining so high a standard is this, that no person holding a lower grade certificate than first A should be appointed to inspect the schools of teachers who may possibly attain a higher grade than himself. It was therefore wisely determined that no person should be appointed inspector of the public schools who does not give official evidence that he possesses the highest possible qualifications which a teacher of any public school in his own province is required to have under the regulations. So much for the examination and status of teachers.

The salaries are not yet equal to what we hope they will become by and by; but they have gone up with some regularity within the last five years. The ordinary salary of a second class teacher (it is not worth while to refer to the third class, as their compensation depends so much on the locality and character of the school) is from $350 to $500 and $600 a year in gold. Those of the higher grades are generally from $500 to $1,000, gold.

In regard to another point which affects the status of the teacher, I may mention that, in order to keep teachers in the profession, (and I suppose that is one of the chief difficulties which every state experiences,) we hold out the additional inducements to which I have referred to those who aspire to the highest places as teachers in our public schools. The prize is, that they shall have the right to become examiners of teachers and inspectors of public schools, the latter being the very high-

est rank to which they can attain in the profession in the province. That rank is considered to be a very high one indeed. But further to encourage persons to remain in the profession as long as they can efficiently discharge its duties, we have provided a fund by means of which teachers, having become worn out in the profession, shall have the right, when they reach the age of sixty, to retire, and to receive a pension, at the rate of not less than $6 per year for each year of service, and an additional dollar per annum, if the teacher shall have reached the highest grade in his profession. We have, I think, now nearly three hundred venerable men pensioned as teachers in the province, drawing at that rate per annum for their services in past years. You will be surprised to find that the average age of those persons, according to the last report, is at least sixty-five years, and the average amount of service which those teachers have rendered to the province is about twenty-two years. I think there is no feature of our system of education that commends itself so entirely to the judgment of the practical man and the benevolent heart of the philanthropic man as this special and (on this continent) peculiar feature of our public school system. We have, as you see, in these ways endeavored not only to fix the status of the teacher as high as possible, but also to reward him for his past services after he shall have become worn out in the service. And I may add in regard to this provision of the school law, that it is not necessary that the teacher should reach the age of sixty years; if he becomes disabled from any cause—even from causes not arising out of the practice of his profession—if he should become permanently sick or deranged, or become disabled by accident, then he has the right to retire and receive a pension, he or his friends furnishing evidence of the facts satisfactory to the department. One of the most agreeable duties which devolve upon the department is the examination of these cases from time to time, some of them, though rarely, of teachers of not more than thirty-five or forty years of age, and the majority from sixty to seventy or seventy-five years of age. It is indeed a pleasant thing to be able to recommend to the honorable the minister of education that such and such persons, having become superannuated in the service as public school teachers, shall be entitled to a pension according to the length of their service.

In reply to questions Dr. Hodgins stated that the classics are not taught in the public school, but in the high school, and that there is no limit attached to the age of an inspector.

On being asked to state the annual pay received by these county inspectors, Dr. Hodgins said that he had forgotten to mention one peculiarity about their school system which he hoped they would be able to extend further. The salaries of inspectors are fixed by law at $5 per school, payable by the county, and $5 per school, payable by the province; so that, in point of fact, the inspector is a provincial officer, yet having a county status. By a liberal interpretation of the law,

the inspector receives really more than the amount named; because a department of a school is considered a school—that is, a department of the school which is under a teacher with a register of his own and in separate rooms requires as much care and inspection as any school. In that way his salary is somewhat increased; but in addition to that he is entitled to a certain specified allowance for services rendered in the settlement of disputes, and in other ways his salary is increased so that it is from $1,200 to $1,800 a year in gold.

The chairman said the conference hoped to hear from some other gentlemen representing foreign countries on this subject.

Dr. MEYERBERG, of Sweden, then addressed the conference. He said he had already spoken of popular instruction in Sweden, and he would now give some idea of higher education in that country. He thought it a great advantage that the popular schools have no connection with higher institutions of learning. If the public or common school were to prepare for higher grades, they could not do as good work as they now do. While their only aim was to teach the common branches thoroughly, they could show excellent results. The more advanced public schools teach, in addition to the common branches, some elements of secondary instruction. These schools are intended for such children as can devote a few more years to education than the children in general.

Commissioner Eaton here interrupted the speaker, saying that he hoped he would say something about the teachers in Sweden.

Professor Meyerberg, continuing, said he wished to state that they have now in Sweden twelve normal schools, ten for male and two for female teachers. The normal course is now three years. Since there were many applications for admission to the normal schools, the standard for admission has been raised. The branches of instruction are the same as those in the common schools, and also physics, chemistry, drawing, and gymnastics.

Commissioner Eaton inquired how much time is devoted to the philosophy of education.

Professor Meyerberg answered that two hours a week are devoted to the study of pedagogy in the first class and four hours a week in the second class schools. The students of normal schools have also practical exercises in day and evening schools. In Stockholm a school of nearly 400 pupils is connected with the normal school. The professor said there is a great want of good teachers, especially of good female teachers, in Sweden. The employment of female teachers has not been favored very much heretofore, but now there seems to be a general demand for them.

In Stockholm, there are four female to one male teacher. The female teachers are doing excellent work, and are highly esteemed for their great zeal in school.

Their salaries are the same as those of male teachers in all country schools, but in cities female teachers receive less than male. The allowances of teachers consist of money and a dwelling-house with garden, the average amount paid being 500 crowns,* annually. In some places teachers also receive the necessary fuel. Salaries, he said, are raised every five years. It depends a great deal on the generosity of the local school authorities whether salaries are high or low, because it was left to them to fix the amount.

In answer to the question whether the smaller schools pay that amount, Professor Meyerberg said they do. But there are other schools, called infant schools; the salaries paid to the teachers of these schools are less, and these teachers have not passed an examination in the normal school. They are trained in a school connected with the normal school, or in other schools established by the government. Sweden is divided into different governments, each government having an assembly, and sometimes this government assembly establishes normal schools for the instruction of female teachers for the infant schools.

In reply to the question as to how these salaries compare with those paid for services in other positions, Professor Meyerberg said that in the towns and cities teachers are better paid. They receive about 1,500, 2,200, or 2,400 Swedish crowns. It is difficult to compare salaries because those for the various officers differ so widely. The highest salary in his country is about 20,000 Swedish crowns. The salary of a lieutenant in the Swedish army is about 500 Swedish crowns; a captain has about 1,200, and a colonel 3,000, and sometimes 4,000 crowns. Clergymen are very differently paid, because they are paid from the different parishes, and their compensation depends upon the number of the faithful under their charge. They are generally paid 500, 600, 700, 800 Swedish crowns.

Commissioner Eaton here desired to ask Professor Meyerberg for information as to the status of the teacher in Sweden, his rights, the conditions of his tenure of office, conditions of removal from office, and whether he receives a pension.

Professor Meyerberg replied that a teacher can be removed from his place upon an admonition from the board of instruction in the parish. If he were accused of a fault, and lost his place, he had the right of appeal to the king. It very seldom happened, however, that teachers were discharged. They did not generally lose their places unless they were incapable.

He was then asked if the position is for life, provided no offence be committed against the law and the teacher remain competent, and and if teachers receive a pension.

He replied that it is a life position, and that teachers receive a pension after thirty years' service, when they are sixty years old. This

* The value of the Swedish crown in United States gold coin is 26.8 cents.

pension was three-fourths of their salary. If they become sick after ten years' service, they receive a slightly reduced salary. He thought the reduction was about 4 per cent. a year for each year of service.

He was requested to state how many teachers in his country are now drawing pensions.

He answered that there are not a great many yet; he supposed not more than 600 or 700.

He was then asked if this pension was paid by the government.

He replied it was paid in this way: the government or diet has given a sum (about half a million) to constitute a fund, and the parish or board of instruction must contribute to this fund 4 per cent. of the salary. If the teacher dies, the wife and children receive a pension, and to this pension the teacher must contribute himself. In case of a female teacher being married, her husband becomes the pensioner. [Laughter.] If husband and wife are both teachers, they are each entitled to a pension.

In answer to the question, Are any teachers employed except those who have taken a course in the normal schools? Professor Meyerberg said there are some in the towns and cities. In Stockholm there are a few. Young students and those they call doctors of philosophy are employed in the schools there because of the lack of teachers; and generally after some years' service, if they are found to be efficient, they receive the right from the government to be considered examining teachers.

In reply to the inquiry as to whether pensions are paid to civil officers generally after a certain term of service, or if they are confined to teachers, he answered that there are different pension funds that the civil officers themselves had established. The question of allowing all officers pensions was being agitated. All clergymen have pensions. If a clergyman dies, his wife generally has his income during two years from a fund formed by the clergymen of different districts.

In reply to a question, Professor Meyerberg stated that it is impossible for a teacher to be discharged by a board of education without some cause being assigned. If he were a drunkard or a criminal he would be discharged.

On being asked who examined the teachers, Professor Meyerberg replied that they are examined by the teachers in the normal schools.

Being asked whether teachers in cities are supplied with houses, he answered they are not. They were formerly furnished houses in Stockholm, but now there are thirty to forty teachers in one schoolhouse, and it would be impossible for them all to live there.

He was asked as to the requisite qualifications of a teacher in the public school. He answered he must have been three years in the normal school, and have passed the examination there.

To the question, Must the qualifications of those who are not graduates of the normal school be equal to those of persons who have grad -

uated there? he answered that they must. It depended upon the superintendents or boards of instruction whether such persons should be employed in the schools. If such teachers proved satisfactory after trial, they were given by the government the same rights as a teacher who had been examined.

Commissioner Eaton said he believed they have in the sparsely settled districts of Sweden what are called ambulatory schools.

Professor Meyerberg answered that they have.

He was then asked by Commissioner Eaton whether the teachers of these schools have all been educated in the normal schools, and, if the school is held only a few months in a place, how they could afford to employ teachers educated in the normal schools.

He answered that these ambulatory schools are mostly in districts in the northern part of Sweden where the population is sparse. The teacher comes to the children; and in these districts there are more so-called infant schools than any other kind. In some of the large districts with four or five hundred inhabitants there are three or four infant schools, which are generally taught by female teachers. These teachers are not examined in the normal school, but in a school established for the instruction of female teachers who are to teach infant schools.

In reply to the question as to whether there are permanent schoolhouses for these schools, he said sometimes there are and sometimes not.

He was then asked how far the scholars travel to these schools, and answered about three English miles, which was too much.

Asked to what extent the Kindergarten system prevails, if at all, he replied that the Kindergarten system prevails in Stockholm and in some other cities and towns, but not in the country.

He was asked if a teacher in Sweden proved incompetent, or unsatisfactory to the people in any way, whether there are any means of removing him; and also, how much time a day and how many days of the year are occupied by school instruction in the rural districts and small towns. He answered if the teacher was incapable certainly he could be removed, but it would be very difficult to do so. The matter must first be called to the attention of the superintendent of the school, and he must examine the instruction given by the teacher and report upon it; then the teacher may perhaps get an admonition from the board of instruction, and afterward be removed; but it is a very difficult matter to remove him except for sufficient cause. Formerly the peasants in the country wished that the teacher might give instruction as many hours a day as possible, but now there is a regulation that they shall not teach more than six hours a day. As to the number of months and weeks, that varied; it depends upon how many schools there are in the parish. Generally nearly the whole year is given to instruction in an infant school; but in other schools the time is less.

In reply to the question whether education is compulsory in Sweden, he said that it is. If parents neglect the education of their children they are at first called before the board of instruction, and receive an admonition from the presiding officer of that board. If that have no effect, the board of instruction can take the children and have them educated at the expense of the parents, but it is in most cases impossible to collect money from such parents, since they are generally poor.

The professor was asked how many children there are given to a teacher on the average. He answered in the schools of Stockholm the average number of pupils to each teacher is 50. It is the same in the other towns and cities. In the country the number ranges from 60 to 70, and often more, because there are no regulations in the country relative to the number of pupils.

Prof. E. JONES, of Liverpool, England, said that perhaps the meeting would like to know something respecting the training, preparation, and status of teachers in England. In the first place, very great care is bestowed upon the training of teachers. It is done in this way: At the age of 13, boys and girls, the best of the school, are selected as candidates for pupil teachers. If they pass the examination satisfactorily, they are apprenticed for five years. They are not only teachers but pupils; that is to say, they teach in the school according to ability, and they also pursue their studies. At the close of every year they are examined by the government inspector or examiner. A failure in this examination, or a failure in character, or inaptitude to teach, disqualifies them, and they drop out. The same takes place according to a graded scale every year, until by the end of the apprenticeship of a certain number of young people, many of them would be sifted out and only the best (the cream as it were) remain. At the close of their apprenticeship these young men and women are subjected to a more rigid examination preparatory to entrance upon the normal school. If they pass this examination they are entitled to what is called a Queen's scholarship; that is to say, to a maintenance or part of a maintenance in a training college for two years. The course there, perhaps, may be described as more thorough than ambitious. They do not undertake classics or languages very much, but the English language is studied thoroughly, and mathematics as far as it may be required in elementary schools. But great attention is paid in these training colleges to physical science, chemistry, and botany. Other subjects are taught, and the students are very strictly examined by examiners outside of the college in all these subjects. These examiners are appointed by the government at the close of the term. He might say that music is always a subject of study, and also drawing in its four branches—free hand, perspective, model, and geometrical—and the pupils get certificates for excellence in each of these subjects. At the close of two years these young people are examined preparatory to their going out

as teachers. If they do not give satisfaction at this examination, they fall out again; so that the *crème de la crème* of the candidates is reserved for the work of teaching. But they are not yet fully qualified. They may get a provisional certificate at the close of the term of the third degree; but the full certificate is given only upon actual successful teaching — upon success in teaching after three or four years' experience — so that an English teacher must have passed through nine or ten years of preparation before he or she can be fully equipped for the work. He said he had not the figures before him giving the exact proportion of those now engaged in teaching of this class who have gone through the process described. There are other avenues to the work of teaching; as, for instance, teachers may go up for a low grade of certificates to teach in the rural districts, in which case they are admitted on a lower examination and without passing the training college. Also a lower certificate may be obtained for teaching infant schools, but he should say about 80 per cent. of all the teachers now engaged in England are such as have passed through the first course described.

Now, as to the status of the teacher and his relation to the government. No one ever dreams of engaging a teacher for a year or a fixed term; the engagement is considered to be for an indefinite term, until he or she can better the situation. There is no thought of changing a teacher at the end of the year or of a number of years, unless he becomes inefficient, and then the manager of the school has the right to give three months' notice, and at the expiration of that time the bargain ends.

With regard to the salary of a teacher in England, he thought that if translated into dollars, it would be expressed something in this way: For a small rural school kept by a lady teacher, it would be, say, $250 a year; that is the lowest, and from that it would mount up by a gradual scale to $2,000 a year for male teachers in the best schools in the cities. In a good city school, in Liverpool, London, or Birmingham, a principal male teacher will get from £200 to £300 a year — *i. e.* from $1,000 to $1,500. That would be considered a good salary. The ladies, he was sorry to say, are not paid at the same rate, though they may be equally efficient. Their salaries are about three-fourths those of the gentlemen; a master would get £100, and a mistress £75. One great grievance that English teachers feel is this, that there is no opening out of the profession; that is, there is no promotion, no reward for good service. The inspectors are appointed entirely outside of the class of teachers. Their power is very great. There is no appeal from the inspectors' report, and there is no pension, he was sorry to say.

Being questioned as to how these inspectors are chosen, Professor Jones replied that they are government appointees. They are required to be first class Oxford or Cambridge men in honors, so that their education is guaranteed, but not their practical experience.

In answer to the question as to whether they have no practical experience as teachers or in regard to common schools, he replied they

have none whatever. It has been known that a young man of five-and-twenty, who may never have been inside an elementary school, and may know nothing about it, although an excellent scholar, should go at once and inspect a teacher who had spent five-and-twenty years in teaching.

He was asked whether there is any reason for thus excluding practical experience, and answered that the teachers could not understand it; they cannot see the reason. The thing has never been attempted to be explained by the government; perhaps it is a piece of government patronage that the president of the council does not like to dispense with.

In response to a question as to whether these inspectors are appointed for counties or districts, and in regard to the length of their official term, he said that they are appointed for life — it is a career as a rule — and they are appointed to certain districts.

To the question as to the present compensation of the inspectors, he replied that it begins with about $2,000 to $2,500; £400 is the least; then it increases at a fixed rate, up to £800 a year; that is, $4,000.

Professor Jones was requested to mention the names of some inspectors that occurred to him. He said a very old inspector is D. J. Morell, who has been thirty years in the work; should think his emolument would be the maximum.

In answer to a question as to the number of such inspectors, he said the number under the education department is about seventy-five in all England, and they have assistants selected from elementary school teachers, but the salaries of the assistant inspectors are not equal to those of the teachers themselves. They are simply the clerks of the inspectors, quite a distinct class.

Professor Jones was asked if Matthew Arnold is not still an inspector, and replied that he is.

Then being asked what difference there is in the qualification of those employed by the school board and other teachers, he replied there is none whatever; as a rule the school boards pay better; they can draw upon the local rates, whereas other schools depend upon the voluntary contributions of friends of education in addition to government appropriations.

He was asked whether Matthew Arnold, for instance, spends every day in inspecting primary and other schools, and answered that he does, and has to give an account strictly of every day and hour that he spends in that department.

Commissioner Eaton said that before drifting entirely away from the topic which has been engaging the attention of the conference this evening, he would offer the following resolution:

Resolved, That the thanks of this conference be sincerely extended to all gentlemen who have favored us with their instructive remarks this evening.

The resolution was agreed to. [Applause.]

Hon. G. Videla Dorna, of the Argentine Republic, said he had come

by invitation prepared to make some remarks to-night on the present topic of discussion, but would defer his remarks until the following morning if that would be more agreeable to the conference.

It was informally agreed that he should be heard at the next session.

The chairman declared the conference adjourned to meet the next day, in the parlors of the Pennsylvania Educational Hall, at 10 o'clock a. m.

THIRD SESSION.

PENNSYLVANIA EDUCATIONAL HALL,
CENTENNIAL GROUNDS,
Philadelphia, Pa., July 18, 1876—10 a. m.

The conference was called to order at 10 o'clock a. m. by Chairman Phelps, who said the desire was expressed last evening that the discussion of the topic for the evening—"The teacher in different countries: his preparation, status, salary, and tenure of office"—might be resumed this morning. There are two gentlemen who will address us. He then called upon Dr. J. George Hodgins, of Ontario, Canada.

Dr. HODGINS said, before he resumed his remarks of yesterday evening, he begged to be permitted to express to the American gentlemen at this convention, not only for himself, but in behalf of other foreign educators present, their grateful thanks for the great courtesy which had been shown to them by the American educationists gathered at this exhibition. He said he had felt it as a personal kindness shown to himself as well as to these gentlemen; and the kindness and courtesy evinced last night, in proposing a vote of thanks to those from foreign countries who had attended the convention, he felt was beyond their deserts, because they had experienced so much courtesy and consideration to which they personally made no claim.

Resuming, Dr. Hodgins said: In the remarks which I had the honor of addressing to the convention yesterday, I omitted, for want of time, the mention of two particulars in regard to the system of education in Ontario which I shall now bring before you. I refer (1) to our normal school system of education, and (2) to the rights of teachers in our province. Those are connected especially with the subject now before the convention.

1. I may say so deeply impressed were those connected with education in our country that, from the period of its foundation, the normal school should be considered an important adjunct, that in 1847 the legislature made a very liberal grant for the establishment of the normal school in Upper Canada. The normal school has been in very successful operation since that time. I shall tell you why it has been so successful; it was felt that no person should leave the normal school, with its authority to teach, unless he was equipped for the performance of the duty for which that training was required of him; and no person

was allowed to leave the institution with a certificate testifying to his qualifications as a teacher until those qualifications had been tested in a satisfactory manner in a school of practice, and after he had acquired that position as the result of an examination which was very rigid indeed. Not only was it considered that the literary qualifications of the teachers should be as high as possible, but the main cause of the success of the normal school has been just this, that no person has been allowed to go out as an authorized teacher from that institution unless he has proved, by actual experiment in a school of practice, that his qualifications for teaching have been well tested.

Attached to the normal school are two model schools, one for boys and one for girls, divided into three sections of seventy each, under the special care of trained masters or mistresses. Those in attendance at the normal school are required to be present at these model schools; and they must not only to listen to the instruction of the masters or mistresses of the schools, but must also take part in the exercises, under the oversight of the teachers. Very careful note is made of the daily progress of the student of the normal school who may be in charge of the class, and defects in teaching are noted down in a book, and at the proper time and in the proper manner the defects noticed are pointed out to the teachers themselves. Not only are the literary qualifications of the teacher carefully looked after, but in order that he may procure a certificate as teacher the examination in the model school department must be satisfactory to the teachers of the normal school. Thus we are sure to send out none but carefully trained teachers, not only in theory, but in actual practice; and this is an essential part of our normal school instruction. The Ontario normal school was established in 1847, and nearly eight thousand persons have been instructed within its walls up to the present time. The model school is so very popular, as an admirable school for the education of pupils, that we generally have two or three hundred applications in advance for admission to the school. The great desire to gain admission to that school is induced by the fact that the training is the very best that can be given; and although the schools of the city are free to all the ratepayers, yet parents prefer to pay the additional charge of one dollar per month in advance to gain admission to this school.

Many of the boys who have gone out from the model school are sought for by merchants and men of business; so that you can see that when a teacher in training passes through a school like ours, under the careful supervision which is exercised in it, he must have some real practical knowledge of the art of teaching, and of the best methods of communicating the knowledge which he has acquired. We hold it to be so essential that the teacher should have this personal practice in the model school, that we do not consider any normal school instruction to be complete which does not combine this practical training in the model school with normal school instruction. Within the last year an addi-

tional normal school has been established on the same footing in the city of Ottawa, or capital of the Dominion, for the eastern section of the province.

2. In regard to the "rights of teachers" in the province of Ontario, the law, in the first place, prescribes certain duties which the teacher must perform; but in the exercise of his vocation as teacher he himself has certain rights. In other words, his status is recognized by law, as a person cannot be legally employed as a teacher in the country unless he possesses a certificate of qualification; and a special agreement in writing must be entered into by the trustees with him. To give this the more effect, the law declares that no agreement can be enforced between trustees and teachers unless it be in writing and stamped with the seal of the corporation. The trustees cannot dismiss a teacher at their pleasure, unless in accordance with the terms of that agreement and the teacher is a voluntary party to it. In order to secure to the teacher the privileges incident to his profession, the law declares that he shall be entitled to the whole of the holidays and vacations occurring during the year or the school term for which he is employed; and in order to secure to him to the fullest extent the advantage of that arrangement, the law also declares that he shall be entitled to the holidays which follow the expiration of his term of service, and his salary still runs on until he is paid up in full. So that should a teacher be dismissed at the end of the midsummer term he must be paid for the additional six or seven weeks of vacation following. There is no possibility of defeating that provision of the law. The teacher is therefore secured in his salary for the term up to the end of his vacation, or for the year, as the case may be. Another benevolent provision of the law in the interest of the teacher is that in regard to sickness. As teachers are frequently liable in the course of a year to lose time by illness, the law provides that the trustees must allow them for such losses at the rate of at least four weeks during each year, and as much longer as they please. In that way the teacher is not compelled to suffer from an occasional sickness and in addition lose his time and salary, but he is secured in his salary during the period of his sickness, within the prescribed limit of time. Thus the interests of the teacher are in every way secured. In the first place he is most carefully trained, and in the next place his interests are carefully guarded. The school year embraces the whole of the civil year, and the schools in Ontario are kept open during that time, deducting holidays and vacations, except in the outlying districts of the province, where the schools are kept open about half of the year. One inducement to the keeping open of the school during the entire year is that the moneys granted by the legislature are at first apportioned to the county according to the school population, or, in other words, according to the number of children which the county is required to educate, and a specified sum *per capita* is given to the county to enable it to discharge this duty. The money is then redistributed to the schools, not according to the length of time during which these schools may have been kept open, nor the numbers on the roll, but according to the number of children being educated in the school. The mode of distribution is to take the average attendance for the six months of each year, and according to that average attendance the apportionment is made to each of the schools of the county. Thus an inducement is held out to keep the schools open during the entire year. Then, again, the law very wisely provides that any moneys lost to a school in consequence of the refusal or neglect of the trustees to keep it open must be personally made good by the trustees themselves; the trustees, therefore, have to make good out of their own pockets any moneys lost to the school from any cause arising from their neglect of duty. Thus in the interest of the teachers you see, the inducement is to keep the schools open the whole year and to keep teachers employed all the time, and pay them not only for all the time they are employed, but for holidays and vacations.

These are the main points of the additional subjects to which I should have referred yesterday had time permitted. If there are any matters which I have omitted, I should be very happy to be called on to answer any questions. Dr. Hodgins was questioned as to the average length of time teachers remain in their profession. He replied that they have no precise means of judging at present of the average length of service. By the law of the province, each male teacher is required to pay into a superannuation fund a sum at the rate of $2 every six months. In the case of female teachers this payment is optional, but the male teachers are required to make this payment. They have, on retiring from their profession, the right to receive back one-half of the moneys which they have paid in. We hope in the course of a few years to have from these facts data by which we can answer a question of the kind now proposed, but I am not able at present to answer it. I might in general terms state that the length of service has very greatly increased within the last few years. The operation of the beneficent provisions of the law to which I have referred has had the effect of continuing in the profession some of the best teachers. Many of them have been in it fifteen or twenty years. My own experience in the department extends over thirty-two years. I can, therefore, speak from my own personal knowledge. The teacher, if ambitious to remain in the profession, can distinguish himself in due time, by diligence and ability, even to reach the highest position in his profession—that of inspector of public schools.

The chairman then introduced Mr. G. Videla Dorna, chargé d'affaires of the Argentine Republic.

Mr. DORNA said he had not so much experience in educational matters as the distinguished gentlemen who preceded him. He could not speak of anything new, but he had come to learn, and hoped that the conference would listen to him with that paternal feeling with which a good educator listens to his pupils. He said he was neither a professional

educator nor an educational representative for the Argentine Republic but, in the absence of both, he felt it his duty to attend the educational meetings, in order to answer questions relative to public instruction in his country. He would limit his remarks to mere statistical statements based upon the latest official report of the minister of public instruction, Dr. Lequizamon.

The Argentine Republic could not yet be judged from the European standpoint; he would therefore compare her with the other South American states. The three leading countries in South America are Brazil, Chili, and the Argentine Republic. He would now compare the official statistics, and determine the relative position of his country with regard to public instruction. According to the official reports, the population of the Argentine Republic is nearly 2,000,000; that of Brazil 11,780,000; and that of Chili a little over 2,000,000. The number of children between the ages of 6 and 16 years is, in the Argentine Republic 459,122; in Chili 509,941; and in Brazil 2,945,000. The number of primary schools in the Argentine Republic is 1,850; in Chili, 1,256; and in Brazil, 4,593. The total number of pupils in these three countries is, in the Argentine Republic, 117,203; in Chili, 83,812; in Brazil, 155,058. Children receiving no education number in the Argentine Republic 341,919; in Chili, 426,129; and in Brazil, 2,789,942. In the Argentine Republic there is one school for 992 inhabitants; in Chili one for 1,624; and in Brazil one for 2,564. In the Argentine Republic one in every fifteen, in Chili one in twenty-four, and in Brazil one in seventy-five children of school age receive an education. He said he had taken the figures for Chili from the report of the minister of public instruction for the year 1874, and with regard to Brazil he had based his statement upon an official document of that country prepared for the Vienna Exposition in 1873.

All these official statistics show sufficiently well that the Argentine Republic has done very much for the education of the people; they also show, he said, what place his country deserves among the countries of South America. He wanted to have this well understood, because his country is a republic, and his countrymen want to prove that they know no greater question than that of educating the people. Although his country is not the richest of the South American states, it afforded him great pleasure to state that his government expends more money for educational purposes than any of the other states. The Argentine Republic expends, he said, $2,425,259 a year for public instruction; Chili only $1,133,353; and Brazil not more than $2,356,738 per annum.

Mr. Dorna then explained the organization of his government, and said that it is similar to that of the United States of America. The Argentine constitution differs, however, a little from that of the United States, because his country has made the educational question an article of the constitution.

The constitutional provisions relative to education guarantee the liberty of teaching and learning, and provide for the appointment of a minister of public instruction, whose duty it is to report annually upon the condition of the different institutions of learning in the whole country.

The national government has always exercised its constitutional power to control public instruction throughout the republic, and this control has proved very beneficial. Very much has been done during the last ten years. A national university, a national observatory, fourteen national colleges for secondary instruction, five normal schools, schools of law, of medicine, of commerce, and of agriculture, and one hundred and fifty popular libraries have been established, and fourteen normal schools for women would soon be established in his country.

In regard to teachers, Mr. Dorna said he would only speak of their salaries and appointment. The salaries of national teachers range from $80 to $100, gold, a month. College teachers receive a higher compensation. In Buenos Ayres, the director of a college receives $230 a month, and each professor $113. Teachers keep their situations as long as they behave well. Pensions are not paid to teachers, but a movement has been made in this direction. A person who desires to teach in the common schools has to be trained in the normal schools and pass an examination in the following branches: Reading, writing, arithmetic, geography, grammar, algebra, physics, history, Argentine constitution, composition and declamation, drawing, object lessons, singing, moral instruction, gymnastics, and pedagogy.

Mr. Dorna was here interrupted by Mr. Wickersham, who said that a lady in the audience desired to state that the first normal school on this continent had been established in Chili by Dr. Sarmiento, late President of the Argentine Republic.

Mr. Dorna believed this to be true, and said that this must have been in 1838 or 1840.

Mr. Wickersham said that Dr. Sarmiento was elected President of the Argentine Republic while he was visiting the public schools in the United States, and that he was now inspector of schools for Buenos Ayres.

Being asked if the Kindergarten had been introduced in the Argentine Republic, Mr. Dorna said that there are several Kindergärten in Buenos Ayres, but they form no part of the public school system. Kindergärten in Buenos Ayres are pay schools, and therefore not attended by the poor, with the exception of one or two under the supervision of the provincial government.

The chairman said that Dr. Da Motta desired it to be understood that the figures concerning Brazil given by Mr. Dorna refer only to education in the provinces, and do not include the technical schools, higher schools, and private institutions, and, therefore, do not show what Brazil is doing for education, and offer no accurate data for such comparisons as have been instituted by Mr. Dorna.

The chairman announced that Professor C. J. Högman, of the normal school at Yyveskyla, Finland, was present, whom he would introduce to the conference.

Professor HÖGMAN came forward and addressed the conference in the Swedish language. At the conclusion of his remarks, Professor C. J. Meyerberg interpreted them, as follows:

This gentleman, who came from Finland a few days ago, has spoken about the normal schools in Finland, a country that belonged formerly to Sweden, but now belongs to Russia. Finland, however, has its own laws, and is, in regard to fiscal and educational matters, entirely independent of Russia. Finland has at present three normal schools, one of which is for those who desire to prepare for schools where Finnish is the leading language. Nearly the whole population of cities and towns speak Swedish, while in the country Finnish is almost exclusively spoken. Professor Högman has been recently appointed teacher of the Finnish normal school at Yyveskyla. It is customary in Finland to send teachers abroad before they enter upon their duties, in order to enable them to study foreign methods of teaching. Professor Högman is now here for the purpose of studying the American school system, and he says he finds it admirable.

The Finnish normal schools are not very old yet, but they can be favorably compared with other normal schools in Europe. If Finland continues to work with its present energy, its system of public instruction will soon be one of the best in the world.

The salary of teachers in Finland is about 3,700 Finnish crowns, (4 crowns = $1.) The female teachers receive only one-half of that amount, although they are doing excellent work.

Hon. J. P. WICKERSHAM, superintendent of public instruction for the State of Pennsylvania, said that he wished to occupy a short time in the explanation of a few facts which concern education here in America. These facts seem somewhat to our disadvantage. And, without taking the ground that America is better in the respects that he was about to refer to, he wished to give the plain reasons why these facts exist. First, he wanted to explain why it is that in America we do not furnish teachers with dwelling houses in connection with the school-houses. Now, in Brazil and in Sweden, and in some of the other countries of Europe, they connect dwelling houses with school-houses. We do not do that in America for certain reasons. One of these is that we have established graded schools that employ a number of teachers. You noticed last evening Dr. Meyerberg said they did not have dwelling houses in Stockholm, for the reason that they employed quite a number of teachers in each school-house. Now, it is the great purpose of American education and American educators to have several teachers in one school-house. In all our cities, in all our towns, in all thickly settled neighborhoods, there are several teachers in the same school-house; and

therefore we cannot very well connect dwelling-houses with school-houses. Of course, we have a great many schools that are not graded schools. These schools are generally taught by young, unmarried persons. Three-fourths at least of American teachers who teach in ungraded schools are unmarried. He did not mean to draw a comparison between our custom in this respect and that of other countries. He was simply giving the reason why it is so here.

Now for the reason why we have not pensioned our teachers. He was not about to maintain that it would not be better if our teachers were pensioned, but was about to give the reason why in this country we have not yet pensioned old teachers. In the first place, it is understood that education in this country is not so much a state concern as it is a concern of the people. Teachers in America are not part of a great civil service; they do not bear the same relation to the General Government, by any means, that soldiers bear. The Government does not fix their salaries, and does not fix their status in any way. Public education in America is not a creature of the state, but a creature of the people; and when we pension our teachers the pension will be voted by the people and not handed them by the general or a State government. By virtue of our institutions, the power comes from the people or boards of instruction. They fix the teachers' salaries and status, and therefore the Government does not consider the question of pensioning them. Besides that there are two classes of teachers, and one of them does not need a pension; they would be too independent to receive it. They are a very independent class of persons; and a large number of those who receive small salaries only remain in service a short time. He did not believe that, out of 17,000 teachers in the State of Pennsylvania who teach in the primary schools, there are 100 persons who have taught thirty years, taking Pennsylvania from one end to the other, outside of the graded schools. Therefore we do not think of pensioning these young ladies and gentlemen who teach only temporarily. They do not want it. They do not expect to teach very long, some five years, some ten; then they will go into some other kind of business.

Now, sir, about permanency. Our teachers are not permanent. Gentlemen are apt to draw disparaging conclusions between this and other countries in that respect. He was not about to say that they ought not to be more permanent, but in America we have a constant social change; the higher stratum of society goes down and the lower stratum comes up. It is the survival of the fittest in this country, the survival of the strongest; and the man of brain, no matter if he was born in the lowest cabin in the land, has the privilege of sitting in the presidential chair. [Applause.] And it is this constant ferment which makes all conditions necessarily fluctuating and flexible. There is some advantage in permanency; there is some advantage in keeping teachers for life; but there is also an advantage in introducing new blood into the schools, and he would like to impress this fact, that the very best blood in the

United States of America runs in the veins of the men and women who are teaching our schools to-day. [Applause.] They come from our very best families, from all the nobility we have in this country. You will find them graduating at Harvard, Yale, Lafayette, and Pennsylvania University, and in the best normal schools, and going down to teach the lower schools, because that is the place to begin; and they go up, up, up, and up until they sit in the highest seats in the land. He ventured to say that one-half of our members of Congress, one-half of our governors of States, and one half of our judges of courts began by teaching in the common schools. Such is the condition of life here. Do not understand me as saying it is better than in other countries. As to himself, he commenced teaching a country school at $20 a month. He never expected to remain there; he meant to go higher. He taught at that salary and then at $24, and then at $30, and so on, until to-day he had a different position. So it is with these young men and women. Though they do not introduce into teaching the long experience of permanent teachers, they introduce into it that vigor and life that are hardly possible where there is not this mobility. Besides, there is another advantage, and that is, that until we have some fixed principles of teaching, until we understand the great laws of human growth—how the body grows, how the mind grows, how the soul grows—and teach according to those doctrines, it is better that we should not get into a rut out of which we can hardly struggle. Teaching here is to-day a mere empirical art. There must be great experience; there must be fundamental laws according to which the mind and soul grow, and when we learn those, then he would like to see a permanent profession of teaching. But he did not want American teaching to crystallize around methods that are altogether false or only partially true.

He did not want to make a speech in favor of American education; but he loved his country to well to be willing, by silence, to allow any disparaging conclusions to be drawn from the comparisons that had been made between the customs of this and of other countries. He was ready to acknowledge what is good in other countries, and anxious to learn from them. Pennsylvania and the United States of America welcome these foreign gentlemen here and now, and thank them for the information that they are so freely giving us in reference to this matter of education. The most important question we have is this educational question. What we want is to know how to train up these millions of boys and girls in this country so that they will make good men and women. We welcome light; and he felt that he ought to say this much in reference to the social and governmental condition of this country, because our school system is in great measure controlled thereby.

The chairman then called upon Professor Meyerberg to say something about the supervision of schools in Sweden.

He said that the schools in his country are under the general supervision of the bishops of the different dioceses. They have almost entire control of the school management, and have to report every three years upon the condition of schools in their districts.

In Stockholm the citizens have emancipated their schools from the control of the clergy, and several cities in Sweden have already followed the example of the capital and instituted secular school organizations.

There are besides about fifty school inspectors for public schools. They are appointed for a term of five years, and it is their duty to inspect the schools in their respective districts according to instructions issued by the government.

It is incumbent on the inspectors carefully to follow the course of the national instruction, to visit in person the national schools in their districts, to procure information about their condition and wants, with a view to their improvement and development, and to lay before the school board and consistory proposals for improvement whenever the arrangements are found to be deficient, carefully to look after the teaching, and to give the teachers necessary instruction and advice as to the method of teaching, etc.

The inspector shall give to the consistory of the diocese to which his district belongs a short annual report of what he has done; also, at the expiration of his term of office, a complete report to the department for ecclesiastical affairs and public instruction, which at the same time must contain a complete review of the schools in the district. These latter reports are printed by order of the department, and distributed among the school board and chapter, and then these authorities shall take such measures as are suited to the various local circumstances and called for by the suggestions and proposals in the reports.

The inspectors receive an annual salary, which is fixed for each period of inspection in proportion to the extent of the district; they also receive an allowance for travelling expenses and board.

Dr. MURRAY, superintendent of education in Japan, said he believed it was well understood as a principle of successful educational administration that a proper inspection and superintendence of schools is the first requisite. There is no other way in which a government can so efficiently and thoroughly advance the interests of the schools as by regular, systematic superintendence and inspection. This principle is well understood in Japan, and is incorporated in the system of education. In order that his explanation of the present system of education in Japan might be more clearly understood, he would preface his remarks by a brief statement of the form of government administration in that country.

The responsible head of Japan is the Emperor, from whom all laws and edicts are supposed to emanate, and to whom all officers are responsible. Under him, as the supreme head, there are different departments of government, intended to administer the laws and regulations that

are made for them, and among these the department of education holds an important place. Besides this general government, the whole country is divided into about sixty different provinces—or, as they are called there, *kens*—in each of which is a local government appointed by the central government and having control of the local affairs of that special district. The government is thus conducted from this centre, and yet in its details is conducted in these different local districts. The administration of the schools is conducted upon this basis:

There are three different kinds of schools: (1) Those which are directly under the control of the central department of education; (2) those schools which may be called public schools, those which are under the control of the local governments more particularly, and which are supported, sustained, and organized by the people among themselves; and (3) private schools, which are established in many parts of the country. In regard to the mode of superintendence and control of government schools for higher instruction in the country, the colleges, and the university which has been established, with the technical schools for various subjects of learning—all these are under immediate government control. The normal schools are under the same control. In each of these institutions there is a government director, appointed immediately by the department of education, who, with the officers under him, has direct charge and supervision of the affairs of that school. He is, therefore, the government representative, holding his place at its will, and liable to removal at its pleasure. He is an officer of the department of education, and is sent to this school to perform special duties. These schools are visited annually, some semi-annually, or quarterly, by inspectors from the department of education. There is a special bureau of inspectors in that department, whose duty it is to see that all government schools are properly inspected and superintended. Officers from that department visit these government schools at appropriate times, and see that their affairs are conducted in a proper manner; and, at the examinations which take place at regular intervals, some one of them is supposed to be present for the purpose of seeing that the examinations are satisfactory, and that the students who pass through them to the higher courses sustain proper examinations.

Then in regard to public schools, what are called public schools, schools which are immediately under the control of the local governments; these are schools of an elementary character. They are established all over the country. There are thousands of them now which have been gradually, within the last few years, established at different points. For the superintendence and care of these schools there is in each one of these local governments a bureau, with an officer or officers who devote their time to the superintendence, care, organization, and inspection of the schools in that particular district. This officer is responsible to the head of that local government, and through him to the educational department at the capital. In that way the inspection

reaches down to all these local governments, and through them to the schools which they have under their charge.

These schools are supported from three different sources. In the first place, the department of education grants an annual allowance to each of them in accordance with the number of scholars which it contains. This allowance is granted on condition that it shall be made to conform to the regulations of the educational department, and that it shall follow out the instructions that are given in regard to courses of study, examinations, and other matters appertaining to these schools; so that the department of education exercises control by the giving of this annual allowance to these schools over the kind of instruction that shall be there given. The second source of support of these schools is the tax laid on the inhabitants of each district. This is usually imposed under the control of the bureau of instruction which is charged with educational affairs there. They arrange with the members of the district in a formal or informal way in regard to the amount of the tax they shall raise, and this tax in almost all cases is cheerfully paid. A third source of income of these schools is the gifts of individuals who are interested in the schools of those particular localities. There are many men in the different provinces who have large revenues and who are greatly interested in the progress of the schools in their different districts, and they give liberally, oftentimes very largely, toward their support and encouragement. With the merchants in cities it is the same way; they are ambitious and anxious that the schools in their neighborhoods shall attain a high character, and are ready to help sustain them by their own means.

Every private school must be sanctioned by the local government or by the department of education before it can go into operation. The plans of study of those schools are usually submitted for inspection, and, if there is anything objectionable in them, it must be changed, or the school is not sanctioned. These are the means by which the department of education in Japan attempts to control and superintend the schools under its charge. He had not mentioned in connection with the government schools that the normal schools are among the most important. There are now seven of these normal schools, one principal one (which has been in operation four or five years and which has sent out many students) and six others. These schools have sent out teachers who are now engaged in many of these local provinces in the immediate work not merely of teaching but of inspecting, organizing, superintending the schools. This work that was demanded of the normal schools was required for the purpose of supplying one teacher for every district, and so for a long time the graduates of these normal schools were taken up as fast as they were sent out, and put at work in these different localities in organizing schools; showing the old teachers how they should teach, how their classes should be organized, how new kinds of books, maps, apparatus, etc., should be made a part of their instruction,

and really acting as trainers of these teachers in the different districts. For the better accomplishment of this purpose they frequently brought together the teachers of those different localities who could easily be assembled and submitted them to a regular training in a manner similar to our American teachers' institutes or local normal schools. The old teachers who were desirous of learning would gather together and spend a month or more under the instruction of one of the graduates of the normal school, who would put them through a regular course of instruction and show them how to teach. This system was of immense service in developing the schools much more rapidly than could have been done in any other way. Looking back, it seems astonishing that in four years from the time that this system began in Japan there is so good a system of education spread over the whole country and under reasonable superintendence and control.

Dr. Murray was asked if teachers of private schools are subject to an examination. He replied that he thought not. They are only required to submit to the programme of instruction and the regulations of the school.

He had a table of statistics for the year 1874, from which he would only take time to read a few figures to give some idea of the real educational status of Japan. There are now of elementary school districts in the empire of Japan, *i. e.*, school districts in which there already is or is to be established one elementary school or more, 45,418. He supposed these districts may have increased 25 per cent. during the past year. The increase during the year 1874 was about 3,000, while the number of schools in the empire of Japan in the same year was 18,712; an increase for the year of 10,710. It is estimated by the minister that the number of schools in Japan at present is fully 30,000.

Dr. Murray appealed to Hon. F. Tanaka, vice-minister of the educational department of Japan, who was present, as to the accuracy of this statement, which was verified by that gentleman.

The whole number of pupils in these schools during the year 1874 was 1,725,107, an increase for that year of 397,155; and it is believed that the number of scholars estimated in the statistics for 1875 would not be less than 2,000,000. Thus it will be seen with what rapidity these schools are increasing in number, and are gathering in additional pupils.

The query was then put as to whether education in Japan is in any way compulsory.

Dr. Murray answered that it is not, as yet. They speak of making it compulsory in that country; and, in common with all nations who are looking forward to the advance of education, he thought it is looked to by the best friends of education as the means which will be resorted to as soon as possible.

He was asked if the missionary schools fall in with the general method. He replied that they are not named with these government schools,

being referred to under the head of private schools. They are efficient in a great degree. A very great deal of service has been rendered to Japan by the education which is given by those schools.

Being asked what proportion of the teachers are men and what women, he answered that the number of women teachers in Japan is very small. The whole number of teachers in Japan is given here to be 38,365, with an increase in the year 1874 of 15,859. Of these teachers he could not give the exact proportion without a little computation, but he could give the number of teachers employed in the schools, public and private, male and female, which would give some idea. In the public schools, that is, the schools under the care of the local governments, the number of teachers is 32,556, and the number of female teachers is 457.

He was then asked the present population of Japan; he answered 33,579,909. He said in the private schools the number of male teachers is 4,398, and the number of female teachers 210. The school age is between 6 and 16.

The chairman then called for voluntary speeches, of five minutes in length, on the subject of supervision and inspection.

Mrs. E. S. Carr, of California, inquired of the foreign gentlemen present whether educational journals are maintained in their respective countries at the expense of the government

Mr. Dorna said, in his country there was not only a report made yearly by the minister of public instruction, but they also had annals of education published weekly, under the patronage and direction of this minister. This publication was founded by President Sarmiento some time before he was president, when he was director general.

Dr. da Motta said, there are some educational magazines in Brazil, but they are not published by the government. They are published by private associations and publishers.

Mr. Dorna said he knew there are some in Chili, but did not know the exact number.

Dr. Murray said the educational department in Japan publishes semi-monthly information on the subject of educational news, statistics, and other matters, which is sent gratis to various parts of the country. Journalism in Japan has had a remarkable development, and a very large number of the English newspapers of Japan are conducted by men of fine attainments, who are devoted to education, and who give it a great degree of prominence in their papers.

The chairman declared the conference adjourned until 3 o'clock p. m.

FOURTH SESSION.

PENNSYLVANIA EDUCATIONAL HALL,
CENTENNIAL GROUNDS,
Philadelphia, Pa., July 18, 1876—3 p. m.

The conference was called to order at 3 o'clock p. m. by Vice-President Phelps.

The chairman announced that the first topic for discussion was pedagogical museums or cabinets, and introduced Dr. J. George Hodgins, deputy minister of education, Ontario, Canada.

Dr. HODGINS said he had hoped that the representative of the Russias would have been called upon to open this subject for the afternoon meeting, because, in point of fact, that is the only nation, so far as he knew, that has especially and formally established a museum of this kind, and has given to it this particular designation. He had occasion to examine some of the specimens of the collection from this museum, (which are here in the Exhibition,) and from them he had formed an opinion of the great value, extent, and variety of the articles shown in that museum. Now this question of museums, popular and otherwise, is quite a new thing. In England, the large and famous British Museum has long held the first place among the popular museums of Europe. Those in other countries are also noted and distinguished, but it was not until the great gathering of the nations in England in 1851 that the idea took hold of the public mind that it would prove an important educational factor to popularize these musems, to give them that kind of popular character which would render them a great school of instruction, not only for teachers, but for the mass of the people, young and old. Although I speak chiefly with reference to England in this matter, I mean Canada also. We saw that in England, immediately after the great exposition of 1851, the British government turned that exposition to great practical account; and out of the collection gathered in that exposition formed the now famous South Kensington Museum, which is not only one of the most interesting in the world, but it is to the teacher and all persons engaged in popular education the most instructive. Those who have had the good fortune to be there remember with pleasure the immense variety of things that are there brought under notice; not only such as have to do with the specialty of the teacher's work, but with various professions and callings. In that museum there is a great variety of school appliances, and an immense mass of material which it is supposed the teacher can use with more or less effect. There are departments of special interest and of special value. Those who take an interest in natural history, and have read the works of Frank Buckland, will enjoy a rich treat in going into that department of the South Kensington Museum with which he is connected, and in seeing the extraordinarily beautiful collection of fish which he has colored after nature and silvered and burnished with gold so as to bring the life-like reality of nature itself before the eye of the teacher.

There is one thing connected with the South Kensington Museum which strikes the visitor as one of its chief peculiarities. In this respect the contrast between it and the British Museum is very marked indeed. Those who have been at the British Museum will remember that there is in it an immense mass of the most interesting material, so immense that it wearies one even to look over the catalogue, and to classify it in one's mind; but although the variety is very great, yet the collections are arranged with so little regard to beauty that the excessive plainness of the whole strikes you most painfully. But when you go into the South Kensington Museum, the first thing that strikes the eye is the beauty both of the building itself and of its interior fittings. Even if everything were taken out of the building, you would see what an exceedingly beautiful structure it is, both outside and inside. Then you go into room after room, and you see that the mere fittings of the rooms are beautiful, and that their style and proportions are varied for the purpose for which the room is designed. And when you come to examine the contents of the collection in this museum, you will find that they are artistically arranged in the most satisfactory manner possible. Thus every department is not only beautiful in itself, but each separate detail is studied so as to make the whole arrangement attractive. The educational features of the museum seem to be inexhaustible. There is scarcely a department in the teaching art of which you will not find therein a fitting representation I only refer to this collection to illustrate the fact that the public men of the present day—statesmen, leaders of public opinion, and educators—seem to be so far impressed with the value of these great collections of educational products and appliances in every department of science, that you will now find in many of the large towns and cities of England most valuable and beautiful collections. This South Kensington Museum is further made available so as to encourage as much as possible the study of the arts and art displays in the cities and towns of England. Those connected with the museum will, if you desire it, take you into a suite of rooms in which is arranged in complete order a set of cases containing, as it were, an epitome of all the cases in the museum. They call them "typical collections." With a view to give the greater value and interest to the local exhibitions of art in the three kingdoms, arrangements are made to send one or more of these useful collections to each town or city. When a set of these typical cases, containing so many beautiful things from the South Kensington Museum, is added to the local collection, it makes a very attractive exhibition indeed. In that way the public interest in such collections is constantly kept up in England.

Now, the purpose which we had in Canada was, though at a humble distance, to follow up the great idea of the South Kensington Museum.

One of the most distinguished statesmen which England has produced, and whose name is well known in this republic, was one of the first to give his hearty support to the establishment of our educational museum. I refer to the late and lamented Lord Elgin, whose services in India and China will not soon be forgotten by the British people.

Our educaticnal museum at Toronto combines a twofold character: It is as complete as we can make it, with the small grant at our disposal, in things relating to the profession of teaching. Every text book that we can procure in England and America we endeavor to get. These form an exceedingly valuable collection, and are very instructive to any teacher who may examine them. Then there is another important department of the museum containing samples of various kinds of instruments, in the form of maps, charts, and apparatus which is used to illustrate school instruction. These we have procured in this country, in France, Germany, England, or elsewhere. Then in regard to higher departments of culture, (which is not so essential, but which is necessary, nevertheless, for the complete education of the teacher,) we have a typical collection of all the old masters in painting, including the eminent painters of Italy, Belgium, and the Netherlands. Everything of that kind that we have been able to obtain is there, getting only, however, one or two of the most noted paintings of each of the famous masters of Europe. There is another important branch of our museum to which I shall refer. There is a large room (and one of the most interesting) which we have chiefly devoted to products of the excavations at Nineveh, under Mr. Layard, who is so famous for his explorations in these old ruins. That room contains a collection of Egyptian figures and some of the slabs which Layard obtained at Nineveh, also a winged bull and winged deities, as well as other objects of interest. The peculiarity of this collection is that, so far as we can learn, we have reproduced the coloring of these ancient and celebrated slabs as they were originally found. There are two or three of them of special interest in illustrating and thus bringing home directly to the public mind the truth of the Holy Scriptures. There is one slab taken from Nineveh illustrating the besieging of Damascus by King Shalmaneser, as stated in the Bible, in which the taking of that city is pictured with wonderful and almost grotesque beauty. The details of the dresses of the soldiers, their bows and spears, and the various apparatus of war are there depicted in brilliant colors. The whole delineation is most effective. Of the contents of this museum, the casts relating to the history of Egypt are of very great interest. Another department is comprised entirely of celebrated studies in architecture; that is, casts of parts of noted cathedrals and buildings, which were obtained in London and Paris. One large room, with its galleries and corridors in the upper part of the building, is entirely filled with casts of statuary and busts of famous men of antiquity. And then, to bring home to our people the most noted men in our own history, one room is devoted to Canadian history, and the

whole of another large room is filled with busts of the most celebrated men in English history. This collection is very extensive, and comprises all the famous men whose names occur in the history of England for hundreds of years. We have a few things here at Philadelphia which were brought from our museum, and which may appear to you incongruous in connection with a collection of school apparatus merely, but they were of very great historical interest, and therefore we thought it better to bring them. I refer to the collection of the great seals of England. You will find in the education court of Ontario a complete collection of all these seals, from William the Conqueror to Queen Victoria, inclusive. As a study of real art for 800 years, the collection is most instructive to the teacher. In William the Conqueror's time you will see how exceedingly modest he or his artist was in designing and engraving the great seal of England of 1066. Coming down through the Stuarts, you will find elaboration rarely dreamt of. But Queen Elizabeth seems to have exhausted the whole art of decoration in her time. Her seal is without exception the most elaborately elegant. It represents her on her throne and on horseback in very gorgeous array. Then when you come down to the time when the King of the Roundheads, Cromwell, ruled in England, you will find the whole of this decorative art swept away, and on the face of the seal of the Commonwealth of England you will find the unadorned House of Commons as the ruling power, and on the other side simply a map of the three kingdoms. And so on. It is a most instructive collection, not only from its completeness, but from the history of the art which in that silent way it illustrates. As to the value of these collections, I have not said anything. There are, however, with us, as with you, thousands of people who will never leave their own country—most of our people will never be able to see elsewhere anything approaching a collection of that kind; therefore we thought it all the more necessary to make such a collection, and to make it as full and complete a museum, both in matters relating to education and relating to art, as it was possible for us to do. Those who have been at our museum from time to time within the last twenty years have often remarked that we have come nearer to the standard of the South Kensington Museum than any other educational collection in America. The grounds connected with the building also have been kept for upward of twenty years as neatly as possible. Thus the whole object has been not mere display, but the promotion of æsthetic culture in such matters on the part of teachers and others. We have felt as a matter of fact that in that way only can our people have the advantages of such culture; and it is necessary to impress upon the public mind as deeply and strongly as possible, through the teachers, the æsthetical principles of art, and especially of the arts relating to their own homes and daily life; and therefore time and labor have been expended for this purpose. The collection in our museum itself and its surroundings have in all those respects been used as a means of elevating the taste of the teachers, and, through them, of the pupils and people of our coun-

try. I am sure that a visit to our collection at Toronto by any teacher would be amply repaid. I hope that it is but a type of what may become general in our country, when a proper appreciation of art and educational museums shall have become universal among our people.

The chairman here asked Dr. Hodgins if he would be kind enough to give the conference some approximation of the cost of that collection.

Dr. Hodgins replied that the cost need not frighten the most economical. The whole collection had been the growth of years, and the grant has never exceeded $4,000 a year. We have had that steadily for about twenty years, and have added to it every year, so that the burden has not really been felt by the country at all.

Dr. Hodgins was asked how natural history is represented. He replied that there is, for instance, a large collection of the birds that are found in the country, arranged on either side of a room—that is, the perching birds on one side and water-fowl on the other side. A few fish and skeletons are also arranged in the same room.

He was then asked to what extent the depository at Toronto had been encouraged by donation and otherwise by the schools of the province. He answered that it had received few or no donations; but that it had contributed so largely to the schools, that the department had persons employed in reproducing the maps displayed on the wall of the Canadian educational court here, and that it also supplied the chief part of the apparatus.

The Ontario schools, he said, are now getting well supplied from the depository with all the necessary appliances for education. The collection of articles in the depository is very large indeed, and is kept up at no expense to the country, since the depository pays its own way. The province itself bears one-half the cost of the articles supplied to the schools; the net cost to the schools is therefore very little indeed.

The question was then asked as to what help is given by the educational department to the schools of the province in regard to books and apparatus. Dr. Hodgins said the legislature has laid down this general principle, that it would make grants to the schools in money, in the shape of trained teachers, or in books, maps, or apparatus, and according to the demand it was proposed to make grants in any of these ways. In regard to the supply of maps, apparatus, and books for libraries, etc., if those interested send up $10, the same amount is added to that amount, and $20 worth of maps, or of prize or library books, is sent in return. Thus to the schools the cost of these things is really only one-half; and it is even less than that, because these things are furnished to the schools at the cost price, including only the expenses of management, so that an ordinary map with the roller would cost the school $2, the selling price being $4.

Dr. G. Seelhorst, from Germany, was the second speaker. He spoke in the German language, and his remarks were interpreted by Prof. C. H. Pluggé.

Dr. Seelhorst said he had willingly complied with the request of the committee on organization of this conference to say a few words about museums of industrial art in Germany.

Being officially connected with the Museum of Nuremberg, he would limit his remarks to this institution, which was universally known as very complete.

The Nuremberg Museum represents in its different departments all branches of industrial art. Knowledge of museums of industrial art has been greatly advanced since the first universal exposition of London. Many of the best men in Germany had long felt the necessity of establishing schools of art in connection with industrial museums, though the plan, when first proposed, met with much opposition, as men of great influence had doubted whether it would succeed at all.

Among those who were most earnest in advocating the founding of museums in connection with schools of industrial art, he mentioned Carl Semper, whose efforts were well known both in Germany and in England.

The success of the South Kensington Museum was so apparent as to need no comment and to decide the question as to the desirability of similar collections for the use of schools of industrial art.

In the speaker's judgment, the Imperial Museum of Industrial Art in Vienna contributed largely to the success of the Vienna Exposition in 1873.

The doctor said the foundation of the Nuremberg Museum dated from 1867, but as the director of the institution died shortly afterward, it had been discontinued for a time, owing to the want of a competent manager.*

Since 1872 the Nuremberg Museum had made great progress. Original examples or true copies of articles representing all periods and nations are to be found there collected in twelve separate groups. Every facility is afforded visitors to examine the successive steps in the improvement of models and patterns. The library of the museum contains the necessary books of reference and works on various industrial branches.

A bureau of information has been established in the museum to aid the investigations of visitors and students. Pupil apprentices are also admitted, to whom instruction is given during eight months in each year.

* The following account of the collections of this museum, as they existed in 1870, is given by C. C. Perkins in an article on American art museums, published in the North American Review, volume III: Here are pictures, engravings, tissues, faïences, goldsmith's work, medals, and seals, the most remarkable of which have been reproduced in a series of drawings, photographs, and engravings, already 100,000 in number; 60,000 tracings and drawings illustrate secondary classes of art, (as, for instance, all forms of the bed from Roman times to the present day,) and the history of eminent persons is followed up through portraits, coats of arms, seals, and medals. At present such laudable enterprises are subordinate to the purchase of the masterpieces of the past, which are becoming more and more rare. The directors wisely spend their available funds in this way, because they know (to borrow the words of M. Muntz) that *when America shall enter into the lists* they will no longer have the opportunity.

The museum was liberally patronized by the public, and the number of visitors is nearly fifty thousand a year. He then called the attention of the conference to the exhibit of the Nuremberg Museum in the Memorial Hall, and to a weekly paper published by this institution for the discussion of industrial science and the methods of teaching the same most successfully.

Dr. F. MIGERKA, chief commissioner for Austria at the Centennial Exposition, was then introduced. He spoke in the German language and at the conclusion of his remarks they were interpreted by Prof. C. H. Pluggé. Dr. Migerka said he had intended to speak about museums of industrial arts, but as Dr. Seelhorst had so ably treated this subject, he had decided to say only a few words, and those about public instruction in Austria.

In his country institutions of learning are divided into three groups, primary, secondary, and higher schools.

With regard to primary schools, he said that every community which has 40 children between the ages of six and fourteen years is obliged to establish and support a primary school, and children are compelled by law to attend school until they are fourteen years of age. Americans, he said, think this compulsory system probably cruel and unjust, but in Austria and most other European states it is considered humane and beneficial. The doctor said it is a well known fact that parents do not always appreciate the great importance of educating their children, and in such cases make special efforts to keep them away from school, and the children are too ready to obey in this respect.

Since it is the unquestionable duty of the State to educate the people, every effort is made by his government to execute the compulsory laws to their fullest extent.

In the Austrian primary schools the pupils receive a thorough instruction in the elementary branches. Teachers make it their special duty to cultivate independent mental activity, without which pupils are mere machines.

The higher institutions of learning, he continued, admit young men who desire to prepare for higher professions. The gymnasia and Realschule form the bridge between primary and higher education. In these secondary schools the classics, modern languages, mathematics, and natural sciences are studied for nine years.

In regard to teachers, he said that in Austria the calling of a teacher is considered a sacred one. Teachers are generally appointed for several years, and often for life. They employed almost exclusively male teachers in Austrian schools. He referred to differences between the opinions prevalent in Europe and those common in America in regard to women as teachers. In Europe, the impression is that the influence of male teachers is greatly superior.

Before concluding, he said he would state that the Austrians endeavor

to profit from other nations by comparing different systems and adopting what they believe to be beneficial. He had been charged by the minister of public instruction to study the American school system, and to report upon it after his return to Austria. He thought Austrians could learn very much from Americans, who had made such progress in so short a period.

The chairman announced that voluntary speeches were now in order, although there was another subject to discuss this afternoon.

Dr. J. W. Hoyt, of Madison, Wis., said that he would have been glad if the subject of pedagogical museums could have been more pointedly and particularly presented. He had been deeply interested in all that had been said here, and in the interesting report which has been made of foreign museums of a more general character. But it is a matter of great importance that there should be established in each country at least one great comprehensive pedagogical museum, such as they have established at St. Petersburg and have carried forward to a very complete condition; such an one as is represented here by the Russian educational department, where they have brought together samples of the various articles of apparatus, specimens of the text books that are used, specimens of the articles illustrative of natural history, school furniture of every description, representations of the best kind and poorest kind of work done by the pupils in different classes of schools; such a collection as would be, properly speaking, pedagogical or professional, for the purpose of informing teachers and school officers, superintendents, and all others interested and engaged in carrying on the school work of a country of what is done in all these different schools and branches of education in other countries. He hoped to see, as one fruit of this great exhibition here and of this bringing together of the articles in the educational department, a museum of this characte restablished at Washington in connection with the National Bureau of Education. As a fruit of the Vienna Exhibition, the Austrian commissioner will inform you that the minister of public instruction commenced the collection of a museum of this kind. The speaker stated that he was at Vienna in charge of the educational exhibit of the United States, and that he had knowledge of this fact, that the minister was deeply interested in this matter, and represented to him the importance of the establishment of a pedagogical museum at Vienna in connection with the ministry. The American representatives, so far as they could procure the privilege, presented gratuitously such articles as they took there—large cases of books, specimens of furniture and apparatus, all the means of illustration and teaching, together with the work done by our pupils in the schools, and various means of forwarding education and pedagogy, to begin the work of establishing this museum. So were gathered from all the nations there represented portions of their collections. He urged the beginning of such a work here to-day, and appealed to the educational men of the country to carry it through.

Rev. S. J. Travelli, of Pennsylvania, was rejoiced to hear the remarks of the former speaker. He had been to the Bureau of Education at Washington several months ago, and found it in a small building with no adequate opportunity for displaying its valuable material. There is nothing more practically important that will be discussed at this meeting than this question. From all parts of the country there is a strong disposition to send material of this kind, and he was satisfied if there were a suitable place provided, it would go there by the car-load.

The chairman said that he was glad to inform the conference that the establishment of an educational museum is likely to be forced upon our Government by the liberality of the foreign nations represented in this great exhibition. [Applause.] He was informed that very liberal contributions have already been tendered by the representative of the government of Austria, and, if he was not mistaken, by the representatives of the governments of Japan, Belgium, Brazil, and the Argentine Republic. He desired that these contributions might form a collection so large as to require immediately a large building at the national capital for its care and display.

He thought something of this kind needful to awaken Congress and the Federal Government to a proper appreciation of the relation in which education stands to the national welfare and progress. He thought that many Americans do not appreciate the importance of the doctrine that a free government has its only safe foundation in the intelligence and virtue of its people. With six millions of illiterates in this country at the present time, and with perhaps as many more who are but a few stages removed from illiteracy, he thought that the great concern of this nation in the future should be to address itself with all its power and all its influence to the proper education of the people; and if the discussion of this great question shall awaken the minds of the representative educators here to the great importance of establishing these museums, it will have accomplished a work entirely worthy of all the efforts which have been made to bring this conference about. And here he desired to return to the gentlemen representing foreign governments the thanks of every true American educator for the valuable information and for the inspiration which they have afforded on this occasion. [Applause.] It cannot otherwise than result in the greatest good to the cause of education in this nation.

The chairman announced that the conference would proceed at once to a brief consideration of the topic of technical education, and inquired whether Dr. Reuleaux, of Germany, was present. Dr. Reuleaux not responding, the chairman called upon Dr. J. M. Gregory, of the Illinois Industrial University, to open the discussion.

Dr. GREGORY said he regretted that Dr. Reuleaux was not here to begin this discussion, since Germany by right may claim precedence in this work of industrial education—if not for having started it, (because there is a little doubt in this matter,) for having carried it forward to a greater extent than any other nation.

It would not be expected of him to give any account of the origin of industrial education, or technical education, as it is called in the Old World. There is a little difference in the use of terms on this subject in America and in Europe. The Europeans use the term "technical education" chiefly with reference to schools or establishments for the teaching of persons who are to be mechanics; and in this department there are schools in almost every industry. In Switzerland there are schools for watch making. In some countries there are schools for straw plaiting, and schools in all departments of industry where an art can be learned better by the aid of teachers than it can be learned by ordinary apprenticeship, and, indeed, schools for learning many things that in this country and elsewhere have been commonly learned by apprenticeship. They use the term "polytechnic education" as referring to higher technical education, and mean by it the study of the sciences as applied to the industries, or, as we say, of applied science. In this country we have had for many years what we have called "polytechnic schools," and in almost all the schools that are of this class we design to do what is attempted by the polytechnic schools of Europe, with the exception that many of our polytechnic schools are devoted to a single branch, teaching perhaps engineering in one of its branches, and not teaching the whole round of the sciences in all their applications. We have, however, some true technical schools such as they exist in Europe. Still, these are mainly schools connected with reform or correctional institutions where children picked up from the streets, orphans or vagabonds, or criminal classes of children, are taught some trade. We have had also some benevolent institutions, where children have been taught in very much the same spirit and the same way that Pestalozzi began his institution, for the purpose of teaching children to be self-sustaining by teaching them some branch of manual art which they may practise when they come to be men. Ordinarily, however, in this country we understand the term "technical education" in precisely the same sense in which they use the term "polytechnic education," meaning applied science—science applied in engineering in all its departments, in architecture, in agriculture, horticulture, or in any other department where science can be brought to the aid of industry.

He could not now say what were the first polytechnic schools on this continent. We have some that are quite old, like the Rensselaer Polytechnic School, situated in Troy, N. Y., the polytechnic school in this city, and the polytechnic school in Brooklyn. Years ago a conviction took very strong hold of the public mind before it did of the minds of educators proper, that education could do something for the advancement of the arts, that many of the arts could be much helped by scientific instruction, particularly by instruction in those branches of science on which improvements in those arts depend. Hence began a movement, chiefly

outside of the teachers' ranks, demanding the establishment of schools of industrial science. The institution with which the speaker is connected takes the name given it by the legislature of the State, of "industrial university." It is similar in its character to the polytechnic university at Munich, in Bavaria, with the exception that it adds to it the course in literature, the ordinary college course. The term "industrial" is not used in this case in any such sense as we have used it in the industrial schools of the country, which are schools of manual labor, or schools for the teaching of the trades, but was used because the originators of the movement, the men who petitioned Congress for the grant of lands for this purpose, demanded that it should be so named that there could be no mistake about it; that all the institutions to be organized under this grant, as far as they could manage it, should be especially pledged to devote themselves to the advancement of human industries—not by the teaching of these industries as manual arts, but by teaching the sciences by which they may be advanced. The movement of which he had spoken, and which was carried on very largely outside of the educational ranks in the country, finally reached the floors of Congress in an imperative demand for the establishment of schools of agriculture, schools of mechanic arts, in short of polytechnic schools, of such a character that they should teach prominently all branches of the sciences for the education of the captains and leaders of industry. These petitions came to Congress from the year 1851, when the first State memorial was prepared and sent forward, and the movement from that time gained strength, although in the first place it received at the hands of Congressmen no attention whatever. To use a common expression, it was "whistled down the wind."

In 1860 a bill was passed for the establishment of such institutions of learning on a national basis, to be sustained by a national grant of public lands. This bill was vetoed by the then President of the United States, Mr. Buchanan. It was passed again in July, 1862, was signed by Abraham Lincoln, and became a law, granting an amount of public land equal to 30,000 acres for every member of the Senate and House of Representatives from each State, giving to those States in which there were still vacant public lands the lands themselves, and to other States (like the Eastern States here) that had no Government lands, the scrip for these lands, to be sold or located in the western Territories. These grants were immediately accepted by nearly all the Northern States, and ultimately, he believed, by all. At the close of the war the grants were renewed, or the privilege of accepting them was renewed, by a new act of Congress, and they were accepted largely by the Southern States also.

There may have been more, but he knew of at least three agricultural colleges that had attained some prominence before this grant was made, two of which died for want of support. There had also been established several polytechnic schools, chiefly schools of civil engineering, sometimes with schools of architecture, or a smattering of it, and of mining engineering connected with them, but none of mechanical engineering that he knew of. After the grant was made institutions began to spring up in all the States in which the grant was accepted, and these institutions took their character very largely from the wants of the several States. In the New England States, where the manufacturing industries predominate, the schools developed chiefly into scientific schools, like the Sheffield School, and into polytechnic schools, like the Institute of Technology in Boston, and into agricultural schools, of but small growth, however, except in the case of the Agricultural College of Massachusetts, at Amherst. In the Middle States they took more of a mixed character, and very frequently by the addition of large funds donated by the State, or by the munificence of private individuals, as in the instance of Cornell University, they developed into a university and a polytechnic school combined. He believed the opinion entertained by gentlemen in Europe is that the agricultural colleges should always take this form. Baron Liebig, in Munich, told the speaker that he had always been of that opinion, *i. e.*, the institution has been most successful where the two are combined, as at Halle and Bonn, and some other places in Europe where an agricultural school exists in connection with a university. In this country we have attempted to develop the two together for reasons which he would not now enter into. These institutions in this country have in almost all cases attempted, at least at the outset, to combine the two sides of technological education, the practical and the theoretical. In some the practical instruction is developed only in so far that a certain amount of chemistry is obtained in the chemical laboratories. In others practical instruction in physics is given in the physical laboratories. We do not call this real technological practice because it is purely scientific. Some schools taught the practical side of mechanic art, but found it difficult and abandoned it. It is difficult; he thought that everybody who has tried it will say that there is no more difficult problem connected with technological education in this country, and he might say in Europe, because there are institutions there, like that at Carlsruhe, which have tried and abandoned it. It is difficult to manage a shop so as to make it pay its expenses; so difficult that many persons are ready to abandon it as utterly impracticable. It is difficult to obtain a man who shall be at once a scientific man, able to instruct in the applications of science, and a thoroughly practical man, understanding his art. That is almost an insuperable difficulty, and very few have overcome it. But he was glad to say that in quite a number of institutions there has been such a commanding sense of the importance of maintaining the practical in connection with the theoretical, in order that the education given shall be found capable of being brought into the field of the industries, that the attempt will not be abandoned; so shops are kept for the manufacture of machinery and models of machinery, where the students who are taking courses in mechanical engineering take also shop practice, just as

the student of chemistry takes laboratory practice, under precisely the same conditions. Having mastered the principles of mechanics, and having mastered mechanical drawing, they go to the shops to learn the applications of these; not to learn a trade, but that they may master the practical difficulties that must be met by those who carry into action their education as inventors or as managers of manufacturing and engineering enterprises. Although it is a matter of great difficulty, the success that has been attained in three or four institutions that have been named is such as to warrant us in believing that it is worth all it will cost. The practical instruction in the agricultural and horticultural schools of the country is also difficult to manage, but happily of less importance, inasmuch as the greater part of the students who go to these schools come directly from the farms, having already mastered the manual processes. But a sufficiency of this practice, it is believed, can still be given to enable them to manage whatever new problems or processes may be needful for them in the applications of their education. Technological education is now making in this country large strides, he believed, although there is still among educational men a degree of doubt, if not of positive disbelief, in these schools. He had heard since he had been in this city that a body of men, who ought to know better, gravely discussed the question whether technological education is a possible thing. After all that you have done, gentlemen, in Europe, and the much that has been accomplished in this country, it is unnecessary to debate that question to-day.

In reply to a question asked by the chairman as to whether this body of men referred to consists of educators, Dr. Gregory said that it does not.

In a conversation a few days ago, participated in by some leading educators of this country, he heard the whole system of polytechnic education spoken of with supreme contempt, as being a plan of education that in itself is a myth, and designed only to tickle the fancy of certain practical men in the country who had been asking that something should be done by our colleges and schools for practical education. Their argument is this: The most practical thing in the world is brains, and the most practical education is that which simply educates brains, gives brain power; and all that can be asked or expected of schools is that they shall give the utmost possible discipline to the mind. They still adhere to the old theory that discipline is the sole product of education, whereas it is only one of the two factors; and they beg the question in the assumption that technological studies cannot give as much discipline as other studies.

But, in spite of these views, he believed, judging from his own standpoint and from association with men conducting these institutions, that the failures in technical schools have been few in comparison with the number of experiments, and that the success already attained is such as justifies us in the promise and prophecy of a large and brilliant fu-

ture. It has come to be believed by the men who manage the industries of this country, men who have in hand the great manufacturing enterprises that are represented in this world's fair, that education, or science, rather, has very much to do with the progress and final success of the industries. The argument can be very easily sustained. One who will walk through yonder Machinery Hall, and continue his walk along the avenues of human invention and art triumphs which fill the Main Building, will have passed in review the most magnificent polytechnic institution that the world ever saw [applause] and the most convincing evidence and magnificent proof of the extent and power of science as usefully applied to industry that can possibly be given.

Science helps art. It has helped it to these results; and to-day science bases its strongest right to exist and its noblest claim to public confidence on what it is showing of its power to help the brain and the hand of man in the production of human wealth and the multiplication of human triumphs over brute nature, barbarism, poverty, want, and crime.

Dr. KENNEDY, president of the Pennsylvania Polytechnic College, by request was introduced by the chairman, and said that he should not attempt to follow the learned speaker from the West in connection with this subject. All have been charmed by him; but he felt sure that no one in the audience enjoyed his remarks so much as himself, (Dr. K.) They might not agree fully on all points, but he did not stand here to discuss the question or to criticise what had been said.

In Pennsylvania, the subject in question is one which has been, perhaps, understood a little differently than elsewhere. We have our own nomenclature, and we have our own system. The first movement in this direction was begun in 1848, and since that time the interest in technical education has increased. But what is meant by the terms "technical education" and "industrial education," as understood in the State of Pennsylvania? By "industrial education" is meant the education of the artisan, the education of the youth who is to work in the machine shop, in the moulding room, in the draughting room; who is to construct the edifice, whether as a carpenter or as a mason. An "industrial school" is one in which education is carried, so far as the sciences are concerned, to a certain extent only. It is enough to teach drawing both from the flat and the round copy, and from natural objects, arithmetic, algebra, geometry, and plane trigonometry; mathematics forming the basis of all the other instruction. Those are all the landmarks he would trouble the conference with. By the term "technical school," in Pennsylvania is meant a school in which instruction is given to those who are to direct the great industries—to the civil engineer, the mechanical engineer, the engineer of mines, the architect, the metallurgist, and the chemist. If you have a collection of such technical schools it is termed a polytechnic college. That is the way in which this matter

is regarded here; and it is similar to the way in which it is regarded abroad. Take, for example, the very school referred to by Dr. Gregory, the excellent polytechnic school in Carlsruhe. There these various technical schools combine to make up one of the grandest institutions in the world, as they do to a certain extent in what is called the Central College of Arts and Manufactures in Paris, which is another example of what we term here a polytechnic college.

The speaker would like to add a single word as to the great difficulties to be met in technical education, and by that you understand is meant the education in technical schools; and to you this, perhaps, is the most practical point of the whole subject. Why? Because those of us who are devoting ourselves to technical education look to you to supply the want. You have heard from our learned friend from Austria, whose remarks we were all so delighted to hear to-day, something about those schools which are termed Realschule in his country. They have no representatives here. They are the feeders to the polytechnic schools of Europe. We have no such feeders, and it is for you that are here to give fashion and direction and force to the system of public education. It is for you to devise means by which this shall be done. We have an abundance of schools in the country where young men are prepared for the ordinary classical course of our colleges. They are the feeders of these excellent institutions. But where are the feeders to the *technical* schools of America? We do not have them; and this kind of education suffers to-day, waiting for the provision which has been mentioned. It was not for him to point out how that want shall be supplied, for he was addressing those who understood that portion of the subject much better than he. But this is a want, a great educational want, perhaps the greatest educational want of the country at this time. He feared it to be such. Whether the remedy should be sought in including in the instruction of the technical school such studies as shall connect it with the public high school, or by increasing the curriculum of the high and the grammar schools, was a question which he thought the conference should consider.

The conference then (at 5 o'clock and 40 minutes) took a recess until 8 p. m.

FIFTH SESSION.

JUDGES' PAVILION, CENTENNIAL GROUNDS,
Philadelphia, Pa., July 18, 1876—8 p. m.

The conference was called to order by Vice-President Phelps at 8 o'clock p. m.

The chairman announced the first business of the evening to be the consideration of the question of a permanent organization for the international educational congress, and called upon Hon. John Eaton, Commissioner of Education, to open the discussion.

Commissioner Eaton said that an extended discussion seemed hardly necessary upon this topic. It is a topic on which we each have an opinion, and it is chiefly desirable that we should express that opinion. We have had the experiences of these conferences that have occurred since yesterday. He thought they had left the impression on each mind that there is in an educational congress of an international character a capacity, a possibility, of furthering the interests of education throughout the world. This is the day of international communication, of ready intercourse between different nations, over continents and under seas; and, in spite of the difficulties in the way of these congresses, we have a large number of them already organized relating to great leading interests. Large numbers of good men are endeavoring to inaugurate the era of peace. They often communicated with him, and he might say here what he had so often said to them, "Yes, gentlemen, God speed you, but before the time of universal peace can come the schoolmaster must be abroad over the whole earth." [Applause.] Then Godspeed to all these great congresses upon any of these great ideas. Be it the promotion of peace; be it the promotion of prison reform; be it the promotion of the codification of international laws; be it medical science, meteorological science, or sanitary science, God speed them all; but unless it is possible to go back and have some general agreement upon the subject of education; unless education can reach the human mind in its various conditions and nationalities and develop the reason and the conscience, so that the higher powers of man will be exercised in the place of the lower, a sense of right controlling passions and appetites, the dawn of the day when reason and conscience and God shall receive cordial obedience among men is still far off, and if upon other subjects men of various beliefs and of various nationalities can meet and confer to advantage for the promotion of these great purposes, why not upon education, this primary and most essential subject? Educational statistics have been considered in several international statistical congresses and some very able reports have been made. A partial translation from one of these we have published, and he thought it a general belief that there are certain elements of statistics in describing which a common nomenclature could be adopted throughout the civilized world, upon which comparisons may be based which shall be a better measure than we have yet had of the comparative intelligence, position, and progress in this respect of different nationalities.

As a means of bringing this discussion definitely before the conference, he moved, as the sense of this conference, that it is expedient to inaugurate measures by which there may be organized a permanent international educational congress.

The motion was seconded by Dr. Harris, of St. Louis.

Hon. John Hancock, superintendent of city schools at Dayton, Ohio, said he did not think we need hesitate a moment in admitting the importance of such an organization, and that, therefore, the question

scarcely needed any discussion. But if we are to have such a congress, it is very evident that it will require time to perfect the arrangements for it so as to make it of the greatest value. He had hoped such a congress would be held during the Centennial Exhibition; but he supposed that the Commissioner of Education found that with the time given it was impossible to arrange for such a congress as we would all be glad to meet. We have had such evidence of the value of a congress of this kind that it is scarcely necessary to discuss it. He knew all have felt that a vast deal of information has been derived from our friends from foreign countries which we should hardly have obtained in any other way. He felt that a congress of this sort ought to be made up of the foremost educators of every country, and especially of the United States, which professes to be doing so much for the general diffusion of knowledge, and not, he thought, without some fruits. Especially ought the United States to send to such a congress as that her foremost educators.

He did not know that it is the desire of Commissioner Eaton, in bringing this matter before the association, to go into details now, but simply to agitate this question, and then, from the Department at Washington, to work up such measures as may be necessary to insure the success of the congress, so far as America is concerned. He thought that that will be the proper course to take under these circumstances, and that the Department will advise with all the educators throughout the country.

Commissioner Eaton stated that he would not occupy time with explaining the difficulties under which the committee to which was intrusted the organization of these gatherings had labored, though they were great and, in numerous instances, serious. You notice that although there have been many international congresses projected in connection with this exhibition, none has been held answering to the meaning of these terms as understood by our foreign friends. Now, this is not an international congress in the full sense for the same reason that they were not. The Superintendence Section of our National Educational Association, in January, 1874, assumed certain responsibilities concerning the inauguration of an international educational congress, and directed correspondence and the preparation of a programme to be reported at the next winter's meeting of the section for its adoption or rejection. That meeting was not held, and so these conferences, of the most informal character, were all that remained possible.

Superintendent Hancock said that he supposed the committee scarcely had enough time after the meeting last summer to work the subject up with foreign nations.

Commissioner Eaton answered that they had not. He said he thought it best to put this single proposition, not to complicate it with any ideas or methods of organization, but simply say that we approve of the proposition of proceeding to organize a permanent international

educational congress. After that we can take up other points if we choose, and act upon them.

Superintendent Hancock inquired what was meant by a *permanent* international congress.

Commissioner Eaton replied that he meant one that should take upon itself an organization looking to perpetuity. There is to be, we suppose, according to the decree of the French assembly, a world's fair in Paris in about two years. That will afford an opportunity for the organiza tion, perhaps, of a formal international congress. If this is effected there will naturally arise the question of whether there shall be a succession of such congresses. It is his hope that the question may be answered affirmatively.

Commissioner Eaton's motion gave rise to a discussion in which the following named gentlemen participated: Dr. J. M. Gregory, Illinois; Hon. J. P. Wickersham, Pennsylvania; Hon. A. Armstrong, Iowa; Dr. W. T. Harris, St. Louis; Hon. E. E. White, Indiana; Dr. J. G. Hodgins, Canada; Prof. C. J. Meyerberg, Sweden; Commissioner John Eaton; Dr. J. W. Hoyt, Wisconsin; Prof. C. L. Hotze, Cleveland, Ohio; Superintendent John Hancock, Dayton, Ohio, and J. R. Sypher, esq., Pennsylvania.

Dr. Hodgins submitted, as a substitute for the motion of Commissioner Eaton, the following resolution:

Resolved, That in the opinion of this conference it is desirable that there should be held at the next universal exposition an international educational congress, and that the United States Commissioner of Education is hereby requested to take such steps, whether by correspondence with foreign governments or otherwise, as to him shall seem most proper to bring about that result.

The resolution was adopted.

Commissioner Eaton said that he understood this resolution to be the act not only of the Americans but of the foreign gentlemen present, and that whatever he did in the matter would be done not in his own person but as the representative of all participating in this action; and that any official statement which he might make to foreign governments would embody the proceedings of this informal conference, and would go through him simply as the educational official of this country, *i. e.*, the Commissioner of Education for the United States.

He then explained that some wished to have these sessions of the conference continued; but that owing to the inability to be present of many foreign gentlemen on whom they had relied for assistance, and to the fact that the hard-working men from this country and from other countries would find it difficult to confine themselves to the labor required to keep up this conference another day, his impression was that it better be concluded to-night.

He informed the conference that there were very interesting informal conferences of an international character held twice a week, (Monday and Thursday,) at 4 o'clock p. m., in the Pennsylvania Educational

Hall, and that these meetings could be continued while the exhibition lasts, if desirable.

Mr. Hancock said that, imbued with the feeling of entire sympathy with every representative of a foreign nation that Americans he was sure feel, and expressing toward them all our heartiest good fellowship, he would move that we shake hands with our foreign brothers, in the hope that we shall meet them again. He then moved that the conference adjourn *sine die*.

The motion was agreed to, and (at 10 o'clock and 15 minutes p. m.) the conference adjourned without day.

PERSONNEL OF THE CONFERENCE.

The conference was so entirely informal that there were no specified conditions of membership. All persons from any country interested in education were invited to attend, and all who wished to make remarks were permitted to do so after first presenting their names to the committee of arrangements, through whom announcements were made.

The following foreign and American educators were present during one or more of the sessions of the conference:

FOREIGN COUNTRIES.

ARGENTINE REPUBLIC.

Mr. G. Videla Dorna, attaché of the Argentine legation, Washington, D. C.

AUSTRIA.

Dr. F. Migerka, chief commissioner for Austria-Hungary.

BRAZIL.

Dr. Philip da Motta, Brazilian educational commissioner.

CANADA.

Hon. J. G. Hodgins, deputy minister of education, Ontario.
Mr. W. A. Walls, Otterville.
Hon. J. M. Palmer, principal Deaf and Dumb Institution, Bellville, Ontario.

ENGLAND.

Professor E. Jones, Liverpool.

FINLAND.

Dr. C. J. Högman, professor of normal school.

GERMANY.

Dr. G. Seelhorst, professor of the School of Art, Nuremberg.
Dr. Oscar Salomon, Berlin.

HAWAIIAN ISLANDS.

Hon. H. R. Hitchcock, inspector general of schools.

JAPAN.

Hon. Fujimaro Tanaka, vice-minister of education.
Mr. Tanetaro Megato, assistant education department.
Dr. David Murray, foreign superintendent of education.

RUSSIA.

Mr. J. C. Heard, Russian Centennial commissioner.

SPAIN.

Colonel Juan J. Marin, Spanish royal commissioner.

SWEDEN.

Professor C. J. Meyerberg, superintendent of schools, Stockholm.

UNITED STATES.

ALABAMA.

Rev. George W. Price, Huntsville.

CALIFORNIA.

Miss Buckmaster, San Mateo.
Hon. E. S. Carr, superintendent of schools, Sacramento.

DELAWARE.

Hon. W. H. Purnell, president Delaware College.

GEORGIA.

Hon. B. Mallon, superintendent of schools, Atlanta.

ILLINOIS.

Hon. J. M. Gregory, president Industrial University, Champaign.
Mr. L. T. Regan, Amboy.
Mr. J. X. Wilson, Peoria.
Mr. S. H. White, Peoria.
Mr. C. Rapp, jr., Bloomington.
Mrs. O. Forward, Jacksonville.

INDIANA.

Mr. Harry W. Wiley, La Fayette.
Mr. C. W. Hodgin, Terre Haute.
Mr. H. Greenawalt, Terre Haute.
Mr. J. M. Olcutt, Indianapolis.
Mr. W. A. Bell, Indianapolis.

IOWA.

Mr. W. E. Crosby, Davenport.
Miss Mary Abernethy, Illyria.
Miss Augusta Abernethy, Illyria.
Hon. A. Armstrong, Sioux City.
Mrs. Armstrong, Sioux City.
Miss G. Sharp Sioux City.
Mr. J. M. Mansfield, Mount Pleasant.
Mrs. Mansfield, Mount Pleasant.
Mr. J. M. Fegtly, Mount Pleasant.
Miss Virginia Scott, Kossuth.

LOUISIANA.

Dr. J. B. Cooper, New Orleans.

MAINE.

Mr. Charles C. Rounds, Farmington.
Mrs. K. M. Rounds, Farmington.

MASSACHUSETTS.

Dr. D. B. Hagar, principal State Normal School, Salem.
Mr. Andrew E. Ford, Clinton.

MICHIGAN.

Hon. J. M. B. Sill, superintendent of schools, Detroit.
Mr. J. L. Stone, Battle Creek.
Mr. L. T. Curtis, Calumet.
Dr. D. C. Jacokes, Pontiac.
Mr. J. C. Jones.
Mr. Th. Holmes, Ann Arbor.

MINNESOTA.

Mr. P. Gorman, Lanesborough.
Hon. W. F. Phelps, Winona.

MISSOURI.

Hon. W. T. Harris, superintendent of schools, St. Louis.
Mr. G. D. Letterman, Allentown.
Mr. D. G. Aber, Narrow Rock.
Mr. S. S. Laws, Columbia.
Miss H. Sawyer, St. Louis.

NEBRASKA.

Hon. S. D. Beals, superintendent of schools, Omaha.

NEW HAMPSHIRE.

Miss Mary M. Gill, Franklin Falls.

NEW JERSEY.

Mr. R. Bingham, Camden.
Mr. M. E. Campbell, Camden.
Mr. L. Johnson, Trenton.

NEW YORK.

Professor E. V. De Graff, New York City.
Mr. N. A. Calkins, New York City.
Mr. Max Goldstein, New York City.
Hon. N. Gilmour, State superintendent of public instruction, Albany.

OHIO.

Professor R. H. Warder, University of Cincinnati.
Hon. John Hancock, superintendent of schools, Dayton.
Mr. Franklin Ward, Marysville.
Hon. J. C. Hartzler, superintendent of schools, Newark.
Professor C. L. Hotze, Cleveland.
Mr. Alexander Forbes, Cleveland.
Mr. Frank Aborn, Cleveland.
Miss D. C. Sawyer, Cleveland.
Hon. A. J. Rickoff, Cleveland.
Mrs. A. J. Rickoff, Cleveland.
Hon. C. H. Payne, Delaware.
Hon. W. S. Ward, Salem.
Mr. F. P. Davidson, Springfield.
Mr. J. B. Neasler, Cincinnati.

PENNSYLVANIA.

Hon. J. P. Wickersham, State superintendent of public instruction, Harrisburgh.
Mr. H. Whitall, Philadelphia.
Mr. John Lynch, Philadelphia.
Mrs. John Lynch, Philadelphia.
Rev. Warren Randolph, Philadelphia.
Mr. L. E. Claghorn, Philadelphia.
Mr. C. E. Pond, Philadelphia.
Mrs. E. W. Hutter, Philadelphia.
Miss E. J. Hanna, Philadelphia.

Miss L. S. Agden, Philadelphia.
Mr. George W. Felter, Philadelphia.
Mr. J. R. Sypher, Philadelphia.
Mr. L. Stubbs, Philadelphia.
Mr. S. M. Booth, Philadelphia.
Rev. S. J. Travelli, Philadelphia.
Mr. D. S. Holman, Philadelphia.
Mr. James F. Sickel, Philadelphia.
Mr. R. S. Hinsman, Philadelphia.
Mr. Alonzo Flack, Philadelphia.
Miss R. S. Walk, Philadelphia.
Mr. Philip Cressman, Philadelphia.
Rev. Dr. Stewart, Philadelphia.
Mr. J. S. Gilbert, Philadelphia.
Rev. Herman Bokum, Philadelphia.
Mr. Alexander Loos, Philadelphia.
Miss M. Fowkinson, Harrisburgh.
Hon. H. S. Jones, superintendent of schools, Erie.

TENNESSEE.

Rev. P. M. Bartlett, president Marysville College.

WEST VIRGINIA.

Mr. E. M. Marshall, Glenville.

WISCONSIN.

Dr. J. W. Hoyt, Madison.
Mr. H. W. De Motte, Delaware.
Miss Ruth A. Graham.

UTAH.

Hon. O. H. Riggs, superintendent of schools, Salt Lake City.

DISTRICT OF COLUMBIA.

Hon. John Eaton, Commissioner of Education.
Miss A. J. Rowland, Washington.