

and Portuguese, the first. Any system of this kind, if rigidly adhered to, is of vast aid in cataloguing. How to catalogue such a name as "du Bois Reymond" is one of the ever-recurring puzzles of bibliography. In listing abbreviations, the Royal Society Committee still adheres, in many instances, to the practise of placing the locality of a given society at the head of the abbreviation of the title of its transactions, instead of after it, as ordinarily, which sometimes loses it under an unknown entry. In some cases, this difficulty is obviated by a cross reference, but the custom can not be commended. A few very trifling errors have been noted, such as the confusion of J. S. Billings, Sr. and Jr., but these are surprisingly rare in a work of such vast extent. The impeccable typography is in itself a token of accuracy in indexing. The entire series, when completed, will be one of those invaluable works which no scientific library can do without for any length of time.

F. H. GARRISON, M.D.

ARMY MEDICAL MUSEUM

THE NATIONAL CONFERENCE COMMITTEE

THE seventh conference of the National Conference Committee on Standards of Colleges and Secondary Schools was held at the rooms of the Carnegie Foundation for the Advancement of Teaching, New York, on February 28.

The following delegates were present as representatives of the organizations indicated:

Headmaster Wilson Farrand, Newark Academy, representing the College Entrance Examination Board, *President*.

Dean Frederick C. Ferry, Williams College, representing the New England Association of Colleges and Preparatory Schools, *Secretary-Treasurer*.

Professor Frank W. Nicolson, Wesleyan University, representing the New England College Entrance Certificate Board.

Dean Frederick P. Keppel, Columbia University, representing the Association of Colleges and Preparatory Schools of the Middle States and Maryland.

Principal Frederick L. Bliss, Detroit University School, representing the North Central Association of Colleges and Secondary Schools.

Chancellor James H. Kirkland, Vanderbilt University, representing the Association of Colleges and Secondary Schools of the Southern States.

President John G. Bowman, The State University of Iowa, representing the National Association of State Universities.

Secretary Clyde Furst, as substitute for President Henry S. Pritchett, representing the Carnegie Foundation for the Advancement of Teaching.

Honorable Philander P. Claxton, the United States Commissioner of Education.

There was present also, by invitation, as a visitor, Dr. Samuel P. Capen, specialist in higher education in the National Bureau of Education.

Headmaster Wilson Farrand, president of the committee, presided at both the morning and the afternoon sessions.

The subcommittee, consisting of Headmaster Farrand (chairman), Dean Ferry, President Pritchett and Principal Bliss, gave a report of an investigation made by its chairman to ascertain the number of recitation periods per week devoted to Mathematics A, History A, History B, History C, History D and Civics (as a separate study), the year in the course when each of these subjects is taken by the pupil, and the number of periods per week which constitute the normal schedule of the pupils in the schools considered. Information had been procured from 363 schools widely scattered through the country. The results seemed to the committee to warrant the raising of the question of increasing the weight (in units) given to Mathematics A and decreasing the weight given to each of the four history subjects.

The subcommittee suggested also the consideration of the proposal presented from various sources, and particularly from the North Central Association of Colleges and Secondary Schools, that there be a discrimination among units according to the time in the secondary school curriculum when the subject is studied; *e. g.*, units of the first two years might be called "minor" units, those of the last two years "major" units, and perhaps those of the second and third years "intermediate" units. A third suggestion was to

the effect that it might be advantageous for colleges and universities to demand that a certain number of admission units, say ten or twelve, be confined to a small number of subjects, say three or four, and that only a definite minimum be made up of isolated subjects. After much discussion, it was voted without dissent that these questions be referred to the constituent bodies for consideration and advice; and for that purpose the following circular letter was later prepared by Dean Keppel and Secretary Furst for submission to the members of the organizations whose delegates constitute the National Conference Committee on Standards of Colleges and Secondary Schools:

In spite of the marked progress toward uniformity in college entrance credits, this committee is informed of certain recurring difficulties in administration. It appears, for example, from our general inquiry concerning the subject, that elementary algebra is usually given more time than is represented by the unit and a half of credit given to this subject, and that certain branches of history are usually given less time than is represented by the unit of credit that they receive. There is, on the other hand, a tendency toward a strictly mechanical interpretation of the unit, even to the point of counting minutes, which emphasizes the letter rather than the spirit of a system of merely approximate measures.

The committee realizes the importance of recommending as few changes in the regulations as possible, but it believes that it will be of service if the organizations that it represents will consider and report to the committee their official judgment or the attitude of their members toward the following suggestions:

A. That the unit credits assigned to the subjects of elementary algebra and history be modified so as to represent more nearly the amount of time given to these subjects.

B. That in certain subjects—as for example, history—the amount of credit to be assigned should not be uniform in all cases but should vary with the time and attention given.

C. That some distinction be made between the amount of credit that is given to subjects taken in the early years of the high school and those taken in the later years.

D. That there be adopted some uniform plan of limiting the number of subjects in which credit

may be gained in order that continuity of work may be secured in at least two subjects.

The committee having received many requests for a uniform blank for the submission to the college of a statement of the school record, and it being understood that committees of the Association of Colleges and Preparatory Schools and of the College and University Presidents Association of Pennsylvania are already engaged in the preparation of such a paper, it was voted that the subcommittee seek information on this subject, consult with other committees, and report to the committee at its next meeting.

Commissioner Claxton asked that the National Conference Committee undertake the task of defining many terms which have come into use in modern education, school administration, etc., and have not had certain and clear meanings assigned to them. It was agreed that the committee should undertake this work with the expectation that some part of it, at least, could be successfully accomplished. It was accordingly voted that the subcommittee be instructed to take this subject under consideration with a view to the extension of the field of the committee to the desired determination of definitions and that a report be made at the next meeting.

Officers for the ensuing year were elected as follows:

President, Headmaster Wilson Farrand.

Vice-president, Chancellor James H. Kirkland.

Secretary-treasurer, Dean Frederick C. Ferry.

The choice of the subcommittee was left to the president with the provision that he serve as its chairman. The other members, as appointed by him, are Chancellor Kirkland, Dean Ferry and Dean Keppel.

FREDERICK C. FERRY,
Secretary

SPECIAL ARTICLES

THE "MULTIPLE UNIT" SYSTEM AS A SOURCE OF ELECTRICITY FOR LABORATORIES¹

THE problem of furnishing electricity, adapted to physiologic and pharmacologic ex-

¹From the pharmacology laboratory of the Northwestern University Medical School.