

conveying, transporting, elevating, and included in this will be weighing, measuring and power transmission equipment. So important have these mechanical features become for all industrial plants due to the shortage and high wage for man power that an unusual interest is expected in this new section.

The program for the exposition will have session on subjects the phases of which will be developed in the exhibits of these latter two sections. There will be sessions on chemical engineering for which an elaborate program is planned. Motion pictures which will have an interest for mechanical men will form part of the program, and there will be popular public addresses as well.

THE WORK OF THE NATIONAL COMMITTEE ON MATHEMATICAL REQUIREMENTS

THE National Committee on Mathematical Requirements held a meeting in Chicago on April 23 and 24. The principal topic discussed at this meeting was the preliminary report on "Junior High School Mathematics" prepared for the committee by Mr. J. A. Foberg. After detailed discussion and some amendment and revision, the report was adopted by the committee and its publication as a preliminary report authorized. It has been submitted to the U. S. Bureau of Education for publication as one of its secondary school circulars.

Reports of progress were made by subcommittees on the training of teachers, experimental schools and courses, disciplinary values and transfer of training, elective courses in mathematics for high schools, and mental tests. It is expected that preliminary reports on all of these topics will be ready for consideration by the committee at its next meeting on September 2, 3 and 4. The attention of experimental schools throughout the country is called to the report on this subject being prepared for the committee by Mr. Raleigh Schorling of the Lincoln School, New York City. Any experimental school or schools giving experimental courses in mathematics who desire to be represented in this report should communicate with Mr. Schorling

without delay, if they have not already done so. A subcommittee on the standardization of terminology and symbolism, with Professor D. E. Smith as chairman, and a subcommittee on junior college mathematics, with Mr. A. C. Olney as chairman, were appointed. J. W. Young, Raleigh Schorling and W. F. Downey were authorized to take steps to initiate investigations into the mathematical elements entering into various industries, professions, vocations, etc.

A budget for the coming year based on the recent appropriation of the General Education Board of \$25,000 for the use of the committee in completing its work was adopted. It is hoped that the increase in the item allowed for traveling expenses in this budget will make it possible for representatives of the committee to reach educational meetings in all sections of the country where such representatives are desired to discuss the various reports of the committee. Nearly 70 organizations are at present actively cooperating with the committee and it is hoped that many others will communicate with the chairman in the interest of furthering the nationwide study and discussion which is already underway. J. W. Young, 24 Musgrove Building, Hanover, N. H., and J. A. Forberg, 3829 North Tripp Avenue, Chicago, Ill., were re-elected chairman and vice-chairman, respectively, of the committee for the ensuing year.

J. W. YOUNG,
Chairman

THE ELLIOT MEDAL IN ZOOLOGY AND PALEONTOLOGY

TERMS of the award of the Daniel Giraud Elliot Medal for zoology are written in the deed of gift to the National Academy of Sciences as follows:

One such medal and diploma shall be given in each year and they, with any unexpected balance of income for the year, shall be awarded by the said National Academy of Sciences to the author of such paper, essay or other work upon some branch of zoology or paleontology published during the year as in the opinion of the persons, or a majority of the persons, hereinafter appointed to be the judges in that regard, shall be the most

meritorious and worthy of honor. The medal and diploma and surplus income shall not, however, for more than two years successively, be awarded for treatises upon any one branch of either of the sciences above mentioned. Professor Henry Fairfield Osborn, of New York, the scientific director of the American Museum of Natural History in New York City and the secretary of the Smithsonian Institution at Washington for the time being, are appointed as such judges. Vacancies at any time occurring in the number of the judges shall be filled by the Council of the said National Academy of Sciences, and in each case of a vacancy it is the wish of the said Margaret Henderson Elliot that the council will, if practicable, appoint to the position an American naturalist eminent in zoology or paleontology.

As science is not national the medal and diploma and surplus income may be conferred upon naturalists of any country, and as men eminent in their respective lines of scientific research will act as judges, it is the wish of the said Margaret Henderson Elliot that no person acting as such judge shall be deemed on that account ineligible to receive this annual gift, and the medal, diploma and surplus income may in any year be awarded to any one of the judges, if, in the opinion of his associates, he shall, by reason of the excellence of any treatise published by him during the year, be entitled to receive them.

The committee of the award includes Secretary Charles D. Walcott, of the Smithsonian Institution; Director F. A. Lucas, of the American Museum, and President Henry Fairfield Osborn, of the American Museum. The committee invites nominations from the works of the year 1919. The award for 1917 was to Frank M. Chapman's "Birds of Colombia." The award for 1918 was to Beebe's "Monograph of the Pheasants."

HENRY FAIRFIELD OSBORN

AMERICAN MUSEUM OF NATURAL HISTORY,
NEW YORK

SCIENTIFIC NOTES AND NEWS

PRINCETON UNIVERSITY has conferred its doctorate of laws on Dr. Raphael Pumpelly, the geologist, and its doctorate of science on Dr. Alexis Carrel, of the Rockefeller Institute for Medical Research. Dr. Carrel has also

received the same degree from Brown University.

THE degree of doctor of science was conferred upon Dr. Frank Schlesinger, director of the Yale Observatory, by the University of Pittsburgh at its commencement on June 9.

THE degree of doctor of science was conferred on Professor Lewis William Fetzner, of the department of physiology and pharmacology in the Baylor University College of Medicine, at the recent commencement exercises of the University of Dallas.

THE degree of doctor of laws has been conferred by the University of Pennsylvania on Professor John M. Macfarlane, who is this year retiring from the chair of botany after a service of twenty-eight years.

THE degree of doctor of science has been conferred by the University of Liverpool on Professor F. G. Donnan, formerly professor of physical chemistry in the university, and now professor of chemistry in University College, London, and on Professor W. A. Herdman, formerly Derby professor of natural history, and now professor of oceanography, in the university.

THE honorary degree of doctor of letters has been conferred by the University of Oxford on Dr. Temistocle Zammit, professor of chemistry in the University of Malta and curator of the Valetta Museum.

DR. B. L. ROBINSON, Asa Gray professor of systematic botany in Harvard University, has been elected a corresponding member of the Czecho-Slovakian Botanical Society.

THE Stewart prize of the British Medical Association has been awarded to Dr. Harriette Chick, an assistant in the department of experimental pathology of the Lister Institute.

SIR WILLIAM J. POPE has been elected president of the Society of Chemical Industry.

PROFESSOR AUGUSTUS TROWBRIDGE, of the department of physics of Princeton University, has been granted a leave of absence for the coming academic year in order to become chairman of the Committee on Mathematics, Physics and Astronomy of the National Research Council.