

and incisive; a practitioner with the insight that makes a physician great, and with a strong man's sympathy that has brought comfort and courage to countless sufferers; Benjamin Osgood Peirce, physicist and mathematician, by whose skill in experiment and calculation intricate problems in heat and magnetism have been solved; a man of science ignorant only of his own deserts. Doctor of laws: George Washington Goethals, a soldier who has set a standard for the conduct of civic works; an administrator who has maintained security and order among a multitude of workmen in the tropics; an engineer who is completing the vast design of uniting two oceans through a peak in Darien.

The honorary degree of doctor of laws was conferred by Western Reserve University, at commencement, upon Dr. P. P. Claxton, United States Commissioner of Education; Dr. G. A. Gordon, pastor of the Old South Church, Boston, and Dr. T. C. Mendenhall. Dr. Mendenhall was presented by Dr. Frank Perkins Whitman, professor of physics, who said:

Mr. President: I present to you, that he may receive at your hands the degree of doctor of laws, Thomas Corwin Mendenhall, teacher, investigator, administrator, professor of physics, but chiefly leader and inspirer of youth in this state, and the Imperial University of Japan; effective interpreter of nature and her laws; president of two notable scientific schools; head of a great government department; leader or collaborator in many scientific undertakings of the United States. Though prevented in youth by circumstances, not according to his desire, from entering regularly on her courses of study, Professor Mendenhall is no stranger to Western Reserve, for at the old college in Hudson he found a congenial academic atmosphere, and the inspiration of high scholarly ideals, as a special student with Professor Charles A. Young. To-day Western Reserve University cordially receives him into the company of her graduates, at the summit of a career of which in the day of small beginnings she is happy to have had some part in laying the foundation.

Among recipients of the doctorate of laws from the University of Pennsylvania are the following: Joseph Swain, president of Swarthmore College, and the orator of the day; Louis A. Duhring, professor emeritus of dermatol-

ogy and honorary curator of the dermatological collections of the University of Pennsylvania; James Tyson, emeritus professor of medicine at the University of Pennsylvania, and John Grier Hibben, president of Princeton University.

At its recent commencement Northwestern University conferred the degree of doctor of science on Dr. Henry Smith Carhart, emeritus professor in the University of Michigan and from 1872 to 1886 professor of physics in Northwestern University.

Brown University has conferred the honorary degree of doctor of science on Professor W. J. Hussey, director of the observatory of the University of Michigan.

SCIENTIFIC NOTES AND NEWS

THE board of scientific directors of the Rockefeller Institute for Medical Research announces the following appointments and promotions: Alexis Carrel (experimental surgery) has been promoted to the rank of member of the institute. The following associates have been made associate members for a term of three years: Peyton Rous (pathology and bacteriology), Donald Dexter Van Slyke (chemistry), Walter Abraham Jacobs (chemistry) and Frank Watts Bancroft (experimental biology). The following assistants have been made associates: Paul Franklin Clark (pathology and bacteriology), Richard Vanderhorst Lamar (pathology and bacteriology) and Harold Wasteneys (experimental biology). The following new appointments are announced: Harold Lindsay Amoss (assistant in pathology), Clarence J. West (assistant in chemistry), Wolfgang Ewald (fellow in experimental biology), Francis Richard Fraser (assistant resident physician and assistant in medicine), Frederic Moir Hanes (assistant resident physician and assistant in medicine).

DR. EDGAR W. OLIVE, professor of botany in the State College of South Dakota, and state botanist, has been appointed curator in the Brooklyn Botanic Garden, to have charge of the department of public instruction, and also

of the work in plant pathology. The appointment takes effect on September 1, 1912.

CAPTAIN H. G. LYONS, F.R.S., has been appointed assistant director of the Science Museum, South Kensington.

PROFESSOR DÜRCK, until a short time ago director of the pathologic institute at Jena, has assumed the direction of the pathologic institute at Rio de Janeiro.

THE executive committee of the Entomological Society of America has named the following as additional delegates to the second International Congress of Entomology, to be held at Oxford, England, August 5 to 10, 1912: Professor Stephen A. Forbes, University of Illinois; Dr. L. O. Howard, chief, U. S. Bureau of Entomology; Dr. Wm. M. Wheeler, Harvard University; Dr. James G. Needham, Cornell University.

THE former students of Professor O. Henrici, F.R.S., who recently retired from the chair of mathematics at the City and Guilds Engineering College, have had engraved in his honor a medal to be awarded annually for proficiency in mathematics.

THE alumni and students of the School of Mines of the University of Pittsburgh have held a banquet in honor of Professor M. E. Wadsworth, the retiring dean of the school. In presenting a silver loving cup to him, Mr. Floyd Rose said: "In the four years during which Dr. Wadsworth has been with us he has become intimately associated with every student in the school. He has aided the weak, encouraged the despondent and won the affection of every one with whom he has come in contact. A more popular or more successful dean the university has never seen. From an insignificant department, he has developed the school of mines into one of the best schools of its kind in the country. It is a source of pleasure that, though he retires from teaching, he will remain with us as dean emeritus."

THE Lucy Wharton Drexel medal of the Museum of Archeology of the University of Pennsylvania has been awarded to Dr. M. Aurel Stein for his explorations in China.

THE Albert medal of the Royal Society of Arts has been awarded to the Right Hon. Lord Strathcona and Mount Royal, F.R.S., for his services in improving the railway communications, developing the resources and promoting the commerce and industry of Canada and other parts of the British empire.

DR. CHARLES J. CHAMBERLAIN, of the University of Chicago, has been elected an honorary member of the Naturforschende Gesellschaft an der Kaiserl. Universität zu Kiew, Russia. Dr. Chamberlain has just returned from Australia and South Africa, where he has been making a field study of the oriental cycads and collecting material for a detailed morphological investigation.

PROFESSOR BURTON E. LIVINGSTON is continuing his researches at the Desert Laboratory during the present summer. He is assisted by Mr. E. M. Harvey.

MR. J. T. LLOYD, assistant in limnology in Cornell University, has recently gone from Colombia, where he has been spending the past six months collecting in the summits of the Andes, to Europe, where he will spend the summer visiting fresh-water biological field stations.

HENRY HOLMES BELFIELD, dean of the technological course of the high school of the University of Chicago from 1903 to 1908, and organizer of the Chicago manual training school, of which he was director until it was merged with the university high school in 1903, died in Ann Arbor, Mich., on June 5.

THE United States Civil Service Commission announces an examination on July 24, to fill vacancies in the position of entomological assistant (male), at salaries ranging from \$1,400 to \$1,800 per annum, in the Bureau of Entomology, Department of Agriculture, Washington, D. C.

A RESEARCH laboratory is being planned for the National Jewish Hospital for Consumptives at Denver, to cost about \$100,000.

THE nineteenth International Congress of Americanists to be held in 1914 will consist

of two sessions: the first in Washington, D. C., and the second at La Paz, Bolivia.

THE Paris correspondent of the *Journal* of the American Medical Association writes that the *Journal Officiel* has recently published very discouraging statistics on the French population in 1911. In 1911, there was an excess of 34,869 deaths while the year before there was an excess of 71,418 births. This difference is due, on one side, to the diminution of births (742,114 infants reported living in 1911 against 774,390 in 1910) and, on the other side, to the increase in the number of deaths (74,011 greater in 1911 than in 1910). The deaths have been more numerous in 1911 than in 1910 in almost all the departments. In proportion to the population, the Norman departments, as in the preceding years, furnished the greatest mortality. The notable increase in the proportional number of deaths in France as compared with many other countries is because France is one of the countries in which there are the greatest number of aged people and chiefly because of the small birth-rate of recent years. Although the birth-rate is low, France is among the countries in which the number of marriages is relatively large. In 1911, 307,788 marriages were registered. The constantly increasing number of divorces reached 13,058, slightly more than in 1910. The birth-rate is low in many countries at the present time, but in no country is it so low as in France. Among the many measures suggested to check this increasing depopulation, the most recent is the proposal which M. Messimy, former minister of war, has made to the bureau of the chamber of deputies. M. Messimy believes that a premium at the birth of every child born of the same mother, reckoning from the fourth, would increase the number of births. This premium would be \$100 (500 francs), of which one half would be paid to the mother at the birth of the child and the other half deposited in the national pay-office for pensions, in order to insure her an income from it during life. The mother could, however, collect the sum at once, or devote it to assure herself a

subsequent pension, which, in this case, would naturally be much greater. In order to meet the expenses which the premium of 500 francs or subsequent annual income would involve, M. Messimy proposes either to resort, entirely or partially, to the regular budget-resources or to place a special tax on bachelors as well as on heads of families without children or having only one child.

A CIRCULAR by the National Bureau of Standards, Department of Commerce and Labor, on the measurements of length and area, including thermal expansion, is in press. It supersedes a similar circular issued July 1, 1909. The new regulations and fees will go into effect May 1. The bureau gives notice that it will be glad to cooperate with investigators, manufacturers and others, not only in executing tests of the highest precision, but also, on request, in furnishing any information at its disposal concerning methods of measurement, the relations among and the legal status of units, the requirements that accurate standards should fulfill, and the design and construction of special apparatus. The bureau will not accept for tests standards and apparatus likely to change excessively or that can be checked with ordinary facilities, such as poorly divided scales or scales graduated on wood, celluloid or paper. A certain minimum of quality will be insisted upon to admit to test. The circular defines the conditions influencing the dimensions of bodies and also describes the fundamental unit of length. It refers to the interrelation of secondary and special units of length and area, with tables of equivalents added, and also devotes some space to a description of national prototype meters, of which it has accurate copies. For the routine work of testing use is made of secondary or working standards whose values are carefully determined by comparison with the bureau's prototype meter from time to time to detect any possible changes. These working standards include multiples and submultiples of the meter and of the yard. Methods of comparison of length standards are outlined and the classification

and nature of tests are defined. The circular concludes with general instructions to applicants for tests and gives the schedule of fees for reference standards, working standards, commercial standards, metal tapes, contact standards, precision screws and calipers, areas and area measuring instruments and thermal expansion of materials. For educational and scientific institutions and societies a discount of 50 per cent. will be allowed on all tests under the schedules stated.

UNIVERSITY AND EDUCATIONAL NEWS

SIR JULIUS WERNHER bequeathed £250,000 to the treasurer of the Union of South Africa for the purpose of assisting in building, and, if sufficient, partly endowing, a university at Groote Schuur, near Cape Town, and £100,000 to the Imperial College of Science and Technology, South Kensington, together with twelfth parts of his residuary estate, but not exceeding £50,000.

PROFESSOR NEWTON H. WINCHELL, of Minneapolis, for many years state geologist of the Minnesota Geological and Natural History Survey, has presented his geological library to the University of Minnesota. This library is probably one of the best private collections of geological literature in this country and was built up through the years when Professor Winchell, as editor of the *American Geologist*, had unusual opportunities for obtaining the earlier serial and regional reports of this and foreign countries. Many of its volumes are priceless. The library is now being installed in the department of geology at the University of Minnesota and will be known as the "Winchell Library of Geology," to which hereafter donations and exchanges should be addressed.

DR. EUGENE L. OPIE, professor of pathology in Washington University, has been appointed dean of the medical school to succeed Dr. George Dock, relieved of this duty at his own request.

SAMUEL N. SPRING, forester of Connecticut and lecturer in the Yale Forest School, has been appointed professor of forestry in the

New York State College of Agriculture, Cornell University.

DR. J. W. JENKS, professor of political economy at Cornell University since 1891, will become professor of government and public administration and director of political studies in the School of Commerce, Accounts and Finance of New York University.

DEAN WALTER R. CRANE, of the School of Mines, Pennsylvania State College, has been granted a year's leave of absence and left June 13 to spend the coming year in the study of the coal fields of Alaska and the northwest. Dr. Elwood S. Moore, professor of geology, will be acting dean during Dr. Crane's absence. Assistant Professor Thomas C. Brown, department of geology, has resigned to accept a similar position at Bryn Mawr College. Mr. H. N. Eaton, instructor in geology and petrography, University of Pittsburgh, has been appointed to succeed him. Associate Professor of Mining William M. Weigel has resigned to accept the position of general superintendent of the North American Smelting Company, Ltd., Kingston, Ontario, Canada. Hugh D. Pallister, instructor in metallurgy, has been appointed to succeed Professor Weigel with the title of assistant professor of mining. Harry B. Northrup and William A. Royce have been promoted from assistants to instructors in mining. Carroll A. Garner has been appointed instructor in mining.

THE following appointments have been made for the coming year in the North Carolina College of Agriculture and Mechanic Arts: instructor in chemistry, J. W. Nowell, A.B. (Wake Forest), Ph.D. (Hopkins), and F. B. Sherwood, B.S. (North Carolina College).

At the Indiana University the following promotions from assistant professorships to associate professorships have been made: Robert D. Carmichael, in mathematics; Melvin E. Haggerty, in psychology; Clarence E. May and Frank C. Mathers, in chemistry; Fernandus Payne, in zoology.

DR. DANIEL STARCH has been promoted to the rank of assistant professor of psychology at the University of Wisconsin.