

Trinity House. The representatives of the United States were: George R. Putnam, commissioner of lighthouses, Washington; J. T. Yates, superintendent of the Third Lighthouse District, New York, and H. W. Rhodes, superintendent of the Eighteenth Lighthouse District, San Francisco, all of the Department of Commerce.

THE MATHEMATICS OF ENGINEERING

THE American Mathematical Society, at its annual meeting to be held at Lehigh University, Bethlehem, Pa., from December 27 to 28, is arranging that Friday be given to the presentation of the usual type of papers and that Saturday be devoted to a symposium on the mathematics of engineering. The general topic chosen for the Saturday sessions is "Differential Equations of Engineering," and it is proposed tentatively that both morning and afternoon three half-hour papers be given by men eminent in their fields. This part of the program is being arranged because of a wish expressed by some members of each of the two groups—mathematicians and research engineers—for closer cooperation.

All who are interested are cordially invited to attend. Headquarters for the meeting are at the excellent Hotel Bethlehem. Further details are being planned by the committee on arrangements, of which Professor Tomlinson Fort, of Lehigh University, is

chairman. The sessions will be held in the new Packard Laboratory for electrical and mechanical engineering, a building which sets a new standard for equipment for teaching and research in engineering. On request to the secretary of the American Mathematical Society, 501 W. 116th Street, New York City, a printed program will be sent when it is off the press (about December 7). Other information will be gladly furnished.

All of the persons invited to participate in the program have accepted and have tentatively submitted titles.

H. W. March, department of mathematics, University of Wisconsin.

Vannevar Bush, department of electrical engineering, Massachusetts Institute of Technology.

T. H. Gronwall, department of physics, Columbia University.

A. Nadai, Research Laboratory, Westinghouse Electric and Manufacturing Company. (Formerly of the University of Göttingen.)

R. H. Park, Engineering Department, General Electric Company.

S. Timoshenko, department of mathematics, University of Michigan. (Formerly with the Westinghouse Electric and Manufacturing Company.)

R. G. D. RICHARDSON,

Secretary of the American Mathematical Society

SCIENTIFIC NOTES AND NEWS

PAINTINGS of scenes and persons identified with the history of Columbia University will be presented to the institution by alumni and various civic, historical and ecclesiastical societies, as part of the ceremonies to mark the celebration of its one hundred and seventy-fifth anniversary, which will take place from October 25 to 31. The portraits include among members of the faculties Dr. Michael I. Pupin, professor of electromechanics; Dr. John Dewey, professor of philosophy, and Dr. Henry Fairfield Osborn, research professor of zoology. Among the portraits of those who have died is that of James F. Kemp, formerly professor of geology.

HONORARY degrees conferred on the occasion of the celebration of the hundredth anniversary of the Royal Danish Engineering College on August 30 include three residents of the United States. These are Professor William Hovgaard, the Massachusetts Institute of Technology; Henrik J. Krebs, founder of the dye works at Wilmington, Delaware, and Professor H. M. Westergaard, University of Illinois.

DR. JOHN A. KOLMER, professor of pathology and bacteriology in the graduate school of medicine of the

University of Pennsylvania, was recently awarded the Mendel medal by Villa Nova College for his work in immunology. This is the first award of the medal, which was established to commemorate the work of Gregor Mendel.

WE learn from *Popular Astronomy* that the Committee on Astronautics of the Astronomical Society of France awarded its first annual international prize to Hermann Oberth, a German teaching at the College of Medinsch, Roumania. The presentation ceremonies were held at the Sorbonne on June 6. Walter Hohmann, a German engineer, and Noel Deisch, an American biologist, were given honorable mention. Oberth's paper was deemed of such unusual merit that the original prize of 5,000 francs was raised to 10,000 francs by the founders, Mr. Robert Esnault-Pelterie, a French aeronautic engineer, and Mr. Andre Hirsch, a French banker interested in astronomy.

CHARLES PIEÉZ, consulting engineer of Chicago, formerly vice-president and general manager of the U. S. Shipping Board Emergency Fleet Corporation, has been nominated for the presidency of the American Society of Mechanical Engineers. Vice-

presidents have been nominated as follows: Paul Doty, St. Paul, Minn.; Ralph E. Flanders, Springfield, Vt.; Ernest L. Jahneke, Washington, D. C.; Conrad N. Lauer, Philadelphia, Pa. The managers nominated are: Harold V. Coes, New York, N. Y.; James D. Cunningham, Chicago; Clarence F. Hirshfeld, Detroit.

DR. WILLIAM BOWIE, chief of the division of geodesy of the U. S. Coast and Geodetic Survey, and Commander N. H. Heck, chief of the division of terrestrial magnetism and seismology, have been elected alumni members of the Sigma Xi chapter at Lehigh University.

THE Cameron prize in practical therapeutics of the University of Edinburgh has been awarded to Sir Leonard Rogers, in recognition of the discoveries he has made in the treatment of several tropical diseases and in particular in the treatment of cholera, amoebic dysentery and leprosy.

PROFESSOR J. J. R. MACLEOD, regius professor of physiology in the University of Aberdeen, and Mr. Wilfred Trotter, honorary surgeon to the King of England and surgeon to University College Hospital, London, have been appointed members of the British Medical Research Council, in succession to Professor E. P. Cathcart and Sir Charles Sherrington, who will retire in rotation on September 30.

REPRESENTATIVE LUCE (Republican), of Waltham, Massachusetts, has been appointed a member of the board of regents of the Smithsonian Institution by Speaker Longworth. He succeeds Representative Newton, of Minneapolis, whose resignation as a member of the House became effective on June 30.

COLONEL CLARENCE M. YOUNG, of Des Moines, Iowa, until now director of the aeronautics branch of the Department of Commerce, has been appointed assistant secretary of commerce for aeronautics, succeeding William P. MacCracken, Jr., who has resigned to engage in the practice of law.

DR. FREDERICK EBERSON, assistant professor of medicine of the University of California, has recently been appointed director of the clinical and research laboratories at the Mount Zion Hospital, San Francisco.

PRESIDENT W. O. HOTCHKISS, of the Michigan College of Mining and Technology, has been appointed chairman of the committee on mining and metallurgy for the Society for the Promotion of Engineering Education. The other members of the committee are: R. M. Black, University of Pittsburgh; R. S. McCaffery, University of Wisconsin; W. G. McBride, McGill University; C. M. Young, University of Kansas; Joseph Daniels, University of Washington, and H. E. Nold, Ohio State University.

H. L. SEWARD, professor of mechanical and marine engineering in the Sheffield Scientific School at Yale University, has been appointed to assist Charles A. McAlister, the president of the American Bureau of Shipping. By an arrangement with Yale University, Professor Seward will devote only part time to his work at the university.

PROFESSOR ALFRED LANDÉ, professor of theoretical physics at the University of Tübingen, Germany, has been elected visiting professor of theoretical physics at the Ohio State University for the autumn and winter quarters of the academic year 1929-30, and Dr. L. H. Thomas, of Trinity College, Cambridge, England, has been elected assistant professor of theoretical physics. He will be in residence for the entire academic year 1929-30.

THE completion of the first year of Dr. Shirley W. Wynne's incumbency as New York City Health Commissioner was marked on August 16 by a surprise reception attended by the heads and personnel of all the bureaus under his supervision in his offices in the health department. Each bureau gave the commissioner a basket of roses or gladioli, and he received numerous telegrams of congratulation and commendation. Dr. Thomas Darlington, who was the commissioner of health from 1904 to 1910 and who appointed Dr. Wynne twenty-two years ago to the position of medical inspector, greeted the commissioner upon his entrance to his office and complimented him on the accomplishments of the past year in the Department of Health.

DR. B. SMITH HOPKINS, professor of inorganic chemistry at the University of Illinois, has been granted a leave of absence for the academic year 1929-30. He will spend the time on the Pacific coast studying methods of research, teaching and manufacturing.

DR. E. L. OVERHOLSER, of the division of pomology of the University of California, will sail on September 12 on a trip to the Orient to study problems of the marine refrigeration of perishable products. He will return at the end of December.

DR. CHIA CHI WANG, who was a guest in The Wistar Institute Laboratory during the years 1925 to 1927, is returning to China to take up a teaching position in the department of biology at the National Central University, Nanking, China.

C. L. LUNDELL, assistant physiologist of the Tropical Plant Research Foundation and a student in the department of botany of Columbia University, sailed from New Orleans on August 9 for British Honduras, where he will assist Dr. J. S. Karling in the investigation of problems involved in the production of chicle. This work, which is being carried out at

Honey Camp by the Foundation for the Chicle Development Company of New York, is now in its third year.

ARTHUR LOVERIDGE, assistant curator of reptiles and amphibians at the Museum of Comparative Anatomy of Harvard University, will leave next month for the African jungles to make collections of reptiles for the museum. Mr. Loveridge will center his activities in the neighborhood of the Livingstone Mountains, about 300 miles south of the spot where Stanley and Livingstone met, where he expects to find traces of animal life which show connections, with both the country further north and the fauna of South Africa. In addition to the collection of reptiles and amphibians, he will endeavor to gather information concerning their life histories, foes and parasites. Mr. Loveridge expects to return to the United States in the summer of 1930.

EXERCISES for the dedication of the Wilmer Ophthalmological Institute will be held on October 15 and 16, under the auspices of the Johns Hopkins University, the Johns Hopkins Hospital and the William Holland Wilmer Foundation. An appropriate program has been arranged including the following addresses: "The Development of Ophthalmology in Europe," by Hofrath Ernst Fuchs, of the University of Vienna; "Some Contributions and Phases of American Ophthalmology," by Dr. George E. de Schweinitz, of the University of Pennsylvania, and "Color Vision and its Anomalies," by Sir John Herbert Parsons, of the University of London.

IN the recent symposium on chemical kinetics at the University of Minnesota, the lecturers included: Dr. M. Polanyi, of Berlin; Professor H. S. Taylor, head of the department of chemistry at Princeton University; Professor Samuel C. Lind, head of the school of chemistry of the University of Minnesota; Professor Farrington Daniels, of the University of Wisconsin, and Drs. R. S. Livingston and L. H. Reyerson, of the University of Minnesota.

THE hundred and tenth annual meeting of the Swiss Scientific Association is being held at Davos from August 29 to September 1, under the presidency of Dr. W. Schibler.

THE second International Malaria Congress will be held at Algiers on May 19, 20 and 21, 1930, under the presidency of E. Marchoux. There will be six sections: biology of the parasite of malaria; biology of the mosquito; epidemiology; pathology; therapeutics, and prophylaxis. There will be excursions to interesting points, such as la Mitidja, Constantine and Laveran. Requests for registration must be accompanied by 100 francs; a certificate entitles the holder to all privileges.

SIR THOMAS HOLLAND, president of the British Association, who has returned to Johannesburg from Rhodesia, in the course of a statement regarding the results of the association's meeting, is reported in the *London Times* to have said: "Speaking from my own experience, and I have attended meetings of the British Association in Australia and Canada, I should say that our meeting in South Africa has been one of the most successful oversea meetings we have had. We have had, among other things, very good local papers by local workers, which have led to very useful discussions. In addition to that everybody to whom I have spoken have been very much impressed by the kindness of the local people, from whom they have learned something new about the conditions and problems of the country. I have noticed the very keen interest of the people attending the public lectures and discussions, and that to me has been an unusual thing. Previously I have often seen people at lectures drift away, but here in South Africa one has not seen people leave the building until the discussion has been absolutely finished. They have listened with intense interest, not as ordinary members of the public, curious to see or hear something new, but as real students. It was exactly the same in Cape Town and Johannesburg, and I have heard similar observations from Pretoria regarding the remarkable success of the agricultural section of the association there."

A CABLE from Melbourne, Australia, states that the government has accepted an offer of £20,000 by Mr. F. D. McMaster, of New South Wales, to enable the scientific and industrial research department to erect an animal health laboratory, which the government will staff and equip.

MR. ATMORE, minister of scientific and industrial research, announces that the New Zealand government has decided to take part in the scheme of Imperial agricultural research bureaus, the establishment of which was recommended by an Imperial agricultural research conference. This provides for the establishment of eight bureaus for the collection and interchange of information in eight branches of agricultural science. The bureaus, which are to be attached to recognized research institutes, will be financed from a common fund formed by contributions from governments of the empire. Several of the bureaus have already been opened, and it was hoped to open the others during the summer.

IN order to centralize and arrange a methodical plan for the scientific work which is carried on in northern Norway, Svalbard, Jan Mayen and the Arctic Sea, a Central Committee for the Scientific Institutions at Tromsø has been recently constituted, the statutes for which have now been sanctioned by the

Department of Education. According to Northern News Service, the Geophysical Institute at Tromsø will act as a weather-forecasting and aurora observatory, and Professor Krogness will have the assistance of Professor Vegard and of other scientific men work-

ing in the north, including Mr. Soot-Ryen, who has made valuable researches into the fauna of the coasts of northern Norway. The committee's aim is to forward cooperative work between the different scientific institutions of Tromsø and the north.

UNIVERSITY AND EDUCATIONAL NOTES

A CONTRACT with representatives of the Italian government has been signed by Mr. George Eastman by which he has agreed to build and equip a dental dispensary in Rome to cost \$1,000,000. It will be similar to the Rochester Dispensary and the Eastman Dental Clinic of London.

W. W. COOK, of New York City, has made a gift of \$200,000 to the University of Michigan for the support of lectures on American institutions.

DR. ALLEN K. KRAUSE, formerly associate professor of medicine at the Johns Hopkins University, who has recently been made director of the Desert Sanatorium and Institute for Research, has been appointed clinical professor of medicine at Stanford University. While Dr. Krause will make his headquarters at Tucson, Arizona, he will be in San Francisco at certain times during the year to participate in the teaching at Stanford.

QUENTIN D. SINGEWALD, assistant professor of geology at the Colorado School of Mines, has been appointed assistant professor of geology at the University of Rochester.

DR. KARL E. MASON has been promoted to an assistant professorship of anatomy at Vanderbilt University.

SEVERAL new instructors will join the faculty of the Pennsylvania State College next fall to work in connection with the legislative appropriation of \$50,000

for oil and gas research at the college, to teach a new course in oil and gas production and to assist in teacher-training work throughout the state. These include Clark F. Barb, of the Colorado School of Mines, appointed associate professor of petroleum research, and M. R. Fenske, of the Massachusetts Institute of Technology, who will become assistant professor in chemical engineering; Paul G. Shelley, of the University of Oklahoma, and E. F. Williams, graduate assistant in mineralogy, and Herbert J. Stack, of Columbia University.

THE following appointments that have recently been made in foreign faculties of medicine are recorded in *The British Medical Journal*: Dr. Marcel Labbé, professor of general pathology and therapeutics at Paris, has succeeded the late Professor Widai in the chair of clinical medicine; Dr. M. Wertheimer, of Berlin, has succeeded Professor Schumann in the chair of psychology at Frankfurt; Dr. Hermann Siemens, of Munich, has been appointed professor of dermatology at Leyden, and Professor Steurer has succeeded Professor Körner as director of the oto-rhinolaryngological clinic at Rostock.

H. T. TIZARD, permanent secretary of the Department of Scientific and Industrial Research, has been appointed rector of the Imperial College of Science and Technology as from the beginning of September in succession to Sir Thomas Holland, who has been appointed principal of the University of Edinburgh.

DISCUSSION

SHALER ON THE FOSSIL BRACHIOPODS OF THE OHIO VALLEY

IN the *Memoirs* of the Kentucky Geological Survey, Vol. I, there is a paper by the late N. S. Shaler, "On the Fossil Brachiopods of the Ohio Valley." This paper consists of p. [2] I-IV, 3-44, Plates I-VII, with descriptions facing the plates. The date and place of publication are not given on the title-page of this paper in the volume, but an author's separate on cover and title-page bears the name of the University Press, Cambridge, and the date 1876. Shaler's text consists of a general account of certain brachiopods of the region. The last twenty-one pages are made up of tables with very detailed measurements as prepared by A. R. Crandall. The bearing of these measurements is not obvious. The tables

and illustrations are only briefly mentioned (p. II, III, 12) in Shaler's text. On page 10 are recorded "*Platystrophia lynx* n. sp., *Plectambonites sericea* n. sp." It is not clear why these should be listed as new species. One was described by Eichwald, in 1830, as *Terebratula lynx*, and later by him, 1840, referred to *Spirifer lynx*. The other was described by Sowerby, in 1839, as *Leptaena sericea*.

N. S. Shaler was at that time (1876) director of the Kentucky Geological Survey and for a long term of years professor of paleontology in Harvard University. The brachiopod paper here considered was Shaler's principal contribution to paleontology. He, however, published: 1865, "List of Brachiopoda from the Island of Anticosti Sent by the Museum in Exchange," 10 pp.; 1888, with August F. Foerste, "Pre-