CHAIRMEN OF THE DIVISIONS OF THE NATIONAL RESEARCH COUNCIL

THE National Research Council has elected the following chairmen of its divisions for the year 1922-23:

Division of Foreign Relations: Robert A. Millikan, foreign secretary of the National Academy of Sciences, and director of the Norman Bridge Laboratory of Physics, California Institute of Technology, Pasadena, California.

Division of States Relations: H. S. Graves, dean-elect, School of Forestry, Yale University.

Division of Educational Relations: Vernon Kellogg, permanent secretary, National Research Council.

Division of Research Extension: W. M. Corse, formerly general manager of the Monel Metal Products Corporation, Bayonne, New Jersey.

Research Information Service: Robert M. Yerkes, National Research Council, Washington, D. C.

Division of Physical Sciences: William Duane, professor of bio-physics, Harvard University Medical School.

Division of Engineering: Alfred D. Flinn, secretary, Engineering Foundation, 29 West Thirty-ninth Street, New York, N. Y.

Division of Chemistry and Chemical Technology: Edward W. Washburn, professor of ceramic chemistry and head of the department of ceramic engineering, University of Illinois.

Division of Geology and Geography: Nevin M. Fenneman, professor of geology and geography, University of Cincinnati.

Division of Medical Sciences: Frederick P. Gay, professor of pathology, University of California.

Division of Biology and Agriculture: F. R. Lillie, professor of embryology, University of Chicago.

Division of Anthropology and Psychology: Raymond Dodge, professor of psychology, Wesleyan University.

THE U. S. COMMISSIONER OF FISHERIES

The president, acting upon the recommendation of Herbert Hoover, secretary of commerce, has nominated Henry O'Malley to be commissioner of fisheries, effective on May 13, 1922, and this nomination has been confirmed by the Senate. Mr. O'Malley, like his predecessor, Dr. Hugh M. Smith, has had long experience in the bureau's service, having entered

in December, 1897, as an apprentice fish-culturist at St. Johnsbury, Vermont, in which place he was born in 1876. From St. Johnsbury he was transferred to the bureau's station at Leadville, Colorado, thence to Baker Lake, Washington. In July, 1903, he was appointed superintendent of the Washington stations; in 1907, of the bureau's work in the Columbia River watershed; in 1913, he was placed in charge of all fish-cultural work on the Pacific coast, with headquarters at Seattle; in 1916, he was made chief of the Division of Fish Culture in Washington and in 1918 placed in charge of all the bureau's activities on the Pacific coast.

The commissioner is responsible for a number of innovations in fish-cultural practices, such as the discovery of the salt-solution process for separating dead fish eggs from the live ones, eliminating the necessity of removing dead eggs by hand, and the practice of holding young salmon beyond the period when the yolk-sac is absorbed, the wisdom of which has been indicated by the improved run of salmon in such streams.

For the past three years he has spent the entire fishing season in Alaska engaged in comprehensive investigations of the fisheries of this region in conjunction with Dr. Charles H. Gilbert, of Stanford University, the results of which have been published in bureau reports for 1919 and 1920.

In 1916 he was elected president of the Pacific Coast Fisheries Society and in 1918 president of the American Fisheries Society. Mr. O'Malley enters the commissionership with a full acquaintance of the needs of the service and its possibilities for rendering fruitful service in its various phases.

SCIENTIFIC NOTES AND NEWS

THE degree of doctor of science was conferred at the one hundred and sixty-eighth commencement of Columbia University on Dr. Stephen Smith, the university's oldest living graduate, and on Frank Julian Sprague, the electrical engineer.

Dr. John J. Carty, president of the American Telegraph and Telephone Company, re-

ceived the degree of doctor of laws at the commencement exercises of New York University.

THE State University of Iowa conferred at the recent commencement exercises the doctorate of laws on Mr. Vilhjalmur Stefansson and on Dr. Franklin H. Giddings, professor of sociology in Columbia University, who delivered the commencement address.

The degree of doctor of science was conferred by the Kansas State Agricultural College on C. V. Piper, in charge of forage crop investigation, United States Department of Agriculture, and on Walter T. Swingle, in charge of the office of crops physiology, United States Department of Agriculture.

At the commencement exercises of the University of Maine the doctorate of science was conferred on Leon S. Merrill, dean of the College of Agriculture; Professor Jeremiah S. Ferguson, of Cornell University; John Belling, of the Carnegie Institution, and Josiah W. Votey, dean of the College of Engineering, University of Vermont, and the doctorate of engineering on Harold S. Boardman, dean of the Maine College of Technology.

TRIBUTE to the services of Dr. John Deaver and Dr. John Marshall, who retire at the end of the present academic year as professor of surgery and professor of chemistry and toxicology, respectively, was paid at the last meeting of the Board of Trustees of the University of Pennsylvania, by the passage of the following resolutions:

RESOLVED, That the trustees receive with very great regret the resignation of Dr. John B. Deaver as John Rhea Barton professor of surgery in the School of Medicine, taking effect June 30, 1922, and the secretary be instructed to convey to Dr. Deaver the regret of the trustees at the ending of his distinguished term of service.

RESOLVED, That the trustees are gratified to learn that Dr. Deaver will remain on the university instructional staff, retaining his position of professor of surgery in the Graduate School of Medicine.

RESOLVED, That the trustees receive with very great regret the resignation of Dr. John Marshall as professor of chemistry and toxicology, in the School of Medicine, taking effect June 30, 1922, and the secretary be instructed to convey to Dr.

Marshall the gratitude of the university for his long and faithful service as a teacher and officer of the university, and their regret at the severing of his connection with the institution.

HAVING reached the age limit of seventy years on May 1, Professor Ramón y Cajal was retired from his connection with the chair of histology and pathologic anatomy at the University of Madrid. Spain and Latin America are taking the lead in organizing a tribute to him. Among the early features of this is the Cajal number of the Archivos de Medicina of Madrid.

A DINNER in honor of Professor Edwin G. Boring, professor of psychology, was given by the faculty of Clark University on May 31, with Professor Arthur G. Webster, of the department of physics, as toastmaster. Professor Boring is leaving Clark University to go to Harvard University.

THE annual Walker prizes of the Boston Society of Natural History were this year awarded as follows: A first prize of \$100 to James W. Mavor, of Union College, Schenectady, N. Y., for his essay "On a modification of the mechanism of inheritance produced by X-rays"; and a second prize of \$50 to Frank J. Wright, of Bridgewater College, Bridgewater, Virginia, for an essay on "The physiography of the upper James River basin in Virginia." At the annual meeting of the council of the society it was voted to elect Professor William Bateson, director of the John Innes Horticultural Institute, London, England, an honorary member.

The Academy of Natural Sciences of Philadelphia has appointed Dr. R. A. F. Penrose, Jr., a delegate to the Thirteenth International Geological Congress in Brussels and Dr. Wm. P. Wilson a delegate to the Twentieth International Congress of Americanists at Rio de Janeiro.

ELEVEN of the twelve members of the committee of the League of Nations on International Cooperation in Intellectual work have been selected. These include in the sciences Madame Curie; Professor Albert Einstein; Miss Bonnevie, professor of zoology at Christiania; Dr. A. De Castro, of the medical faculty

of the University of Rio de Janeiro; and Dr. L. De Torres Quevedo, director of the electromedical laboratory of Madrid. The commission will include a consideration of the three following topics: (1) possibilities of encouraging and improving the organization of scientific research by means of congresses, commissions and institutes; (2) the international relations between universities and means for the organization of an international bureau of universities, and possibly an international university; (3) international organization of scientific bibliography, and exchange of scientific publications.

THE officers elected in Section III of the Royal Society of Canada at the annual meeting in May were: President, Professor J. Watson Bain, of the department of chemistry of the University of Toronto; vice-president, Dr. J. S. Plaskett, director of the Astro-physical Observatory, Victoria, B. C.; secretary, J. Patterson, Meteorological Service, Toronto.

DR. NATHANIEL W. FAXON, assistant director of the Massachusetts General Hospital of Boston, has accepted the position of director of the Strong Memorial Teaching Hospital, which will be built in connection with the School of Medicine and Dentistry at Rochester University.

Dr. J. C. With has been appointed a consulting chemist in the Bureau of Mines, and from time to time will cooperate with that bureau in the study of some phases of portland cement manufacture.

Dr. A. G. Johnson, associate professor of plant pathology at the University of Wisconsin and pathologist of the Office of Cereal Investigations, Bureau of Plant Industry, U. S. Department of Agriculture, formerly stationed at Madison, Wisconsin, has transferred head-quarters to Washington, D. C., where he will continue his work in the Office of Cereal Investigations. He has resigned his university appointment.

Mr. R. L. Howard, who has been associate professor of chemistry in the Medical College of Virginia, has been awarded the research fellowship in pharmacology at Western Reserve University.

VICTOR K. LAMER, instructor in chemistry at Columbia University, has been granted a leave of absence for the coming year to accept the Cutting traveling fellowship for study abroad.

PROFESSOR L. MICHAELIS has received leave of absence from the University of Berlin to lecture on physiologic chemistry at the Japanese University of Nagoya.

MR. ERNEST E. HUBERT, assistant pathologist in the Office of Forest Pathology, cooperating with the Forest Service at the Forest Products Laboratory, left on June 7 for a field trip through Illinois, Missouri, Tennessee, Mississippi, Louisiana and Georgia. The purpose of the trip is a general survey of the problem of sap stains and molds on lumber. The methods of controlling the enormous losses due to these organisms will be studied in detail, and special attention will be given to the steaming and seasoning of sap gum and other lumber and to the treatment of southern yellow pine to prevent blue stain.

NEIL M. JUDD, curator of American archeology in the U. S. National Museum, left for New Mexico on May 1 to resume direction of the National Geographic Society's Pueblo Bonito Expedition. During Mr. Judd's absence John L. Baer will again serve as acting curator of American archeology.

Dr. T. S. Palmer addressed the Biological Society of Washington on May 13 on "Twenty years of federal protection of the bison." A historical sketch of attempts to prevent the extinction of the bison was given; in 1922, there were over 10,000 bison in existence.

The annual Jones' Lectures of the University of Oregon Medical School were given this year by Sir Thomas Lewis. The subjects were as follows: "The nature of auricular flutter and fibrillation as these occur in man," "The action of cinchona alkaloids," and "Digitalis."

THE annual meeting of the Canadian Medical Association will be held at Winnipeg from June 20 to 23, inclusive. Dr. Lewellys F. Barker, of Baltimore, is to give the address in medicine, and Dr. J. M. T. Finney, also of Baltimore, has been asked to give the address in surgery. The scientific work of the meeting will be car-

ried on in a surgical section, a medical section, an eye, ear, nose and throat section, and a general section; and, instead of a formal pathological section, a series of pathological demonstrations will be given. The Canadian Society of Anesthetists and the Canadian Radiological Society will also hold their annual meetings in Winnipeg at the same time.

The Metals Committee of the Federal Specifications Board has been organized with Dr. G. K. Burgess, of the Bureau of Standards, as chairman, and Mr. Freeman, also of the bureau, as technical secretary. Several subcommittees have been appointed, and progress has been made in the formulation of metal specifications. The metals are being taken up in the following order: Ingots, castings and wrought metal. The subject of chains is also being considered by this committee. The American Society for Testing Materials methods of chemical analysis have been recommended for government check analyses.

THE National Committee on Exhibits Showing Advances in Sanitary Science has recently been formed in Washington, for the purpose of collecting and preparing material for a public health exhibit in the capitol. The members of the committee include: Surgeon General Hugh S. Cumming, U. S. Public Health Service, chairman; Dr. D. B. Armstrong, National Health Council; Surgeon General M. W. Ireland, M. C., U. S. Army; Dr. Victor C. Vaughan, National Research Council; Dr. C. D. Walcott, Smithsonian Institution, and James A. Tobey, National Health Council, secretary. Space for the proposed exhibit has been placed at the disposal of the committee by the Smithsonian Institution. Plans are under way to install exhibit material secured from official and voluntary health agencies. The secretary's office is in the national headquarters of the American Red Cross at Washington.

MR. MARCONI left Southampton on May 27 on board his yacht *Electra* on a voyage of wireless experiment to America. According to a report in the *London Times*, two technical assistants accompany him. He proposed to carry out experiments on the Atlantic with direction finders on short wave and long wave transmission. At New York he will conduct a

number of tests in cooperation with some of the modern American stations, and demonstrate to the Americans what can be accomplished in the high speed dispatch and reception of mes-Over long distances, such as from America to England, messages are now received at a rate of eighty to ninety words a minute, and Mr. Marconi will use improved instruments by means of which speed can be increased up to one hundred words a minute and over. On June 20, Mr. Marconi, who has received from the Institute of Radio Engineers, New York, the medal of the institute, will deliver a lecture at a joint meeting of the Radio Institute and the American Institute of Electrical Engineers. His subject will be "Radio Telegraphy," but the question of wireless telephony will also be dealt with. Besides his other experiments, Mr. Marconi will carry out tests for the Meteorological Office in London during his voyage. These will have special reference to the collection of reports of the weather in the areas of the Azores and the Bermudas. He expects to be absent from England until the middle of July. On his return journey, he hopes to visit Canada and Newfoundland. The Electra, a steam yacht of 700 tons, will make the Azores her first objective, and thence will proceed to America, or, if the weather proves bad, to Ber-

The United States National Museum has recently secured by purchase, through the cooperation of the United States Department of Agriculture, the large private herbarium of Dr. Otto Buchtien, formerly director of the Museo Nacional, La Paz, Bolivia, built up by him through many years of botanical exploration in South America and through exchanges with institutions in many parts of the world. The herbarium consists of approximately 45,000 specimens, and is notable for its large proportion of tropical American species, particularly of the floras of Bolivia, Chile, Argentina and Paraguay.

Yale University has acquired a collection of 566 mounted game heads and skulls with horns, and miscellaneous zoological specimens and implements used by native hunters. This is the gift of Mr. Thomas D. M. Cardeza, sportsman and naturalist of wide reputa-

tion, who has hunted big game animals in most parts of the world. For the time being the collection will be set up in the Osborn Zoological Laboratory. Eventually it will occupy a prominent place in the new Peabody Museum, which has not yet been erected. It contains 179 fully mounted heads of large game animals with the front parts of their bodies in many cases. These heads range in size from that of an African elephant measuring eight feet six inches betwen the tips of the ears, to the diminutive dik-dik antelope, which approximates the size of a cat and which is the small-Among the African est of the ruminants. fauna are species of antelopes, including gnus, hartebeests, bushbucks, waterbucks, reedbucks and gazelles. One of the most striking exhibits is that of a great hippopotamus, the open mouth of which measures twenty-three inches between the lips. There are also included several rhinoceroses, zebras, buffaloes and wart hogs.

THE Prudential Insurance Company has made an unconditional gift of the public health, medical and scientific sections of its library to the Surgeon General's Library of the United States of America at Washington, D. C. This collection of books, documents and data is estimated to represent about ninety per cent. of the entire public health material for the civilized world, representing between fifty and one hundred thousand volumes and publications. The books will be transferred gradually to Washington, for re-installation on the main floor of the Surgeon General's Library, where a large section is being cleared for the purpose, to be hereafter known as the statistical division. The library includes countless reprints, articles and clippings on medical and related subjects, brought together during the last thirty years by Dr. Frederick L. Hoffman, the Prudential statistician. The books are down to date, and, as far as practicable, the series of official reports is historically complete. The library is arranged on the subject-index plan, readily accessible, while all possible facilities will be extended by the Surgeon General's Library to students in search of information generally out of reach. It is hoped to complete the installation by the first of next year. The gift has been approved by the surgeon general of the army, Major General M. W. Ireland, and the secretary of war, John W. Weeks.

In line with the purpose of the Department of Commerce to make the textile section of the Bureau of Standards more available and of better service to the textile industry, a conference was called on May 20 of representatives of the various branches of the textile trade. The best means for bringing about the desired results and the formulation of a general plan for carrying on research work throughout the textile industry were discussed. Those present were much pleased with such a plan, and it was arranged that the various delegates should take up with their individual branches of the trade the question of the formation of committees, consisting of twelve to fifteen men each, for the purpose of working up the necessary plans and of holding meetings whenever desirable. A general meeting will be held in Washington in the autumn. This is the first opportunity of the kind given to the textile industry for carrying on collective research work.

Consolidation of the Bureau of Markets and Crop Estimates and Office of Farm Management and Farm Economics of the Department of Agriculture in order to bring the gathering of all data on the economics of production and marketing under one bureau, in accordance with recent legislative provision, will be completed by July 1. It is stated that the adjustment is being made in response to the demand from farmers for a closer correlation of economic data on production and marketing, to enable them to adjust production to meet changing marketing conditions in this country and abroad.

An expedition from the department of medical zoology of the School of Hygiene and Public Health of the Johns Hopkins University, will go to Porto Rico this summer to investigate hookworm disease. The expenses of this expedition will be paid by the International Health Board of the Rockefeller Foundation. The party will include Mr. D. L. Augustine, Mr. N. R. Stoll and Dr. W. W. Cort, from Johns Hopkins University, Dr. W. A. Riley, of the University of Minnesota, and Dr.

and Mrs. G. C. Payne, of the International Health Board. The expedition will be under the direction of Dr. W. W. Cort. The party will leave the United States early in June and will return about the first of October. headquarters in Porto Rico will be Utuado, where a small hospital has been furnished by the Porto Rican Department of Sanitation for laboratory and living quarters. The expedition will work in cooperation with Dr. R. B. Hill, director for Porto Rico of the International Health Board, and Dr. W. F. Lippitt, commissioner of health of Porto Rico. The work of the expedition will include a continuation of the researches on the life of hookworm eggs and larvæ in the soil which were begun in Trinidad during the summer of 1921. Field studies will also be made of the sources of human infestation under the conditions in Porto Rico.

UNIVERSITY AND EDUCATIONAL NOTES

By the will of Seymour Coman, of Chicago, the University of Chicago is made trustee of his residuary estate estimated to be approximately \$145,000, the net income from which is to be used for scientific research with special reference to preventive medicine and the cause, prevention and cure of diseases. This bequest is to be known as the Seymour Coman Research Fund. By the will of Alexander D. Thomson, of Duluth, Minn., the sum of \$50,000 is bequeathed to the university for use in the medical department, to be expended under the direction of Dr. Wilber E. Post, a graduate and trustee of the university, and Dr. Herman L. Kretschmer.

It is reported that Wake Forest College School of Medicine is entitled to receive the principal of a trust fund, amounting to \$1,375,000, which was created in 1892 by Jabez A. Bostwick, a director of the Standard Oil Company.

Dr. D. Wright Wilson, of the Johns Hopkins University, will succeed Dr. John Marshall in the chair of chemistry in the Medical School of the University of Pennsylvania.

G. F. REDDISH, Ph.D. (Yale '22) has been elected associate professor of bacteriology, and

Paul A. Warren, Ph.D (Michigan '22) has been elected professor of botany in the Medical College of Virginia.

Dr. Calvin P. Stone, of the University of Minnesota, has been appointed assistant professor of psychology at Stanford University.

W. I. EIKENBERRY has resigned as associate professor in the School of Education of the University of Kansas, to take the position of professor and head of the science department in the Pennsylvania Normal School at East Stroudsburg, Pa.

Dr. Colin G. Fink has been appointed lecturer in electrochemistry and will have charge of that division of the department of chemical engineering of Columbia University, beginning on July 1. He will continue his services as secretary of the American Electrochemical Society, office facilities having been arranged at Columbia for this.

Professor Mayer, who has recently held the chair of physiology in the Strasbourg Faculty of Medicine, has been appointed successor to the late François Franck at the Collège de France.

DISCUSSION AND CORRESPOND-ENCE

THE ORIGIN OF SPECIES

The recent address by Professor Bateson, at Toronto, has been variously interpreted. Among other things he is quoted as saying that "as to the origin of species we have no clear answer to give. Faith has given place to agnosticism . . . Although our faith in evolution remains unshaken, we have no acceptable account of the origin of species."

This statement must mean one of two things. It may be a large and generous gesture disclaiming for science any approach to omniscience, for the most that science can do is to record the "observed sequence of events." Or we may interpret it as a revelation of the speaker's ignorance of the researches of field investigators and of students of geographical distribution generally. It is evident that Bateson fails to distinguish between these and the taxonomists who, mostly in museums, have as he says "built up a vast edifice of knowledge