

baited traps and on radium hooks at considerable depths. Next to the actual collecting, photographing and painting of living and recently dead deep-sea fish, important work is being done in the laboratory in clearing and staining such rare forms as *Opisthoproctus*, *Lasiognathus* and *Derichthys*.

Success has been had in the use of ice for keeping abyssmal fish alive. It has proved much more effective than pressure. Dr. and Mrs. C. J. Fish spent a month at the station studying plankton and larval fish, and Professor E. Newton Harvey worked on the luminescence of living fish and shrimps for several

weeks. Among other visitors have been Dr. Henry Fairfield Osborn and Professor E. L. Mark.

Other phases of interest have been the tropic birds, fifty-five occupied nests being located on the island, and the young and old birds banded for reference next year. One effect of the absence of enemies on land birds is the reduced number of eggs deposited by catbirds, bluebirds, cardinals and English sparrows.

The scientific staff at present consists of William Beebe, John Tee-Van, G. Hollister and W. Merriam, besides R. Whitelaw, photographer, and Helen Tee-Van, L. Miller and E. Bostelmann, artists.

SCIENTIFIC NOTES AND NEWS

PROFESSOR HARVEY CUSHING, Moseley professor of surgery at Harvard University and surgeon-in-chief of the Peter Bent Brigham Hospital, and M. Cantacuzène, director of the Pasteur Institute of Bucharest, have been elected foreign members of the Paris Academy of Medicine.

THE Royal Medico-Psychological Association at its annual meeting on July 10 and 11 elected as honorary members Professor Ivan Pavlov, of Leningrad; Sir Charles Sherrington, of Oxford, and Professor Eugenio Tanzi, of Florence.

WE learn from *Nature* that Professor Pierre Termier, directeur des Services de la Carte Géologique de France, Paris, has been elected a foreign member of the Geological Society, London, in addition to the election of three Americans already recorded in SCIENCE. Foreign correspondents have been elected as follows: Professor Othenio Abel, of Vienna; Dr. Clarence N. Fenner, of Washington, D. C.; Professor Olaf Holtedahl, of Oslo, Norway; Dr. Rudolf Staub, of Berne, Switzerland; Dr. V. K. Ting, of Peking, China, and Professor Carl Wiman, of Upsala, Sweden.

THE honorary degree of doctor of agriculture was conferred upon Assistant Secretary R. W. Dunlap by Rhode Island State College during the commencement exercises. Mr. Dunlap delivered an address, his subject being "The United States Department of Agriculture and the Land-Grant Colleges."

THE doctorate of science has been conferred by Tufts College on Dr. William Rice, dean of the dental school.

THE following appointments recently made by the Secretary of State for the British Colonies in the Colonial Agricultural Services are reported in *Nature*: Mr. W. H. Edwards, lecturer in entomology and zoology at the College of Agriculture and acting botanist

and mycologist, Mauritius, to be entomologist, Jamaica; Mr. S. M. Gilbert, superintendent of agriculture, Nigeria, to be assistant director of agriculture, Trinidad; Mr. A. Pitcairn, district agricultural officer, Tanganyika, to be assistant director of agriculture, Cypress; Mr. J. R. Mackie, superintendent of agriculture, Nigeria, to be deputy assistant director of agriculture, Nigeria; Dr. R. H. Le Pelley, to be assistant entomologist, Kenya; Lieutenant J. Eaden, to be assistant manager, Experimental Fruit Farm, Sierra Leone; Mr. H. E. Green, to be inspector of plants and produce, Agricultural Department, Gold Coast, and Mr. E. Lawrence, to be district agricultural officer, Nyasaland.

THE *Journal* of the Washington Academy of Sciences announces the following appointments in the U. S. Geological Survey: Roland W. Brown, paleobotanist to succeed F. H. Knowlton, deceased. Armand J. Eardley, David A. Andrews, William G. Pierce, Alonzo W. Quinn, Thomas A. Hendricks, Harold E. Thomas and Frank S. Parker, junior geologists in the section of geology of fuels; Marland P. Billings, assistant geologist in the same section. Howard A. Powers, junior geologist in the section of volcanology. Eugene Callaghan and Ian Campbell, junior geologists in the section of metalliferous deposits, and Quentin D. Singewald, assistant geologist in the same section.

DR. S. L. MADORSKY, Du Pont fellow in the University of Chicago, has been appointed associate chemist at the fixed nitrogen research laboratory of the bureau of chemistry and soils of the U. S. Department of Agriculture.

LAWRENCE T. CLARK has been appointed head of the laboratories of Parke, Davis and Co., succeeding E. M. Houghton, who retired on May 1 after serving for thirty-four years. Walter E. King has been appointed assistant director of the laboratories and of

the biological farm of the company, with which he has been connected since 1905.

JOHN C. FISHER, a member of the staff of the U. S. Weather Bureau at Cornell University for the past ten years, has been appointed to succeed the late Morgan R. Sanford as director of the Syracuse Weather Bureau.

ERNEST CLARE BOWER, assistant professor of astronomy and mathematics at the Ohio Wesleyan University, has been appointed Martin Kellogg fellow in the Lick Observatory of the University of California with academic residence at the Berkeley astronomical department.

Nature reports that the joint committee of the Royal Society and the University of Sheffield has appointed Dr. W. H. George to the Sorby Research Fellowship, tenable at the University of Sheffield. Dr. George will continue his work, begun at the Davy-Faraday research laboratory of the Royal Institution, on x-rays and crystal structure.

DR. THOMAS W. TURNER, head of the department of biology of Hampton Institute, has been granted sabbatic leave for the year 1929-1930. He plans to spend the year in study and research in Europe, and will sail for France in September.

DR. WILLIAM H. MEYER, director of the department of roentgenology of the New York Postgraduate Medical School and Hospital, sailed recently for Europe. He will study European practice in the use of roentgenology as a diagnostic and therapeutic procedure.

W. M. SINGLETON, director of dairying in New Zealand, will make an extended trip through dairy sections in the United States and Canada.

DR. W. D. FUNKHOUSER, head of the department of zoology and dean of the graduate school at the University of Kentucky, is conducting archeological work in Logan County where he will excavate Indian mounds. Professor W. S. Webb, of the department of physics, will join him at the conclusion of the summer school.

CHARLES BROWN, director of the State Historical Museum of Wisconsin, is in North Dakota visiting points of historical and archeological interest. He will confer with North Dakota officials on plans for developing the historical museum of that state.

DR. LESLIE SPIER, director of the State Museum at the University of Washington and professor of anthropology, has left for Honolulu on a research tour to the Gilbert and Ellice Island groups in the Pacific. Dr. Spier, who plans to spend a year in research, will make an anthropological study of the

languages, customs, religion, household arts and social life of the aborigines of these islands. Little is known of the civilization and customs of the Gilbert and Ellice Islands, which are situated just north of the Fijis. Collections of oceanic life and material will be brought back to the university museum although Dr. Spier's leave of absence is to be spent primarily in the interests of the Bishop Museum in Honolulu.

DR. H. H. HOWARD, representative of the Rockefeller Foundation for the West Indies and Central America, has returned to New York after several months passed in Jamaica making research into the malarial condition in the islands. He has been in Trinidad, Grenada and Colombo to see what progress had been made in the campaign against malaria. A recent survey was started in Grenada and will continue for three or four months.

DONALD CARTER, assistant curator in the mammal division of the American Museum of Natural History, arrived in New York on August 7, after spending nine months in Abyssinia. It is reported that 300 specimens of mammals, 120 birds, a number of species of insects and some reptiles were collected. The most important part of the collection is eleven specimens of nyala (the antelope family) which was the primary purpose of his trip. The nyala is to be found only in the Aruci country in Abyssinia.

DR. STANHOPE BAYNE-JONES, professor of bacteriology in the University of Rochester School of Medicine, gave a public lecture at the University of Chicago on August 8 on "Motion Pictures in the Study of Microbiology."

DR. OSCAR RIDDLE, of the Carnegie Institution, Cold Spring Harbor, gave two lectures at the University of Minnesota on July 22 and 23 on "Control of Heredity through Control of Conditions" and "Some Interrelations of Reproduction, Sexuality and Internal Secretion."

A MEMORIAL tablet to commemorate the work of Victor von Lang, the physicist, was recently unveiled at the University of Vienna.

WE learn from *Nature* that on July 19 Sir Thomas Middleton unveiled at Dishley Grange, in Leicestershire, a memorial to Robert Bakewell (1725-95), the pioneer of stockbreeding. The movement to commemorate the great English farmer was started by Professor Scott Watson, of the University of Oxford, who had raised money in both Canada and America for the purpose. In his address Sir Thomas Middleton gave an account of the work of Bakewell and after unveiling the memorial placed a laurel wreath on his tombstone, which lies in the ruins of the old church.

It is reported in the foreign press that at the suggestion of Dr. R. J. Renison, rector of Christ Church, Vancouver, the Royal Empire Society is having a plaque made in England to be placed in Vancouver Cathedral to commemorate the work of Captain Cook in that part of the world. Records show that it was in 1778 Cook sailed up the west coast of North America. He struck the coast at Lat. $44^{\circ} 55' N.$ on March 7, and he "proceeded to make an almost continuous survey of the coast" up to and beyond Bering Straits as far as Lat. $70^{\circ} 41' N.$, where he was barred by the ice. He named the farthest visible point, Icy Cape; he also discovered and named Nootka Sound, Prince William's Sound, and Cape Prince of Wales; and he penetrated Cook's Inlet. His work is believed to have inspired that of Vancouver in 1792, when the latter circumnavigated the island that now bears his name. The memorial is to be unveiled in September during the visit of Sir John Sandeman Allen, Chairman of the Royal Empire Society.

A MEMORIAL tablet to Sir Humphry Davy, the eminent British chemist, was unveiled in the Pump Room of the Wirer Endowment, at Ischl, on July 22, in the presence of Dr. Streeruwitz, the Austrian chancellor, and a party of distinguished guests, including the secretary of the British Legation in Vienna. Sir Humphry Davy spent several weeks at the Austrian watering place in the twenties of the last century. The chancellor, in a short speech, dwelt on the gratitude the world owes to the inventor of the Davy safety lamp, by which the lives of innumerable miners of all nations have been saved.

THE civil list pensions granted this year in Great Britain, amounting in all to £1,200, include annual allowances of £75 to Mrs. Agnes Maude Carey, in recognition of the inventions of her husband, the late Mr. Robert Falkland Carey, in connection with the discharge of aeroplanes from ships; £50 to Mrs. Jane Jackson, in recognition of the conspicuous service rendered to botanical science by her husband, the late Dr. Benjamin Daydon Jackson; £75 to Mrs. Elizabeth Robinson Rennie, in recognition of the services rendered by her late husband, Dr. John Rennie, by the practical application of his scientific knowledge; £75 to Miss Elinor Wallich, in recognition of the eminent services to botanical and zoological science rendered by her grandfather, the late Dr. Nathaniel Wallich, and late father, Surgeon-Major George C. Wallich, respectively; £50 to Mrs. Agnes Mary Weiss, in recognition of the pioneer services rendered to the science of aviation by her husband, the late Mr. Joseph Vincent Weiss, and £50 to Mrs. Elizabeth Mottram Williams, in recognition

of the services of her husband, the late Dr. George Chisholm Waldemar Williams, F.R.C.S., in connection with the application of Röntgen rays to the treatment of disease.

APPLICATIONS for associate and assistant metallurgist must be on file with the Civil Service Commission at Washington, D. C., not later than August 28. The entrance salary is \$3,200 a year for the associate grade and \$2,600 a year for the assistant grade. Higher-salaried positions are filled through promotion.

IN further commemoration of the twenty-fifth anniversary of the inauguration of research activities by Carnegie Institution of Washington exercises will be held on deck of the ship *Carnegie* in San Francisco Harbor on August 26, 2:30 P. M. The following program will be given. Presiding: William B. Storey, member of the board of trustees, Carnegie Institution of Washington. Brief addresses by: Dr. Henry S. Pritchett, vice-president, board of trustees, Carnegie Institution of Washington, "The Institution's Program as Originating with Mr. Carnegie"; Dr. W. W. Campbell, president of the University of California, "The Contribution of Research"; Captain J. P. Ault, commander *Carnegie*, "On the Work of the *Carnegie*"; Dr. Walter S. Adams, director of the Mount Wilson Observatory of Carnegie Institution of Washington, "Program of the Institution in Physical Sciences with Special Reference to Astronomy," and Dr. John C. Merriam, president of the Carnegie Institution of Washington, "The Work of Pacific Coast Departments in Relation to the Larger Program of the Institution."

At the Mount Desert Island Biological Laboratory the following public lectures were given during the summer. Dr. Clarence Cook Little, Jackson Memorial Laboratory, "The Relation of Genetics to Cancer Research"; Dr. Warren H. Lewis, the Carnegie Institution, "The Development of the Human Body," with moving pictures; Dr. Roy W. Miner, American Museum of Natural History, "The Accident of Size"; Dr. Charles J. Fish, Buffalo Museum of Science, "Ocean Exploration," and Dr. William Morton Wheeler, Harvard University, "What is the Cohesive in Insect and Human Societies?"

THE Eugenics Research Association, Cold Spring Harbor, is offering a prize of \$3,500 for the best essay upon the causes of the decline in the birth rate during the last forty years with especial reference to Europeans and persons of European stock. The treatment should be historical, should include an analysis of studies already made upon the subject and should lay stress upon the phenomenon in peo-

ples of Nordic, or chiefly Nordic, origin in all parts of the world. Preference will be given to essays which are based upon objective studies rather than on expressions of opinion. Essays should be mailed to the Eugenics Research Association so as to reach Cold Spring Harbor, N. Y., not later than June 1, 1930. They may be written in the English, German or French languages.

ARTICLES of incorporation were filed on June 29, at San Francisco, for the merger of the League for the Conservation of Public Health, the Better Health Service and the Hospital Betterment Bureau into one organization to be known as the Better Health Foundation. Their object in merging is said to be to bring together the forces which represent important health activities in California in the medical, sociological, sanitary and physical sciences. Dr. Reginald K. Smith is president of the new foundation; Drs. Langley Porter, dean and professor of medicine, University of California Medical School, and James W. Ward are vice-presidents; Dr. Walter B. Coffey is chairman of the executive committee, and Dr. John Gallwey is treasurer. The offices are in the Medico-Dental Building on Post Street.

THE fourteenth annual meeting of the Optical Society of America will be held at Cornell University, Ithaca, N. Y., on October 24, 25 and 26. In addition to the usual program of papers contributed by members on their own initiative, the meeting will include the following special features: (1) A commemoration of the centenary of the death of Thomas Young (May 28, 1829), at which the following papers will be presented: "Thomas Young, the Man and the Physician," by Professor H. B. Williams, Columbia University; "Thomas Young and Physiological Optics," by Dr. Selig Hecht, Columbia University; "Thomas Young and the Wave Theory of Light," by Professor Henry Crew, Northwestern University; "Present Theories of Light" (evening lecture), by Dr. W. F. G. Swann, of the Bartol Research Foundation. (2) A symposium presenting a critical analysis of the observational data bearing on the theory of relativity. Papers critically analyzing observational data will be presented covering the three major predictions of the theory, namely, The Red Shift, The Perihelion Motion of Mercury and The Deflection of Light Passing the Sun. The complete program for this symposium is not yet ready for announcement. (3) Presentation of the Frederic Ives Medal for 1929 to Professor Edward L. Nichols, honorary member of the society and professor emeritus of physics at Cornell University, at a dinner to be given in his honor. Professor F. K. Richtmyer is chairman of the program committee and Professor H. E. Howe is chairman of the local committee. Correspondence should be addressed to Dr.

L. B. Tuckerman, secretary, The Optical Society of America, Bureau of Standards, Washington, D. C.

THE Stockholm correspondent of the London *Times* reports that two hundred and fifty delegates, representing thirty-three countries, arrived at that city on July 22 for the opening of the International Congress of the Experimental Forestry Union, which was held at the Royal Swedish Forestry Academy in Stockholm. This was the first meeting of the union since 1910, and the most important it has held so far. The Prime Minister, M. Arvid Lindman, was honorary president. Proposals were made for the strengthening of international cooperation in forestry. The president of the congress, Professor Henrik Hesselman, pointed out that the science of forestry was truly international, and served the whole of humanity. The congress should therefore agree on standardized measurements and terminology. M. Flury (Switzerland) proposed the organization of an international bibliography of forestry, and Señor Valasquez (Spain) proposed the establishment of a central bureau to assist international cooperation. M. Guinier (France) presented a plan for an international organization to deliver forest seeds of guaranteed quality and origin, in order to avoid the failures hitherto frequent owing to the use of inferior seeds.

EIGHTEEN states and the U. S. Department of Agriculture were represented at the seventeenth annual meeting of the American Association of Agricultural College Editors, held at the University of New Hampshire, from July 9 to 12. Several of the colleges sent two or three representatives each. The official *Record* reports that in the exhibits competition, which was a strong one, New Hampshire and Ohio tied for sweepstakes, the ribbon being finally awarded to New Hampshire, at the suggestion of the Ohio delegation, New Hampshire having won more first prizes than Ohio. Use of newspaper and magazine space and of radio broadcasting for educational purposes in the extension of agricultural and home economics information were prominent themes of discussion at the meeting. The college editor's relations with the county extension agent had been made the subject of a questionnaire study during the year by a committee appointed at the preceding association meeting, and a report prepared by W. H. Darrow, Texas extension editor, was presented by Glenn H. Rule, editor of the University of Maine. About forty per cent. of the county extension agents now furnish extension information to their local newspapers regularly, only a very few altogether neglecting to do so, but there is a distinct need for editorial training of agents, said the report. Among the means proposed for giving agents such training were journalism courses for prospective agents while in

college, state news-writing contests for county extension agents, news-writing training meetings held by the college editor for county agents, correspondence courses in news writing and bulletins on news writing. Detailed tabulation of replies to the questionnaire of the committee was mimeographed for use of members attending the Durham meeting.

THE American Medical Association has appointed a committee to look into the danger of poisoning from methyl chloride used in some makes of domestic refrigerators. The committee includes Dr. H. Gideon Wells, professor of pathology in the University of Chicago; Dr. R. L. Thompson, of the U. S. Public Health Service; Dr. Carey P. McCord, associate professor of preventive medicine in the University of Cincinnati College of Medicine; Yandell Henderson, Ph.D., professor of physiology in Yale University School of Medicine, and Paul N. Leech, Ph.D., director of the chemical laboratory, American Medical Association.

SECRETARY OF COMMERCE LAMONT has initiated a conference to be held in Washington in the near future of the U. S. Bureau of Mines, the Bureau of

Standards and the Public Health Service to consider safeguards against poisonous gases used in mechanical refrigerators. This conference probably will be followed by a general meeting to which representatives of the mechanical refrigerative industry will be invited. The Bureau of Mines has made a survey of the danger of certain refrigerator mediums which the Public Health Service made public, on July 18. The conclusion was reached in this way that methyl bromide and methyl chloride at least and possibly ethyl bromide and ethyl chloride do not possess sufficient warning properties to prevent serious accidents and that chemical warning agents should be added to these compounds.

WORK for protecting the animal world and vegetation peculiar to Denmark, or certain parts of Denmark, and of preserving places of natural beauty is being continued with much energy. Kattehaletmore, a characteristic boggy area of 50 acres in North Zealand, situated between two forests, has now been acquired for a botanical and zoological nature park and sanctuary. Extension of another large sanctuary has recently been made by the owner of the Strodan estate, also in North Zealand.

UNIVERSITY AND EDUCATIONAL NOTES

THE late Worcester Reed Warner, a mechanical engineer, member of the firm of Warner and Swasey, manufacturers of astronomical instruments, bequeathed \$100,000 to Western Reserve University and an additional \$100,000 to the Cleveland School of Arts, to which he had formerly contributed \$100,000; \$50,000 is left to the Syrian Protestant College, at Beirut, \$25,000 to Doshisha College, Kyoto, Japan, and \$25,000 is left to the American Society of Mechanical Engineers, "in perpetual trust to be invested and the income to be used to establish and provide an annual award of a gold medal to be bestowed on the author of the paper adjudged the worthiest to receive such recognition; said paper to deal with progressive ideas in mechanical engineering or efficiency in management, and the medal to be known as 'The Worcester Reed Warner Medal.'"

By the will of the Marquise Charlotte Elizabeth de Sera of Paris, who died on July 19, Columbia University will receive \$200,000 and the Fifth Avenue Hospital \$100,000.

WILLIAM RANDOLPH HEARST has given to Oglethorpe University 400 acres of woodland adjoining the present campus in the outskirts of Atlanta. The land originally laid out as a real estate development

will be reserved for expansion of the campus. This is Mr. Hearst's third gift to Oglethorpe.

DR. ERNST GELLHORN, of Halle, has accepted a call to the University of Oregon, as associate professor of physiology in the department of animal biology.

DR. C. R. ORTON, for the past five years in charge of research for the agricultural department of The Bayer Company, Inc., and since July, 1928, in charge of research for the Bayer-Semesan Company, Inc., at the Boyce Thompson Institute for Plant Research, has been appointed professor and head of the department of plant pathology in West Virginia University and plant pathologist for the West Virginia Agricultural Experiment Station.

DR. ALFRED H. POVAH, of Northwestern University, has been appointed assistant professor of botany in the University of Cincinnati.

DR. J. H. ORTON, for many years chief naturalist at Plymouth Marine Biological Laboratory, has been appointed Derby professor of zoology in the University of Liverpool.

DR. WALTHER GERLACH, professor of experimental physics at Tübingen, has been called to the University of Munich.