

Arthur Francis Buddington, associate professor of geology, Princeton University.

Ermine Cowles Case, professor of historical geology and paleontology, University of Michigan.

William Crocker, director of the Boyce Thompson Institute for Plant Research, formerly of the department of botany, University of Chicago.

Raymond Smith Dugan, professor of astronomy, Princeton University.

Alexander Forbes, associate professor of physiology, Harvard Medical School.

Simon Henry Gage, professor emeritus of applied histology and embryology, Cornell University.

Evarts B. Greene, professor of American history, Columbia University.

Alfred F. Hess, pediatrician, New York City.

Ernest A. Hooton, professor of physical anthropology, Harvard University.

Dugald Caleb Jackson, head of the department of electrical engineering, Massachusetts Institute of Technology.

Carl Otto Lampland, astronomer, Flagstaff Observatory, Arizona.

Waldo G. Leland, author and permanent secretary of the American Council of Learned Societies, Washington, D. C.

Wesley Clair Mitchell, professor of economics, Columbia University.

Alexander G. Ruthven, president of University of Michigan and director of the Zoological Museum.

Herman Augustus Spoehr, director for natural sciences, the Rockefeller Foundation.

Ernest Edward Tyzzer, professor of comparative pathology, Harvard University.

Willis R. Whitney, director of research laboratory,

General Electric Company, and vice-president in charge of research since 1928.

Leicester Bodine Holland, architect, chief of the Division of Fine Arts, Library of Congress, and professor at the University of Pennsylvania.

Howard McClenahan, physicist, secretary and director of the Franklin Institute.

J. Henry Scattergood, Assistant Commissioner for Indian Affairs.

Walter S. Gifford, president of the American Telephone and Telegraph Company.

John D. Rockefeller, Jr., New York City.

Adolph S. Ochs, publisher of *The New York Times*.

Frank B. Kellogg, of the World Court and formerly Secretary of State.

Dwight W. Morrow, United States Senator from New Jersey.

The foreign members elected were:

Arthur Stanley Eddington, professor of astronomy, University of Cambridge.

Sir Arthur Keith, conservator of the Museum and Hunterian professor, Royal College of Surgeons of England.

Dr. Henry Norris Russell was elected vice-president, and the following officers were re-elected: Dr. James H. Breasted and Dr. Elihu Thomson, vice-presidents; Dr. Arthur W. Goodspeed and Dr. John A. Miller, secretaries; Dr. Albert P. Brubaker, curator, and Eli Kirk Price, treasurer. Mr. James M. Beck, Dr. Francis G. Benedict, Dr. Edwin G. Conklin and Dr. Lafayette B. Mendel were chosen as councilors to serve three years.

SCIENTIFIC NOTES AND NEWS

DR. THOMAS HUNT MORGAN has been elected a corresponding member of the Paris Academy of Sciences in the section for anatomy and zoology.

THE honorary doctorate of philosophy of the University of Berlin was conferred on Dr. R. W. Wood, professor of experimental physics at the Johns Hopkins University, at the German Embassy in Washington on April 27.

THE University of Cambridge will confer the honorary doctorate of science on Professor J. S. Haldane, director of the Mining Research Laboratory at the University of Birmingham.

HONORARY degrees conferred by the University of Aberdeen on April 3 include the doctorate of laws on Sir Leonard Erskine Hill, lately professor of physiology at the London Hospital and member of the senate of the University of London; on Sir Frank Edward Smith, F.R.S., secretary of the Advisory Council of the Department of Scientific and

Industrial Research and secretary of the Royal Society, and on Sir J. Arthur Thomson, M.A., LL.D., emeritus professor of natural history in the University of Aberdeen.

DR. ERNST LINDELÖF, of Helsingfors, has been elected a corresponding member of the Prussian Academy of Sciences.

THE Founder's Medal of the Royal Geographical Society, London, has been awarded to Mr. Bertram S. Thomas, for his geographical work in Arabia and successful crossing of the Rub Al Khali; and the Patron's Medal to Rear Admiral Richard E. Byrd, U.S.N., for his expedition to the Antarctic and his flights over both North and South Poles.

At a recent general meeting of the Geological Society of Vienna honorary membership was conferred on Mrs. Ogilvie-Gordon, "in recognition of her distinguished work on fossil corals, and especially in

connection with the geological structure of the Dolomites of the Southern Tirol."

THE Petrie Medal for distinguished work in archeology has been awarded to Sir Arthur Evans.

DR. CHRISTIAN RICHARD THURNWALD, of the University of Vienna, has been appointed Bishop Museum visiting professor of anthropology at Yale University. Dr. Thurnwald goes to Yale to give instruction and direct research in the problems of the Pacific area under the terms of the agreement by which Yale and the Bishop Museum of Honolulu are affiliated.

DR. HERBERT M. EVANS, of the University of California, was elected president of the American Association of Anatomists at the annual meeting which opened in Chicago on April 18, and Dr. George W. Corner, of the University of Rochester, was elected secretary. The next annual session will be held at the College of Physicians and Surgeons, New York, from March 24 to 26, 1932.

THE following officers of the American Society of Biological Chemists were elected for the year 1931-1932 at the annual meeting in Montreal on April 9: *President*, H. C. Bradley; *Vice-president*, W. M. Clark; *Secretary*, H. B. Lewis; *Treasurer*, C. H. Fiske; *Councilor*, W. C. Rose. Officers of the American Society for Experimental Pathology were elected as follows: *President*, Samuel R. Haythorn; *Vice-president*, Peyton Rous; *Secretary-Treasurer*, C. Phillip Miller, Jr.; *Councilors*, Carl V. Weller and S. Burt Wolbach.

DR. LAFAYETTE B. MENDEL, professor of physiological chemistry at Yale University, and Dr. E. B. Hart, professor of agricultural chemistry at the University of Wisconsin, have accepted appointment as advisers to the protein and nutrition division of the Bureau of Chemistry and Soils of the Department of Agriculture.

DR. J. BARTELS, professor of meteorology at the Forstliche Hochschule, Eberswalde, Germany, known for his theoretical investigations of the earth's magnetism, has been appointed a research associate in the Department of Terrestrial Magnetism of the Carnegie Institution of Washington. He took up this work on April 1. Dr. Bartels is devoting his attention principally to the interpretative discussion of the large amount of observational material accumulated by the Department of Terrestrial Magnetism.

DR. DOUGLAS W. MACOMBER, Denver, has been appointed scientific editor of *Colorado Medicine*, succeeding Dr. John Rosslyn Earp, who resigned to become director of public health of New Mexico.

DEAN ALBERT R. MANN, of the New York State College of Agriculture at Cornell University, has

been elected chairman of the committee on rural and village housing, one of several groups comprising the White House Conference on Home Building and Home Ownership.

AMONG the members of the British Committee of Inquiry into Calendar Reform are the Astronomer Royal, Sir Frank Dyson; Professor Winifred Cullis, of the University of London; Sir Herbert Walker, Lord Riddell, Sir Basil Kemball-Cook, Sir Stanley Machin and Mr. A. G. Walkden, M.P.

FOR the purpose of geomorphologic field study Professor Frank J. Wright, head of the department of geology at Denison University, has obtained leave of absence for the remainder of the spring term and will accompany Professor Douglas Johnson, of Columbia University, on a trip to the Pacific Coast by way of the Gulf States. In his absence Professor Wright's work at Denison will be carried on by Professor Henry S. Sharp.

DR. JOSEPH S. CHAMBERLAIN, head of the department of chemistry at the Massachusetts Agricultural College, who has been spending a year's leave of absence at Oxford, England, and in traveling on the continent, will return to Amherst at the end of June.

THE *Journal* of the Washington Academy of Sciences reports that S. L. Seaton, former observer and radio operator on the *Carnegie*, expects to leave during the summer for the Huancayo Magnetic Observatory, Peru, to install equipment for an experimental radio station, for which an appropriation has now been made by the Carnegie Institution of Washington.

AFTER a two-year search for new varieties of soybeans in Japan, Korea and Manchuria, William J. Morse, of the Bureau of Plant Industry, has returned with a collection of about 4,000 lots of seed and more than 300 samples of products made from soybeans.

DR. WM. A. ARCHER, who resigned the position of assistant pathologist of the Plant Disease Survey, U. S. Department of Agriculture, in January, 1930, to become professor of botany and plant pathology in the Escuela de Agricultura at Medellin, Department of Antioquia, Colombia, started on April 4 on an expedition into the Intendencia of Chocó, Colombia, where he expects to spend two months collecting flowering plants, fungi and insects. His headquarters will be at Quibdo.

NINE members of the Syracuse Andean Expedition arrived in Brooklyn on April 28. The group, which was sent by Syracuse University to explore Venezuela for the Syracuse University Museum of Natural Science, left New York on December 31 last under

the leadership of Dr. Parke H. Struthers, professor of zoology at Syracuse University, and director of the Syracuse Museum. The party will bring back specimens of animal and plant life of the Andean region, as well as geographical and geological data about Venezuela. Three other members of the Syracuse University faculty returned with Dr. Struthers: Dr. Ernest Reed, professor of botany; Dr. Earl Apfel, professor of geology, and Major Sidman Poole, professor of geography.

DR. HARVEY CUSHING, Moseley professor of surgery, Harvard University Medical School, Boston, delivered the William Henry Welch Lecture at Mount Sinai Hospital, New York City, on April 30, on "The Posterior Pituitary Hormone and the Parasympathetic Nervous System." Dr. Cushing gave on April 8 the Donald C. Balfour Lecture at the University of Toronto.

DR. R. G. AITKEN, director of the Lick Observatory, gave a lecture on "Recent Progress in Astronomy" in the auditorium of the new Chemical Building of the Ohio State University, on April 22. The lecture was given under the auspices of the Perkins Observatory of Ohio Wesleyan University and the Graduate School of the Ohio State University.

PROFESSOR P. W. BRIDGMAN, of the Jefferson Physical Laboratory at Harvard University, gave the invitation address in connection with the annual initiation banquet of the Wisconsin Chapter of Sigma Xi on April 22. His subject was "Physical Effects of High Pressure." On the preceding afternoon he gave a general university lecture on "The Recent Change of Attitude toward the Law of Cause and Effect."

DR. KARL F. MEYER, professor of bacteriology and director of the Hooper Foundation for Medical Research in the University of California Medical School, San Francisco, delivered the Cutter Lectures on preventive medicine at the Harvard University Medical School on April 27 and 28. His subjects were "Botulism and Its Control"; "A Safe Milk," and "Undulant Fever in the West."

DR. GEORGE H. SHULL, professor of botany and genetics at Princeton University, recently delivered the three Luther Laffin Kellogg Lectures in biology at Rutgers University, his subject being "Evening Primroses and Evolution."

THE annual Sigma Xi lecture at the University of Oklahoma was given on April 13 by Professor C. E. Mendenhall, head of the Department of Physics of the University of Wisconsin, on "Waves and Particles." Professor Mendenhall also assisted in the ceremonies at which six members of the faculty were

initiated members and thirty-two graduate students were initiated associates of Sigma Xi. On Monday he addressed the Physics Colloquium and guests on the subject, "Some Recent Developments in Photoelectricity."

PROFESSOR ELLIOT SMITH, of University College, London, lectured on April 9 in Madrid on "Prehistoric Man and the Cultural Debt of the British Isles to Spain."

THE next International Congress of Applied Mathematics will be held at Cambridge, England, in the summer of 1934.

THE American Association of Pathologists and Bacteriologists plans to hold the annual session in 1932 in Philadelphia on March 24 and 25.

Industrial and Engineering Chemistry reports that the Ninth Colloid Chemistry Symposium will be held in the Chemistry Building of the Ohio State University on June 11, 12 and 13. The university extends to the members of the symposium and their families or guests the courtesies of its dormitories from Wednesday noon, June 10, to Saturday noon, June 12. The rate, including breakfast, is \$1.50 per person per day. Breakfast will be served in Pomerene Hall, a building within one to five minutes' walk of the dormitories. The reception rooms of the dormitories and the University Faculty Club will be at the disposal of the members and guests. The office of the Department of Chemistry will be the headquarters room. Those desiring to avail themselves of campus accommodations should communicate with Wallace R. Brode, Chemistry Building, The Ohio State University. All other communications relative to the symposium should be addressed to W. G. France, Local Chairman on Arrangements, Chemistry Building, The Ohio State University, Columbus, Ohio.

Nature reports that the 1932 meeting of the Iron and Steel Institute will be held in the United States of America, under the presidency of Colonel Sir Charles Wright, Bart. Arrangements, with reference to ocean and inland travel, are being made with the Institute of Metals, which is also holding a meeting in the United States in 1932. The inclusive dates for the meetings and excursions are from September 12 to September 29. Plans are under consideration for participation in some form by the Canadian Institute of Mining and Metallurgy, either at Toronto or Montreal, or both.

At a conference of individual members of the Australian delegation to the recent Imperial Economic Conference with some of the British and the Dominion authorities concerned, it was generally agreed that the proposed meeting of the Imperial

Agricultural Research Conference in 1932 could well be postponed. That has accordingly been done, and the time of the next conference and its place are at the present time in abeyance.

HARVARD UNIVERSITY has received a favorable decision under an adjudication in the estate of Stuart Wyeth, who died on December 30, 1929, which had been contested. The court awarded the residue of the estate, about \$5,528,000, to the president and fellows of Harvard University, as provided by the will, together with about \$300,000 in income.

THE will of Mr. James Arthur bequeathed to the Smithsonian Institution \$75,000 to establish a yearly lecture on the sun, the balance of the income to be devoted to researches relating to the sun. After compromising the interests of certain heirs, the proceeds of the bequest amount to somewhat in excess of \$50,000.

WE learn from the Johns Hopkins *Alumni Magazine* that the university has received gifts for the current expenses of the department of zoology; from Mr. W. P. Eno, for the fund for the "Atlas of the Fundus Oculi"; from Mr. S. Childs, for an addition to the endowment of the Institute of the History of Medicine; from Mrs. C. H. Stout, for the "following up of toxemic patients in obstetrics"; from the National Research Council, for the support of Dr. Whitehead's studies on insulating oils; from the American Child Health Association, for the support of the work of Dr. W. W. Cort in ascariasis; from the Rockefeller Foundation, for a fellowship held by Dr. E. L. Stebbins, of the School of Hygiene and Public Health.

Nature reports that the General Board of the University of Cambridge has made the following grants from the Worts Fund: £100 to the Zoological Station at Naples; £45 to Miss W. Lamb, of Newnham College, for the continuation of her excavations at Thermi; £45 to Dr. E. B. Worthington, of Gonville and Caius College, towards the expenses of the Cambridge Expedition to the East African Lakes; £45 to Dr. L. S. B. Leakey, of St. John's College, for

archeological, paleontological and geological investigations in East Africa; £45 to G. Bateson, of St. John's College, for anthropological work in New Guinea; £30 to R. T. Wade, of Clare College, towards his expenses in connection with visits to museums in Europe to study fossil fish; £20 to P. W. Richards, of Trinity College, towards the expenses of a botanical expedition to the Sierra Nevada; £15 to I. H. Cox, of Magdalen College, for geological exploration in Baffin Land.

THE American Geographical Society, Carnegie Institution of Washington, Norwegian Geophysical Institution, Woods Hole Oceanographic Institution and the Cleveland Museum of Natural History are co-operating in the preparations for scientific work to be undertaken by the Wilkins-Ellsworth Trans-Arctic Submarine Expedition.

INVESTIGATIONS of the diseases of wild life have been consolidated by the Bureau of Biological Survey under a recent authorization by the Secretary of Agriculture. Dr. J. E. Schillinger, senior veterinarian of the U. S. Biological Survey, will be in charge of the work. The object is to coordinate the study of wild-life diseases, chiefly those affecting mammals and birds, and to determine the causes of outbreaks and methods of control. Laboratories will be established in Washington, D. C., and in the field, for observation and investigation of disease-producing agents and of disease conditions among animals and birds, both in the wild and under controlled conditions, as on fur and game farms.

A FURTHER adjustment in the boundaries of the Bryce Canyon National Park, Utah, is contemplated in the passage of the recent act of the Congress approved February 17. This act authorizes the president of the United States, by proclamation, to add to the park approximately 6,360 acres of public lands containing outstanding natural features which are of greater value for scenic and scientific purposes than for economic development. The act also eliminates 1,280 acres from the national park and adds them to the adjoining Powell National Forest.

DISCUSSION

ERASMUS DARWIN AND THE BIOLOGIC CONTROL OF INSECTS

IT is commonly believed that the idea of controlling insect pests through utilization of their natural enemies is a wholly modern conception, originating in the United States. That this is not altogether true is pointed out by Wheeler, 1928, in the chapter on "Insect Parasitism" in "Foibles of Insects and Men." He says:

It is only within very recent times that what may be properly called an *economic* use has been suggested for certain parasitic and predatory insects, namely, that of controlling the insects injurious to our crops, forests, domestic animals, stored foods and fabrics. The notion of using predatory beetles in destroying garden pests seems first to have occurred to Boigiraud de Potiers in France in 1843 and in the following year to Antonio Villa, in Italy. The latter country also produced two