pose of Excluding New and Dangerous Pests." C. L. MARLATT, chief of the Bureau of Entomology, Washington, D. C.

FOURTH GENERAL SESSION

Friday, 2 P. M., August 17, 1928.

"Evolution of Cycles and the Origin of Heteroecy in Aphids." Professor A. K. MORDVILKO, Academy of Sciences, Leningrad, U. S. S. R.

"Das Mimicryproblem und Seine Schwesterproblems." Dr. FRANZ HEIKERTINGER, Wien, Oesterreich.

"Insect Control of Noxious Weeds." Dr. A. D. IMMS, Rothamsted Experimental Station, Harpenden, England.

"Biological Control of Noxious Weeds." Dr. R. I. FILLYARD, chief entomologist, Canberra, F. C. T., Australia.

Report of the executive committee.

Election of members for the permanent committee.

Selection of a place and date of meeting for the Fifth International Congress. Election of the president. Closing remarks by Dr. L. O. HOWARD.

The general morning sessions will be followed by the afternoon sessions, where upwards of one hundred papers will be read on the various phases of entomology, by leading authorities of foreign countries, Canada and the United States. The congress will spend Wednesday, August 13, at the State Experiment Station, Geneva, New York, where the program will be continued.

G. W. H.

SCIENTIFIC NOTES AND NEWS

DR. T. WAYLAND VAUGHAN, professor of oceanography in the University of California and director of the Scripps Institution of Oceanography, has been elected a foreign member of the Linnean Society of London. Other Americans holding this honor are Professor E. B. Wilson, of Columbia University; Professor G. H. Parker, of Harvard University; President H. F. Osborn, of the American Museum of Natural History, and Professor T. H. Morgan, of the California Institute of Technology.

DR. ISAIAH BOWMAN, director of the American Geographical Society of New York, was the recipient at Edinburgh on July 12 of the Livingstone gold medal of the Royal Scottish Geographical Society. This medal, which was instituted in 1901 by Mrs. Livingstone Bruce to commemorate her father, the great missionary-explorer, was awarded to Dr. Bowman "for his great services to geographical science."

THE council of the Royal Photographic Society has awarded the honorary fellowship of the society to E. J. Wall for outstanding achievements in photographic literature. The only other American honorary fellows are C. E. K. Mees, S. E. Sheppard and Alfred Stieglitz.

In recognition of his "great public service from the standpoint of human values," and particularly for his "conspicuous work in the Mississippi flood relief," Herbert Hoover has been awarded for 1927 the Major Surgeon Louis Livingston Seaman medal by the American Museum of Safety. This medal is "for the best record in the saving of life in the field of sanitation and accidents."

THE Hector medal and prize of the New Zealand Institute for 1928 has been awarded, according to *Nature*, to Professor D. M. Y. Sommerville, of Victoria University College, Wellington, for his general mathematical work and for his investigations in non-Euclidian geometry. The medal is given yearly for distinction in different branches of science in rotation, in memory of the late Sir James Hector.

At the summer graduation of the University of Aberdeen the honorary degree of LL.D. was conferred on Emeritus Professor J. D. MacWilliam, formerly Regius professor of physiology in the university.

ON the occasion of the celebration of the centenary of the faculty of medicine at the University of Sheffield, on July 11, the honorary degree of D.Sc. was conferred on Dr. Henry H. Dale, Professor A. J. Hall, Sir Frederick Gowland Hopkins and Sir Thomas Lewis.

At the graduation ceremonial of the University of Edinburgh on June 28, the honorary degree of doctor of laws was conferred among others on Sir John Rose Bradford, president of the Royal College of Physicians, London; Professor F. G. Donnan, professor of general chemistry in the University of London; Professor J. Cossar Ewart, professor emeritus of natural history in the University of Edinburgh; Dr. R. A. Fleming, president of the Royal College of Physicians, Edinburgh; Dr. G. L. Gulland, professor emeritus of medicine in the University of Edinburgh; Mr. J. A. Hood, founder of the James A. Hood chair of mining in the University of Edinburgh, and Professor Niels Bohr, professor of theoretical physics at the University of Copenhagen.

DR. PAUL WALDEN, professor of chemistry in the University of Rostock, has been elected a foreign member of the Royal Academy of Sciences at Stockholm.

DR. ALFRED PHILIPPSON, professor of geography at the University of Bonn, has been elected an honorary member of the Royal Italian Geographical Society and of the Vienna Geographical Society. DR. NICOLLE recently celebrated the twenty-fifth anniversary of his directorship of the Pasteur Institute of Tunis. On this occasion meetings were held in the municipal theater of Tunis.

DR. ANDREW COWPER LAWSON, professor of geology and at one time dean of the college of mining of the University of California, retired on July 25, after thirty-eight years of service on the faculty. He becomes emeritus professor of geology and mineralogy.

DR. DEXTER S. KIMBALL, dean of the college of engineering of Cornell University, has been elected president of the Society for the Promotion of Engineering Education.

AT the annual meeting of the American Society of Clinical Pathologists, held in Minneapolis, from June 8 to 11, Dr. Frank W. Hartman, Detroit, was elected president; Dr. James H. Black, Dallas, Texas, president-elect; Dr. Charles R. Drake, Minneapolis, vicepresident, and Dr. Harry J. Corper, Denver, secretary-treasurer.

IN addition to continuing his services as chief of the U. S. Bureau of Entomology, Dr. C. L. Marlatt has been designated chief of the plant quarantine and control administration, which was established on July 1. Mr. S. A. Rohwer has been designated assistant chief of this administration.

STEPHEN C. SIMMS, who has been a member of the scientific staff of the Field Museum of Natural History, Chicago, since it was founded in 1893, has been elected director of the museum, to take the place made vacant by the death of David C. Davies.

BLAKE R. VANLEER, assistant professor of mechanical engineering in the University of California, has been appointed assistant secretary of the American Engineering Council, succeeding A. C. Oliphant, who has resigned.

ACCORDING to the Journal of Terrestrial Magnetism Antoni B. Dobrowolski, formerly vice-director of the Meteorological Institute of Poland, and Stefan Hlasek, formerly director of the Meteorological and Magnetical Observatory at Pavlovsk and of the Geophysical Observatory at Tiflis, have been appointed director and vice-director, respectively, of the Meteorological Institute of Poland. Dr. Gorczynski has retired from the directorship.

H. L. MASON, who has been connected with the teaching staff at Northwestern University, has accepted a position with the Mayo Foundation, Rochester, Minn., where he will be associated with E. C. Kendall.

OLIVER C. RALSTON, assistant chief metallurgist of the U. S. Bureau of Mines and supervising engineer of the Berkeley, Calif., Mining Experiment Station, has resigned to become director of research for the United Verde Copper Company, Clarkdale, Ariz., where a new research laboratory has been opened.

DR. A. J. STAMM, colloid chemist on the staff of the U. S. Forest Products laboratory at the University of Wisconsin, has been granted a leave of absence to enable him to study under Professor Theodore Svedberg at Upsala, Sweden, as an International Education Board fellow.

THE Secretary of Agriculture, W. M. Jardine, left Washington on July 27 for a three weeks' inspection tour of southeastern Alaska. He will sail from Seattle on August 7.

COMMISSIONER O'MALLEY, of the U. S. Bureau of Fisheries, left Washington on June 15 for the Pacific coast, *en route* to Alaska, where he will devote attention particularly to measures in connection with the proper conservation of the fishery resources.

DR. AND MRS. HERBERT SPENCER DICKEY, who already have done much exploring in South America, sailed on August 1 for another expedition into the interior of South America, where they will study the nomadic Indian tribe known as the Piarroas. The party will be known as the Thea Heye-Dickey Expedition and will be under the auspices of the Museum of the American Indian, Heye Foundation.

AFTER two and a half years spent in China, Sumatra, Java and Ceylon, P. H. Dorsett, of the U. S. Department of Agriculture, and his son have returned with a large collection of seeds, plants, bulbs and cuttings which may be useful in American agriculture.

THE house at Poleymieux, near Lyons, France, in which Ampère spent his childhood and boyhood, has recently been acquired by the Société Française des Electriciens, which will maintain it as one of the historical buildings of France.

JAMES EDGAR DENTON, professor emeritus of mechanical engineering at the Stevens Institute of Technology at Hoboken, N. J., died on July 17, aged seventy-three years.

GEORGE M. BERINGER, a past president of the American Pharmaceutical Association, formerly editor of the American Journal of Pharmacy and chairman of the board of trustees of the Philadelphia College of Pharmacy, died on June 23, aged sixty-eight years.

PROFESSOR E. WIECHERT, director of the Geophysical Institute and professor at the University of Göttingen, recently died, aged sixty-seven years.

THE trustees of the Mount Desert Island Biological Laboratory have announced the following course of lectures to be given in the village church of Salisbury Cove at four o'clock: July 30, Dr. Warren K. Moorehead, of the Andover Museum. "Prehistoric Man in Maine"; August 9, Dr. George H. Parker, professor of zoology in Harvard University. "Color Changes in Animals"; August 15, Dr. S. A. Mitchell, director of the Leander McCormick Observatory, University of Virginia, "The Distances of the Stars"; August 20, Dr. E. G. Conklin. professor of zoology in Princeton University. "How can the Human Race be Improved ?"; August 27, Dr. Ulric Dahlgren, professor of biology in Princeton University, "Luminous Animals"; September 3, Dr. Frank E. Lutz. curator of insects in the American Museum of Natural History, "Learning about Insects."

THE Sigma Xi Club of the University of Florida presented the following program during the academic year of 1927-28: November 21, "Chlorophyll and Its Properties." from the viewpoint of the physicist. by Dr. J. R. Benton, the chemist, by Dr. R. C. Goodwin, the botanist, by Professor M. D. Cody, the geneticist, Dr. W. A. Carver, all from the University of Florida. December 8, "The Sidereal Heavens," by Dr. George H. Peters, U. S. Naval Observatory, Washington, D. C. January 18, "Soil Science from an International Viewpoint," by Dr. J. G. Lipman, director, New Jersey Experiment Station. March 6, "Biological Research in the Tropics," by Dr. Herbert Osborn, of Ohio State University, and "Some Interesting Plants in South Florida" by Dr. L. H. Pammel, of Ames, Iowa. May 16, "Recent Investigations in the Piezo-Electric Properties of Quartz Crystals." by Professor A. M. Skellett, of the University of Florida.

AT the recent quarterly meeting of the council of the Royal College of Surgeons of England, Sir Berkeley Moynihan was reelected president, and Messrs. W. Hey Groves and V. Warren Low were elected vicepresidents for the ensuing collegiate year. Messrs. F. J. Steward, L. P. Gamgee, R. G. Hogarth and R. E. Kelly, newly-elected members of council, were introduced and took their seats. Mr. D. K. Cassels, who has been assistant to the secretary since 1924, was appointed assistant secretary to the college. The following Hunterian professors were elected for the ensuing year: Sir Arthur Keith, Messrs. Arthur H. Evans, G. E. Gask, C. A. Pannett, R. J. M. Love, C. P. G. Wakeley and R. T. Payne. Mr. Henry Albert Harris was elected Arris and Gale lecturer; Messrs. Thomas W. P. Lawrence and Clement E. Shattock were elected Erasmus Wilson lecturers, and Sir Arthur Keith was elected Arnott demonstrator for the ensuing year.

According to the Electrical World a party consisting of twelve French engineers interested in the production and transmission of electricity will leave Paris on September 12 for the purpose of inspecting the outstanding electrical installations of the United States. The party, which will arrive on September 18, will comprise Messrs, Girousse and Groslier, of the Northern Central Station Company of Paris. Lucien Feraud, director of the Northeastern Central Station Company of Paris, Georges-Bernard Drevfus, managing director of the Eastern Distributing Company of Paris, Messrs, Lapevre and Bres, Messrs, Maurice and Francois Fougerolles. of Fougerolles Brothers. M. Duval, chief engineer of the General Contracting Company, and Lucien Bourrellis, manager of the Central Station of Normandie. It is expected that the tour will require more than a month.

THE Electrical World states that in view of the recent failures of some large dams with loss of life, the French government has sent invitations to the other governments of the world suggesting the desirability of the formation of an international commission of engineers to study the question of the safety and design of large dam structures. Spain, Roumania and Switzerland have already indorsed the suggestion and a committee has been appointed by the Union Internationale des Producteurs and Distributeurs d'Energie Electrique to make recommendations. It is expected that the American Society of Civil Engineers may act for the United States and that the entire question will act through the World Power Conference.

THE Pan-American Medical Association, with headquarters in New York and chapter organizations throughout the principal cities of Latin-America, will hold its annual congress in Havana from December 29 to January 3. The oration in surgery will be made by Dr. William Mayo, of Rochester, Minnesota, and the oration in medicine by Professor Lewellys Barker, of the Johns Hopkins University. Dr. Damaso de Rivas, professor of tropical medicine at the University of Pennsylvania, will speak upon some phase of tropical disease. The president of the association is Dr. Fred H. Albee, professor of orthopedic surgery at the New York Post-Graduate Medical School.

An expedition into the little-known wilds of Papua, in southeastern New Guinea, to search for birds of paradise and other rare species, will leave early in August under the auspices of the New York Zoological Society. Lee S. Crandall, curator of birds at the zoological park, will lead the expedition. He will leave on board the steamship *Ventura*, of the Matson Line, for Sydney, Australia, where he will be joined by J. E. Ward, an Australian naturalist. Together they will proceed northward 1,500 miles to Port Moresby, Papua, where the field expedition of carriers, interpreters and collectors will be organized.

FIFTEEN trained field workers from the department of geography at the University of Chicago, headed by Professor Robert S. Platt, left on July 26 for six weeks of field work in the heart of agricultural Mexico, to gather material for a book on "Occupancy Patterns of Population in Relation to the Natural Environment of the Valley of Mexico." The University of Chicago workers will analyze typical communities in the valley, particularly in the Teotihuecan district, and make a broad survey of the highland agricultural territory.

THE acceptance of a deed to 12.6 acres of land for addition to the Aztec Ruin National Monument, northwestern New Mexico, and the issuance of a proclamation by President Coolidge adding this land to the monument and changing its name to Aztec Ruins National Monument were announced July 21 by the Department of the Interior. This additional land was donated to the government by the American Museum of Natural History to supplement a previous gift of the 4.6 acres of land constituting the original Aztec Ruin National Monument, which was reserved by presidential proclamation in 1923. The monument as originally established contained a single ruin which, because of its size and remarkable state of preservation, was an outstanding feature of the area. It is, however, an integral part of the cluster of ruins adjoining it on the land recently deeded to the government.

UNIVERSITY AND EDUCATIONAL NOTES

DR. CHARLES L. BEACH, president of Connecticut Agricultural College since 1908, was named president emeritus at a meeting of the board of trustees on July 18. Dr. Charles B. Gentry, dean of the division of teacher training and head of the department of education, was named acting president.

DR. C. T. DOWELL, who for the past eleven years has been on the faculty of Oklahoma A. and M. College at Stillwater, has been appointed dean of the school of agriculture and director of the experiment station at the Louisiana State University.

DR. ARTHUR L. TATUM, associate professor of pharmacology at the University of Chicago, has been appointed professor of pharmacology at the University of Wisconsin.

Dr. J. P. GUILFORD, of the University of Kansas, has been appointed associate professor of psychology and director of the psychological laboratory of the University of Nebraska.

DR. CHARLES WEISS, assistant professor of bacteriology at the school of tropical medicine of Columbia University and the University of Porto Rico, has been appointed associate professor of experimental bacteriology in the department of ophthalmology at Washington University, St. Louis. In collaboration with Dr. Harvey J. Howard, professor of ophthalmology in the university, he will be engaged in investigations on infectious diseases of the eye.

HERBERT C. TIDWELL, of Mexia, Texas, has been appointed assistant professor of chemical engineering at the Carnegie Institute of Technology for the year 1928–29. He will succeed Walter H. Taylor, who has been at the institute while on a year's leave of absence from the University of Shanghai.

DR. C. H. RICHARDSON, entomologist in the U. S. Bureau of Entomology, has been appointed associate professor of entomology at Iowa State College and assistant chief of the entomology section of the Agricultural Experiment Station.

DR. CHARLES F. Roos has been appointed assistant professor of mathematics at Cornell University.

DR. BORIS BABKIN has resigned from the chair of physiology at Dalhousie University, Halifax.

DR. A. E. CAMERON, professor of zoology in the University of Saskatchewan, has been appointed to succeed Dr. D. S. Patton in the lectureship in medical entomology, University of Edinburgh, Scotland.

PROFESSOR JOHN McGIBBON, professor of obstetrics in the University of the Witwatersrand, Johannesburg, has been appointed professor of midwifery and gynecology at the University of St. Andrews, in succession to Professor Kynoch, who recently resigned the chair.

DR. EDWARD A. MILNE, Beyer professor of applied mathematics at the University of Manchester, England, has been elected the first Rouse Ball professor of mathematics at the University of Oxford.

DISCUSSION AND CORRESPONDENCE A PUZZLING BUTTERFLY MIGRATION

THE fall migration of the Monarch butterfly, in great clouds, down the length of the Mississippi valley to the gulf is a well-established phenomenon. Records are accumulating that show a definite fall migration of the long-beaked butterfly from the plains of Texas south or southeast towards the gulf. A spring migration of the Painted Lady butterfly from Mexico northward into California in immense swarms has been recorded several times and seems to be established as a regular movement. These migrations are all of the same general character as the fall and