

Naval Observatory, Washington, D. C., and to Paul Solenberger, Naval Observatory, Washington, D. C., "in consideration of their invention of a device combining a crystal controlled clock with a stroboscopic reading element and apparatus for emitting radio time signals, whereby the accuracy of these signals has been increased and the labor of preparing for their transmission reduced."

The Longstreth Medal jointly to Norman F. S. Russell, president, United States Pipe and Foundry Company, Burlington, N. J., and to Dr. Frederick C. Langenberg (deceased), "in consideration of the development of means for reducing the rate of cooling of iron pipe cast by the centrifugal process in externally cooled metal molds"; to Clarence W. Balke, director of research, Fansteel Metallurgical Corporation, Chicago, "in consideration of his scientific work in chemistry and metallurgy which resulted in the development of processes for the production and commercial utilization of Columbium and Tantalum."

As previously announced the Franklin Medals will be awarded to Dr. William Frederick Durand, professor emeritus of mechanical engineering at Stanford University, and to Dr. Charles A. Kraus, professor of chemistry and director of research in chemistry at Brown University.

The medals will be presented on Friday, May 20, in Franklin Hall, at the foot of the heroic white marble statue of Benjamin Franklin, sculptured by James Earle Fraser, which is to be unveiled on May 19. All recipients of medals will be guests of the Franklin Institute at the dedication banquet on Saturday, May 21, at 8:00 P.M., at the Bellevue-Stratford Hotel, when Mr. Hoover will make the address.

RECENT DEATHS

DR. MAURICE CROWTHER HALL, chief of the Zoological Division of the National Institute of Public Health,

U. S. Public Health Service, died on May 1 in his fifty-seventh year.

DR. WADE HAMPTON FROST, professor of epidemiology at the School of Hygiene and Public Health of the Johns Hopkins University, of which he was dean from 1931 to 1934, died on April 31 at the age of fifty-eight years.

DR. ROBERT TAIT MCKENZIE, J. William Wright research professor of physical education at the University of Pennsylvania, sculptor and physician, died on April 28 at the age of seventy years.

DR. ROSS V. PATTERSON, Sutherland M. Prevost professor of therapeutics and dean of the Jefferson Medical College, Philadelphia, died on May 2 at the age of sixty years.

DR. FRANCIS BAKER LANEY, since 1920 head of the department of geology at the University of Idaho, died on April 24 at the age of sixty-three years.

DR. JOHN M. BUCK, senior bacteriologist and assistant superintendent of the Federal Animal Disease Station at the Experiment Station at Bethesda, Md., died on May 2 at the age of fifty-nine years.

DR. LEWIS WEBB CRIGLER, surgeon director for ophthalmology of the Manhattan Eye, Ear and Throat Hospital, died suddenly on April 31. He was sixty-one years old.

Nature reports the death of Professor F. Mesnil, of the Pasteur Institute of Paris, member of the Section of Anatomy and Zoology of the Paris Academy of Sciences, aged seventy years, and of Professor Otto Naegeli, professor of internal medicine and director of the Medical Clinic in Zurich, known for his work on diseases of the blood, aged sixty-seven years.

SCIENTIFIC NOTES AND NEWS

DR. THOMAS PARRAN, surgeon-general of the U. S. Public Health Service, has been awarded the Mendel Medal of Villanova College, "in recognition of his scientific approach to the problems of public health."

THE George M. Kober Medal for distinguished service to medicine was presented on May 4, at the meeting of the Association of American Physicians held in Atlantic City, to Dr. Rufus Cole, member emeritus of the Rockefeller Institute for Medical Research, New York, formerly director of its hospital.

THE Howard Taylor Ricketts prize of the University of Chicago has been awarded to John Marshall Weir, Ph.D. (Chicago, '37), last year assistant professor of anatomy at the University of Mississippi, for his researches on long reactions on blood vessels. The

Ricketts prize was established in 1913 to honor Dr. Howard Taylor Ricketts, of the University of Chicago, who discovered the typhus germ and died a martyr to his discovery in Mexico.

THE annual dinner of the trustees of the American Museum of Natural History was given in honor of Dr. Frank M. Chapman, curator of the department of birds, who has completed a half century of service to the museum. An illuminated scroll was presented to him.

A SPECIAL feature of the thirteenth annual meeting of the Midwestern Psychological Association at the University of Wisconsin on April 22 and 23 was a golden anniversary dinner, at which Dr. Joseph Jastrow and Dr. Clark L. Hull were the guests of honor.

The dinner was given in celebration of the founding of the Psychological Laboratory at the university by Dr. Jastrow in 1888. Dr. Hull, now professor of psychology at Yale University, joined the university as assistant in 1914 and succeeded Dr. Jastrow as director of the laboratory. Professor V. A. C. Henmon, head of the department of education, was toastmaster. Dr. Jastrow spoke on "Stages in the Progress of Psychology," and Dr. Hull on "Adventures in Psychological Theorizing."

DR. ALEXANDER W. EVANS, Eaton professor of botany at Yale University, known for his work on the Hepaticae, will celebrate his seventieth anniversary on May 17. A dedicatory volume of *Annales Bryologici* is being prepared to mark the occasion. It will contain a biographical notice and portrait of Professor Evans together with about twenty-five contributions from leading American and European bryologists and hepaticologists.

SIR DAVID PRIN has been appointed president for life of the Imperial College of Tropical Agriculture. *Nature* writes: "Sir David, who celebrated his eightieth birthday on July 11 last, was director of the Royal Botanic Gardens, Kew, from 1905 until 1922. He was a member of the Tropical Agricultural College Committee appointed by Lord Milner in 1919 and had been vice-chairman of the Imperial College of Tropical Agriculture from its foundation in 1921 until last year, when he retired. His appointment as life-president of the college is a particularly fitting honor which, it will be the general wish of all scientific workers, he may enjoy for some years."

THE Linnean Gold Medal of the Linnean Society of London for 1938 has been awarded to Sir D'Arcy Thompson, professor of natural history in the University of St. Andrews.

THE Hofmann Medal of the German Chemical Society has been awarded to M. Pierre Jolibois, professor of chemistry at the University of Paris.

At the meeting of the American Eugenics Society, held in New York City on May 5, Dr. S. J. Holmes, of the University of California, was elected president of the society, and Mrs. Shepherd Krech, president of the Maternity Center Association, New York City, was elected vice-president. Frederick Osborn is treasurer of the society.

MEMBERS of the faculty of the University of Minnesota who will retire at the close of the academic year include Dr. Anthony Zeleny, professor of physics, and Dr. Albert E. Jenks, professor of anthropology.

DR. EUGENE PAUL WIGNER, who resigned a year ago from the faculty of Princeton University to become professor of theoretical physics at the University of

Wisconsin, has been recalled to Princeton as Thomas D. Jones professor of mathematical physics.

At New York University, Assistant Dean William R. Bryans has been named chairman of the new department of engineering mechanics which will consolidate fundamental technical courses; Professor Lewis Van Carpenter has been appointed director of the new Sanitary Engineering Laboratory dedicated last autumn, and Professor Carlos de Zafra has been appointed curator of the James Arthur Collection of Clocks and Watches, to succeed Dr. Daniel W. Hering, who died on March 24.

DR. J. N. GOODIER, research fellow in applied mechanics since 1931 at the Ontario Research Foundation, has been named acting professor of mechanics in the Sibley School of Mechanical Engineering at Cornell University.

DR. GARRETT BIRKHOFF, of Harvard University, has been promoted to an assistant professorship in mathematics; Dr. John W. Green, of the University of California, and Dr. Donald T. Perkins, of Yale University, have been appointed Benjamin Peirce instructors in mathematics.

DR. ADOLF MAHR, director of the National Museum of Ireland and keeper of Irish antiquities, has been appointed Robert Munro lecturer in anthropology and prehistoric archeology for 1938-39 at the University of Edinburgh. This lectureship was founded in memory of Dr. Robert Munro, the Scottish archeologist.

J. EDGAR CRACKSTON, lecturer in physics at the University College of South Wales and Monmouthshire, Cardiff, will exchange positions with Professor Gwilym E. Owen, of Antioch College, for the academic year 1938-1939.

POL E. DUWEZ, of Brussels, has been nominated as head of the recently created National Laboratory for the Study of Silicates at Mons, Belgium. This laboratory, which is the only one of its kind in Belgium, will be not only a research center, but will also establish official specifications for all the products derived from silicates.

At the annual meeting of the Board of Trustees of the American Museum of Natural History on May 2, Dean Sage, Jr., and Malcolm P. Aldrich were elected members of the board. Mr. Sage led the West China expedition in 1934-35, and made extensive collections of mammals and birds. Mr. Aldrich, a director of the Commonwealth Fund, has been interested in the Hall of North American Mammals. He has also aided expeditions to Northern Mexico, Alberta and British Columbia.

COMMANDER DONALD B. MACMILLAN and a party of ten students will leave Boothbay Harbor, Me., on June

25 on the auxiliary schooner *Bowdoin* for his seventeenth Arctic expedition. It is planned to take moving pictures and to study the habits of Arctic birds and to map unknown harbors, the geology of Labrador and the advance and retreat of glaciers.

DR. LAUGE KOCH, the Danish explorer, on April 30 left by seaplane from Copenhagen for the Spitzbergen group of Norwegian Arctic islands with the object of ascertaining whether land exists between Spitzbergen and North Greenland. The Danish government has placed the vessel *Gustav Holm* at his disposal. The vessel will serve as a base of operations while Dr. Koch flies from Spitzbergen to Peary Land and back. If no land is sighted from the air a complete photographic survey will be undertaken from Peary Land.

DR. HARRY GOLDBLATT, professor of experimental pathology at Western Reserve University, will deliver the eighth Harvey Society lecture of the current series at the New York Academy of Medicine on May 19. He will speak on "Experimental Hypertension Induced by Renal Ischemia."

DR. B. M. DUGGAR, of the University of Wisconsin, addressed the Plant Institute of the Ohio Agricultural Experiment Station on the evening of April 27 on "Photosynthesis and Radiation."

DR. WILLIAM CROCKER, director of the Boyce Thompson Institute for Plant Research at Yonkers, N. Y., lectured before the New York University chapter of Sigma Xi on May 6 on "The Effect of Anesthetics on Plants."

DR. OSCAR RIDDLE, of the Station for Experimental Evolution of the Carnegie Institution, gave an address on the evening of May 3 before the Lancaster, Pa., Branch of the American Association for the Advancement of Science on "What We Owe to Our Pituitary Glands."

DR. P. H. STEVENSON, associate professor of anatomy of the Peiping Union Medical College of Peiping, China, delivered in Stockholm the mid-year public lecture of the Geographical and Anthropological Society of Sweden on "The Paleogeographical Factors Involved in the Early Evolution of Man." The lecture was repeated by request in Copenhagen under the auspices of the Royal Geographical Society of Denmark.

DURING the summer session of 1938 at the University of Michigan, special emphasis will be given to the chemistry and metabolism of the proteins. During the first four weeks of the session, four guests will each present four lectures in their special fields of interest. The visiting lecturers will be Dr. R. Keith Cannan, professor of chemistry, New York University Medical College; Dr. Max Bergmann, member of the Rockefeller Institute for Medical Research; Dr. William C.

Rose, professor of biochemistry, University of Illinois; and Dr. Vincent du Vigneaud, professor of biochemistry, George Washington University Medical School. The lectures will be supplemented by lectures, discussions and laboratory work by the regular staff of the department of biological chemistry. Advanced courses will be open to graduate students and others. Information concerning this special program may be obtained from Dr. Howard B. Lewis, professor of biological chemistry, University of Michigan, Ann Arbor.

THE eighth Annual Research Conference of the Department of Chemistry of the Johns Hopkins University will be held from June 6 to June 17 at the Henlopen Hotel, Rehoboth Beach, Del. The first week will be on the subject of "Enzymes," with Dr. A. H. Corwin as chairman and will include lectures on their chemical nature and constitution, fermentation, catalysis and the mechanism of enzyme action, methods of assay of enzymes as well as some discussion of bacteriophage, insulin and filterable viruses. The second week will be on the "Mechanism of some Organic Reactions" with Dr. F. O. Rice as chairman. Certain general organic reactions, such as the Diels and Alder, Friedel and Craft, mercury and manganese salt catalysis, acid and base catalysis will be discussed especially in relation to polymerization. In addition one day will be devoted to the mechanism of heterogeneous catalysis. Further information may be obtained from F. O. Rice, department of chemistry, the Johns Hopkins University, Baltimore.

THE fifth annual convention of the Maryland Biology Teachers Association was held at the State Teachers College at Towson, Md., on April 23. The speakers included Dr. S. O. Mast, of the Johns Hopkins University; Dr. Margaret Reed Lewis, of the Carnegie Institution of Washington; Dr. Gairdner B. Moment, of Goucher College, and Dr. Paul S. Conger, custodian of diatoms, United States National Museum. The convention was well attended by both high school and college teachers and research workers. The annual research prize for the "greatest contribution to science on the part of a high school teacher of the state," was awarded to A. H. Bryant, instructor in Baltimore City College. Dr. Ernest N. Cory, professor of entomology in the University of Maryland, was elected president for the coming year, succeeding Dr. Mabel Lowell Bishop, of Hood College.

THE eighth annual field conference of Pennsylvania Geologists will be held in Maryland, West Virginia and Virginia on May 28, 29 and 30. The conference this year will be chiefly under the auspices of the Virginia Geological Survey. Dr. Arthur Bevan, state geologist, is local chairman. Field trips will embrace a study of the stratigraphy, structure, paleontology

and economic resources of Lower Paleozoic formations particularly in the Lower Devonian, Silurian, Ordovician, Lower Cambrian and Pre-Cambrian periods. A portion of the trip will be over the north half of the Skyline Drive. An optional trip to the Luray Caverns is included. The leaders will be Dr. Charles Butts, of the U. S. Geological Survey; Dr. Frank M. Swartz, of State College, Pennsylvania, and Dr. Arthur Bevan, state geologist of the Commonwealth of Virginia. The conference will assemble at the Algonquin Hotel, Cumberland, on Friday evening, May 27, for an evening conference and discussion. The second night will be spent in Winchester, Va., and the third in Luray, Va. Copies of the final notice and itinerary synopsis can be obtained by writing to Dr. Arthur B. Cleaves, *secretary*, Topographic and Geologic Survey, Harrisburg, Pa.

Nature writes that the Australian Government has decided not to proceed further at present with the proposal to invite the British Association to meet again in the Commonwealth. As it is desired, however, that leading men of science should from time to time be afforded opportunity to visit Australia, it has been decided to issue invitations to a party of six to attend the jubilee meeting of the Australian and New Zealand Association for the Advancement of Science at Can-

berra in January, 1939. It is hoped that the precedent so set will become regular practice at each succeeding biennial meeting of the association. A grant of £A1,500 towards the expenses of the guests in 1939 has been promised by the Government.

THE American Philosophical Society has been made the depository for a group of papers and memorabilia formerly belonging to the late Professor Elihu Thomson. In order to make the collection as complete as possible the society will be glad to receive additional contributions or information regarding such material. They should be sent to The American Philosophical Society, Philadelphia, Pa.

A CORRESPONDENT writes: "By the generous kindness of the widow and daughter of the late Sigmund Graenicher, a distinguished entomologist long resident in southern Florida, his collections of Diptera and Hymenoptera have been presented to the Museum of Comparative Zoology" at Harvard College.

THE John and Mary Markle Foundation of New York City has made a grant of \$10,000 for a three-year period to carry on research work on neurophysiology under the supervision of Dr. Ernst Gellhorn, professor of physiology in the College of Medicine of the University of Illinois.

DISCUSSION

ATTENDANCE AT SCIENTIFIC MEETINGS AND MEMBERSHIP POPULATION CENTER

ABOUT a year ago the center of membership population was determined for the American Association of Economic Entomologists and for the Entomological Society of America.¹ Continuing interest in the problem of selecting the best locations for meetings has led to a similar study with the membership of the American Association for the Advancement of Science. In this study the methods described in the article cited were used. The association membership by counties in continental United States was obtained from its summarized Proceedings as of late 1934. These were the latest figures readily available, but it is believed that changes in distribution since 1934 have not been great. These and other data used were supplied by the general offices of the association in Washington.

The membership distribution for the association was in general similar to that for the entomological societies, with heavy concentrations in the Middle Atlantic, lower New England, East North Central and

Pacific Coast States. A lower density was found westward and southward, especially in the sparsely populated Great Plains and Rockies. Membership of the association seemed to be more concentrated in large cities and educational centers than that of the entomological organizations, and was apparently less affected by horticultural development in the Gulf and Pacific States.

The "median," or place of crossing of the meridian and the parallel, dividing membership into halves, was located in the vicinity of Pittsburgh. The center of population, as determined by the gravity-center or first-moment method, was in eastern Madison County, Ind., about forty miles northeast of Indianapolis. These points are over 200 miles east and a little north of the same points for the combined entomological societies.

The winter meetings since the world war (1920-1936) of the American Association for the Advancement of Science were studied as to location and as to relation of registration to total membership. These factors are summarized below in comparison with those for the American Association of Economic Entomologists.

¹ F. M. Wadley, *Jour. Econ. Ent.*, 30 (4): 596-597, 1937.