ARTHUR MACDONALD, at one time specialist in the U. S. Bureau of Education, the author of many publications on anthropology and criminology, died on January 17 at the age of seventy-nine years.

FOSTER HENDRICKSON BENJAMIN, associate entomologist in the Bureau of Entomology and Plant Quarantine of the U. S. Department of Agriculture, died on January 21. He was forty years old.

The Albany Medical College and Hospital announces that it has named the new laboratory building "The Theobald Smith Memorial Laboratory" in recognition of his outstanding scientific achievements. Dr. Smith was a native of Albany, where he was born on July 31, 1859. He attended the city schools and was graduated from the Albany High School from which he went to Cornell University. In 1883 he received the degree of doctor of medicine from the Albany Medical College.

The trustees of the American Museum of Natural History have adopted a resolution directing that a bust of the late Henry Fairfield Osborn, for twenty-five years president of the museum, be placed in the memorial hall of that institution in commemoration of

his work. The trustees also decided that Professor Osborn's rooms in the southeast tower, where he worked, should be set aside as a place for paleontological research.

THE Journal of the American Medical Association states that a room containing historical material has been set aside at the University of California Medical School in honor of the late Dr. Leroy Crummer, Los Angeles, who inaugurated systematic instruction in medical history in the school. The exhibit includes Dr. Crummer's library and donations by physicians. Dr. Crummer, who died in 1934, was clinical professor of medical history and bibliography at the medical school and professor of the history of medicine, University of Southern California School of Medicine.

Nature reports that a marble plaque has recently been affixed to the birthplace at Villeneuve-le-Guyard of Professor Chauveau, who was born there in 1827 and died in Paris in 1917. At the time of his death, he was a member of the Academy of Medicine, honorary professor of the Veterinary School at Lyons, professor at the Paris Museum and inspector of the French Veterinary Schools.

## SCIENTIFIC NOTES AND NEWS

THE F. Paul Anderson Gold Medal for distinguished scientific achievements in the field of heating, ventilating and air conditioning has been awarded to Dr. Arthur Cutts Willard, president of the University of Illinois, by the American Society of Heating and Ventilating Engineers. The presentation was made at the forty-second annual meeting of the society held in Chicago on January 29. The faculty and officers of administration of the University of Illinois will honor Dr. Willard at a function on the evening of February 3. The occasion is for the purpose of "expressing our appreciation of the action of the board of trustees in selecting as president a distinguished member of our group. We can also express to President Willard our admiration for his work as a member of the faculty and for his leadership since he became president in July, 1934."

Frank W. Caldwell, engineering manager of the Hamilton Standard propeller division of the United Aircraft Manufacturing Corporation of East Hartford, Conn., has received the Sylvanus Albert Reed Award of the Institute of the Aeronautical Sciences. This award, consisting of a certificate and \$250, was endowed with a bequest of \$10,000 by the late Dr. S. A. Reed and is presented annually for "a notable contribution to the aeronautical sciences resulting from experimental or theoretical investigations, the beneficial influence of which on the development of prac-

tical aeronautics is apparent." Mr. Caldwell received the presentation at the annual dinner of the institute, held at Columbia University on January 30, for "increasing the effectiveness of aircraft through development and improvement of controllable and constant-speed propellers."

Dr. E. V. McCollum, professor of biochemistry at the Johns Hopkins University School of Hygiene and Public Health, has been presented with the Callahan Memorial Award by the Ohio State Dental Society. This award is a gold medal given each year to a person "who has made a contribution to dental science which is of very exceptional value."

Officers of the American Physical Society were elected at the St. Louis meeting as follows: President, Dr. F. K. Richtmyer, professor of physics and dean of the Graduate School of Cornell University; Vicepresident, Dr. H. M. Randall, professor of physics and director of the physical laboratory of the University of Michigan; Members of the Council, Dr. J. W. Beams, professor of physics at the University of Virginia, and E. C. Crittenden, physicist of the Bureau of Standards. Members of the board of editors of The Physical Review, Dr. H. A. Bethe, Dr. L. A. Du-Bridge, assistant professor of physics, Washington University (St. Louis) and Dr. M. A. Tuve, physicist at the Carnegie Institution of Washington.

Dr. Robert W. Hegner, professor of protozoology at the Johns Hopkins University, has been elected president of the American Society of Parasitologists.

At the first meeting of the newly organized Limnological Society, Professor Chancey Juday, of the University of Wisconsin, was elected president and Professor R. E. Coker, of the University of North Carolina, was elected vice-president.

Daniel W. Mead, from 1904 until his retirement as emeritus professor in 1932 professor of hydraulic and sanitary engineering at the University of Wisconsin, assumed office as president of the American Society of Civil Engineers at the eighty-third annual meeting, which was held in New York from January 15 to 18. He succeeded Arthur S. Tuttle, state engineer and acting state director for the Federal Public Works Administration of the state of New York.

AT the St. Louis meeting, the biological society of Beta Beta Beta elected the following officers: President, Professor C. E. McClung; Regional Vice-presidents, Dr. Wyman R. Green, Dr. W. K. Butts, Dr. C. L. Furrow, Dr. G. E. Potter and Dr. A. E. Noble. The secretary of the society is Dr. F. G. Brooks, of Oklahoma City University.

AT the thirty-eighth annual meeting of the Washington Academy of Sciences on January 16, the following officers were elected for 1936: President, O. E. Meinzer, Geological Survey; Corresponding Secretary, Nathan R. Smith, Bureau of Plant Industry; Recording Secretary, Charles Thom, Bureau of Plant Industry, and Treasurer, H. G. Avers, Department of Commerce. Vice-presidents representing the affiliated societies were also elected as follows: Philosophical, Francis B. Silsbee; Biological, Charles E. Chambliss; Chemical Society, James H. Hibben; Entomological, A. H. Clark; National Geographic, Frederick V. Coville; Geological, W. T. Schaller; Medical, H. C. Macatee; Columbia Historical Society, Allen C. Clark; Botanical, Charles Drechsler; Archeological, Aleš Hrdlička; American Foresters, S. B. Detwiler; Washington Society of Engineers, Paul C. Whitney; American Institute of Electrical Engineers, H. G. Dorsey; Mechanical Engineers, H. N. Eaton; Helminthological, Emmett W. Price; Bacteriologists, H. W. Schoening; Military Engineers, C. H. Birdseye; Radio Engineers, Louis Cohen.

THE title of emeritus has been conferred by the Ohio State University on Dr. Chas. B. Morrey, formerly professor of bacteriology at the university.

Dr. A. S. Wheeler, since 1900 a member of the department of chemistry at the University of North Carolina, is, on account of illness, on indefinite leave of absence. Until last autumn Dr. Wheeler filled the

post of acting head of the department of chemistry, being named to that position following the death of Dean James M. Bell. Dr. Edward Mack, Jr., of the Ohio State University, was appointed head of the department last fall and assumed his new work in September.

Dr. Milton J. Rosenau, who retired last February as professor of preventive medicine and hygiene in the Harvard Medical School and professor of epidemiology in the School of Public Health, has been appointed director of a new Division of Public Health, established as a part of the Medical School of the University of North Carolina. The purpose of organizing the department is to train students to be health officers. The department was founded by the university with the cooperation of the North Carolina State Board of Health.

Dr. John A. Wilson has been appointed acting director of the Oriental Institute of the University of Chicago, to succeed the late Professor James H. Breasted.

Dr. Norman L. Munn, assistant professor of psychology at the University of Pittsburgh, has accepted a professorship of psychology at the George Peabody College for Teachers, Nashville, Tenn. He succeeds Dr. Joseph Peterson, who died on September 20, 1935. Dr. Munn will assume his new duties early in February.

Louis Jordan, senior metallurgist, chief of the section of thermal metallurgy and assistant chief of the division of metallurgy of the National Bureau of Standards, has been appointed assistant secretary of the American Institute of Mining and Metallurgical Engineers. He will serve as secretary for the Iron and Steel and for the Institute of Metals divisions. He will take up his work at the headquarters in New York City beginning on February 1.

SHERMAN M. WOODWARD, head of the department of mechanics and hydraulics at the State University of Iowa, has resigned his professorship to accept a position as chief water control planning engineer with the Tennessee Valley Authority at Knoxville, Tenn.

George W. Trayer, senior engineer on the staff of the Forest Products Laboratory at Madison, Wis., has been appointed chief of the division of forest products in the U. S. Forest Service, Washington, D. C. This position, newly established, involves liaison activities designed to integrate wood utilization research with other federal forestry activities throughout the United States. Mr. Trayer's headquarters will be in Washington.

New appointments at the American Museum of Natural History include: Dr. Frederick H. Pough, assistant curator in the department of mineralogy; G. Miles Conrad, assistant curator in the department of comparative and human anatomy, and Charles E. Federer, Jr., staff assistant in astronomy and the Hayden planetarium. John Saunders has been promoted from staff assistant to assistant curator in the department of education and Dr. C. H. Curran, from assistant curator to associate curator in the department of entomology.

Dr. W. Carson Ryan, Jr., who has been on leave from his position as director of education of the U. S. Indian Service, engaged in a field study of mental hygiene and education for the Commonwealth Fund of New York, has definitely severed his connection with the Indian Service.

Professor A. O. Rhoad, of the Instituto de Pesquisas Agronomicas, Pernambuco, Brazil, who has leave of absence, has returned to the United States. He plans to spend several months at the Institute of Animal Nutrition at the Pennsylvania State College.

Dr. E. V. McCollum, professor of biochemistry at the Johns Hopkins School of Hygiene and Public Health, sailed on January 29 for Geneva. There he will attend as the representative of the United States the International Commission on Nutrition sponsored by the Health Section of the League of Nations. In November he attended a similar session held at the London School of Tropical Medicine. Delegates from the Scandinavian countries, England, France and Russia attended this session. The Commission on Nutrition is a permanent organization recently set up by the League of Nations. Its members include economists and statesmen as well as those skilled in the science of nutrition.

Dr. W. C. George, of the School of Medicine of the University of North Carolina, is spending a few months at the Bass Biological Laboratory continuing his work on the comparative study of Ascidian blood.

Dr. ALEXIS CARREL, member of the Rockefeller Institute for Medical Research, has been appointed Hitchcock professor to lecture during the spring semester at the University of California.

THE fifth lecture of the Harvey Society will be given at the New York Academy of Medicine on February 20 by Dr. John F. Fulton, Sterling professor of physiology, Yale University School of Medicine, on "The Interrelation of Cerebrum and Cerebellum in the Regulation of Somatic and Automatic Functions."

DR. George W. McCov, of the National Institute of Health, gave on January 16 the address of the retiring president before the Washington Academy of Sciences. He spoke on "Comings and Goings of Epidemics."

DURING January, Professor Bailey Willis, of Stan-

ford University, delivered a series of six lectures on "The Crust of the Earth" at Columbia University.

PROFESSOR ARTHUR H. COMPTON delivered a series of lectures at Ohio University on January 7, 8 and 9. The titles of the lectures were: "Determination of Atomic Constants," "Freedom and Causality in Modern Physics," "X-rays and Atomic Structure," "The Quest of the Cosmic Ray," "Science and Modern Civilization."

Nature states that at the invitation of the Royal Society, the North East Coast Institution of Engineers and Shipbuilders will arrange the first of the annual lectures to be held in connection with the memorial to the late Sir Charles Parsons. The institution has nominated Sir Frank Smith, secretary of the Department of Scientific and Industrial Research and since 1929 secretary of the Royal Society, to deliver the lecture and the council of the Royal Society has approved the nomination. The lecture will be held at Newcastle-upon-Tyne, probably in the latter part of 1936.

THE annual meeting of the British Royal Microscopical Society was held in London on January 15, when Professor W. A. F. Balfour-Browne will deliver his presidential address on "The Evolution of Social Life among the Insects."

THE celebration of the one hundred and twelfth anniversary of the foundation of Birkbeck College (University of London) was held in the College Theater on Wednesday, January 22. The foundation oration was delivered by Sir Frederick Gowland Hopkins, past president of the Royal Society.

The two hundred and fourth regular meeting of the American Physical Society will be held in New York on Friday and Saturday, February 21 and 22, as a joint meeting with the Optical Society of America. All sessions will be held at Columbia University in the Pupin Physics Laboratories, on 120th Street east of Broadway.

PLANS for the seventieth anniversary of the founding of engineering courses at Lafayette College are being made for the ceremonies to be held on March 20 at Easton. A general committee headed by Professor Moreland King, of the department of electrical engineering, has been making plans for exhibits, speakers and dinners. Dr. William S. Hall, professor emeritus of mathematics, from 1884 to 1915 instructor and professor of mining engineering, will deliver the historical address entitled "Seventy Years of Engineering at Lafayette." Besides Professor Hall's address, there will be a convocation speaker for the morning session to be held in the Colton Memorial Chapel. The

services will be preceded by an academic procession of trustees, guests and faculty. At the afternoon session, following a luncheon given to the visiting engineers, a conference on engineering problems will be held. The ceremonies will close with a dinner and evening session.

Grants recently made by the Rockefeller Foundation include a grant of not more than £1,200 a year for five years from January 1 for research in cellular physiology at the Molteno Institute of Parasitology of the University of Cambridge, under the direction of Dr. David Keilin, Magdalene College, Quick professor of biology; \$2,000 to the Medical School of the University of Oregon, for research on the physiology of the brain by Dr. William F. Allen and Dr. Olof Larsell, professors of anatomy; \$1,000 to Union College to provide apparatus, animals and chemicals for the use of Dr. Samuel L. Leonard, assistant professor of biology, for his researches in endocrinology.

THE University of Hamburg is henceforth to be known as the Hansa University.

PROFESSOR HANS MEYER, the editor of Strahlentherapie, Park Allee 73, Bremen, on the occasion of the fortieth anniversary of the discovery of Roentgen rays, has issued an appeal to radiologists of all nations for portraits and short biographies of medical men, physicists, nurses and others who have lost their lives as the result of x-ray work.

THE trustees of Lake Forest College will award a cash prize of \$15,000 for the best book or manuscript, heretofore unpublished, on the connection, relation and mutual bearing of the humanities, the social sciences, the physical sciences, the biological sciences, or any branch of knowledge, with and upon the Christian religion. The award will be made under the Bross Foundation, established in 1857, after decision by a committee of judges, on or after January 1, 1940.

THE Dutch Genetic Association has offered a prize of 250 gulden for an essay on the inheritance of differences in resistance to disease in men and animals. The essay must contain a review of the literature, especially as regards diseases of the blood, with personal observations and conclusions. The essay should be sent to the secretary of the society, Dr. A. L. Hagedorn, Soesterberg, Holland, before a date to be announced later.

## **DISCUSSION**

## SOME ZOOGEOGRAPHICAL PROBLEMS OF THE NORTHERN PACIFIC

The northernmost parts of the Pacific Ocean have been little studied by marine zoologists, and many zoogeographic problems there have escaped the attention of scientists. This is not only due to a lack of work in the area, but also depends on the tendency among the older zoologists to describe most specimens from such "remote places" as "new species" after superficial examination. The literature is thus encumbered with a considerable number of Pacific species which are either so scantily described that they can not be reidentified, or can not be separated from Atlantic species by existing figures and descriptions.

Every zoogeographical study must be based on an exact and detailed knowledge of species and even of the smallest varieties, as in ecology, a useless study without such information. This also applies to causal zoogeography. In many cases small and insignificant characters such as those used in classification (taxonomy) by geneticists in their heredity studies should be used.<sup>1</sup>

The general zoogeographical studies of the Pacific coastal waters of North and Central America have, contrary to earlier expectations, revealed remarkable

<sup>1</sup> Comp. V. Brehm, "Ueber die tiergeographische Valenz der Speziesmerkmale," Zoogeographica, Bd. 1, Jena, 1932. differences there from the fauna of Eastern Asiatic waters. On the other hand, there is an obvious relationship between the Atlantic littoral fauna of Central America and the (much richer) one of the Indo-Malayan Archipelago. Sven Ekman has recently described in detail2 the recent evidence of these relationships. Ekman reviews the fate of the Thetys Ocean and the ecological factors determining the spread of littoral animals. The data suggest that the great abyss of the Pacific Ocean between the Paumotu Islands and the western coast of America was an effective barrier to the littoral fauna at the time of the Thetys Ocean and has remained so ever since, causing the gap in the tropical littoral fauna on the two sides of the Pacific. The comparative poverty on the American side of the Atlantic as compared with the Indo-Malayan region does not prove the Atlantic fauna to be younger. The relationship between the two faunas are features in common derived from the Thetys fauna, and the scarcity on the Atlantic side is due to a period of low temperature in Miocene and Pliocene times. The problems thus brought up by Ekman make it desirable to study the littoral fauna of the northern Pacific. While the Asiatic waters especially in the vicinity of Japan and from there to Bering Straits—an area

2''Indo-Westpazifik und Atlanto-Ostpazifik, eine tiergeographische Studie,'' Zoogeographica, Bd. 2, Jena, 1934.