

be offered; Professor P. S. Welch, of the University of Michigan, a pioneer and leader in limnological studies, will continue his work in that field; and Professor C. W. Creaser, of Wayne University, will again teach courses in the natural history of the non-avian vertebrates.

Ornithological studies, under the direction of Professor O. S. Pettingill, Jr., of Carleton College, have gained remarkable favor during the past seven years and are attracting a promising group of professional as well as many amateur ornithologists.

The station long has enjoyed an excellent record in teaching and research in animal parasitology under the leadership of Professors W. W. Cort, of the Johns Hopkins University, and L. J. Thomas, of the University of Illinois. Because of the absence of Professor Cort during the summers of 1943 and 1944 the course in helminthology was suspended and the emphasis on research in animal parasitology was reduced. With his expected return in 1945 it is planned to restore that course with its aim of training for research in parasitology, and to renew the emphasis of pre-war years on research in that field.

Teaching and research in general entomology under the direction of Professor H. B. Hungerford, of the University of Kansas, has been of high quality for many years. This work will be continued.

Soon after we were plunged into the war, it was recognized that the military position and post-war responsibilities of the United States in the Tropics and the Orient would require an expansion of the American training program in medical zoology. Accordingly, a course in medical entomology and human parasitology, taught jointly by Professors Hungerford and Thomas, was instituted in 1943. It is planned to continue this course as an important element in the training of entomologists and parasitologists, and par-

ticularly of prospective teachers and practitioners in sanitary science and medicine.

With a staff of four botanists—Professors C. D. La Rue and W. C. Steere, of the University of Michigan; F. C. Gates, of Kansas State College, and G. W. Prescott, of Albion College, all with extensive field experience in the tropics, it is planned to add a course in field methods with special attention to tropical conditions, a course which it is believed will be useful to all who expect to do any type of field work in the tropics.

A. H. STOCKARD,

Director

AWARD OF THE NOBEL PRIZES IN PHYSIOLOGY AND MEDICINE

AN Associated Press dispatch from Stockholm dated October 26 announces the award of the Nobel Prizes in physiology and medicine for 1943 and 1944. The recipients were chosen by the Caroline Medical Institute in Stockholm.

The 1943 award, made after a year's delay, is shared by Dr. Edward Adelbert Doisy, professor of biochemistry in the School of Medicine of St. Louis University, and Dr. Henrik Dam, of Copenhagen, now at Strong Memorial Hospital, Rochester, in recognition of their discovery of the chemical nature of the K vitamin.

The 1944 award has been conferred on Dr. Joseph Erlanger, professor of physiology at the School of Medicine of Washington University, St. Louis, and on Dr. Herbert Spencer Gasser, director of the Rockefeller Institute for Medical Research, New York, for their work on the functions of the individual nerve threads. The awards both for 1943 and 1944 will be divided between two recipients.

The 1943 award is worth 123,690 kroner, about \$29,500, and the award for 1944 is worth 12,841 kroner, about \$29,059.

SCIENTIFIC NOTES AND NEWS

THE John Scott Medal and Award of the Franklin Institute, which was conferred on Sir Alexander Fleming in recognition of his study of penicillin, was accepted on his behalf on October 23 by the Earl of Halifax, British Ambassador to the United States, at the William Penn tercentenary anniversary in Philadelphia.

THE Norman Medal of the American Society of Civil Engineers has been awarded to Dr. Ralph B. Peck, research assistant professor of soil mechanics at the University of Illinois, for his paper on "Earth Pressure Measurements in Open Cuts of the Chicago Subway." The Croes Medal, which since 1912 has been given for the paper "next in order of merit to

the paper to which the Norman Medal is awarded," will be given to Dr. Nathan M. Newmark, research professor in civil engineering, also of the University of Illinois, now on leave of absence for service with the army in the Pacific, for his paper entitled "Numerical Procedure for Computing Deflections, Moments and Buckling Loads."

THE Secretary of War has awarded the Emblem for Exceptional Civilian Service to Dr. Walter V. Bingham who, as chief psychologist and chairman of the Committee on Classification of Military Personnel Advisory to The Adjutant General, has been instrumental in bringing the science of psychology effectively to bear on the Army's problems of manpower utilization.

The emblem and citation were presented on October 25 by Major General James A. Ulio, The Adjutant General, at a brief ceremony in the Pentagon.

At a luncheon in Washington on October 19 in honor of Charles J. Brand, executive secretary and treasurer of the Chemical Fertilizer Association and chairman of the American Committee of the International Institute of Agriculture, Marcial Mora, Chilean Ambassador to the United States, presented him with the decoration of Commander of the Chilean Order of Al Merito. The decoration was conferred in recognition of his "services to world agriculture and to Chile, particularly in connection with the development of its nitrate resources for fertilizer."

THE annual Progress Medal of the Society of Motion Picture Engineers was presented on October 17 at the fifty-sixth semi-annual technical conference at the Hotel Pennsylvania, New York City, to George Capstaff, of the research laboratories of the Eastman Kodak Company, for his pioneer work in amateur, professional and color cinematography. At this meeting Donald E. Hyndman, vice-president for engineering, was elected president of the society, succeeding Herbert Griffin.

THE council of the Royal Aeronautical Society, London, has awarded to Air Commodore Frank Whittle, a fellow of the society, its gold medal for inventing jet propulsion.

UNION COLLEGE conferred on October 22 the doctorate of laws on Dr. Charles E. Wilson, president of the General Electric Company and a former vice-chairman of the War Production Board. Dr. Wilson made the graduating address.

THE honorary degree of doctor of science was conferred on October 28 at the commencement exercises of the Stevens Institute of Technology on Dr. Robert F. Mehl, director of the Metals Research Laboratory, professor and head of the department of metallurgical engineering of the Carnegie Institute of Technology, Pittsburgh, in recognition of "his attainments in metallurgy and his contribution to education in Brazil and the furtherance of inter-American friendship." Dr. Mehl recently spent three months in Brazil where he lectured on metallurgy at universities and visited Brazilian metal industries.

THE seventy-fifth birthday of Vladimir Komarov, president of the Academy of Sciences of the USSR, and the fiftieth anniversary of his activities as a scientific worker were celebrated on October 15.

DR. L. EMMETT HOLT, JR., associate professor of pediatrics at the Johns Hopkins Medical School, has been appointed professor of pediatrics at the New York University College of Medicine and director of

the Pediatrics Service at Bellevue Hospital. He succeeds Dr. James L. Wilson, who has joined the medical faculty of the University of Michigan.

PROFESSOR ARTHUR F. JOHNSON, since June 1, 1941, marine consultant to government agencies concerned with shipping, has resumed his post as professor of mechanical engineering at the George Washington University after completing three years of special duty with the Maritime Commission and the War Shipping Administration. His services were loaned to the government by the university.

DR. ROBERT K. ENDERS, who has been on leave of absence from the department of zoology of Swarthmore College for the past year, returned to the college on November 1. He has been promoted from an associate professorship to a full professorship of zoology.

At the Woman's Medical College of Pennsylvania, Dr. Lloyd D. Seager has been appointed professor of pharmacology, and Dr. James O. Brown has been appointed associate professor of anatomy and acting head of the department.

At the School of Medicine of Western Reserve University, Dr. Harold F. Chase, of the College of Medicine of Wayne University, and Dr. Ernest Bueding, of the New York University School of Medicine, have been appointed to assistant professorships of pharmacology.

DR. ORLAN M. ARNOLD, assistant professor of chemistry at the Rensselaer Polytechnic Institute, has been appointed head of the Division of Physical Chemical Research at Detroit of the Chrysler Corporation.

LIEUTENANT JOHN B. LUCKE, USNR, head of the department of geology at the University of Connecticut, has leave of absence and has been assigned to duty as photographic interpreter abroad. He may be addressed at J.I.C.P.O.A. Navy 128, Fleet Post Office, San Francisco, Calif.

MAJOR ALLYN C. SWINNERTON, on leave from the department of geology of Antioch College, has recently been transferred from the Office of the Chief Signal Officer, Washington, D. C., where he has been stationed for over a year as officer in charge of the Quartz Crystal Section of the Engineering and Technical Service. He has been made director of the Long Branch Signal Laboratory of the Signal Corps Ground Signal Agency in the Fort Monmouth, N. J., area.

DR. HARVEY A. ZINSZER, professor of physics and astronomy at the Kansas State College at Fort Hays, has leave of absence to assist in the pre-radar course for army and navy officers at the Cruft Laboratory, Harvard University.

DR. EUGENE KISCH, associate in orthopedic surgery

at the Hospital for Joint Diseases at Far Rockaway, N. Y., left for Brazil in October. He has been invited by the Brazilian Society for Tuberculosis to give lectures on bone and joint tuberculosis and to attend conferences in Rio de Janeiro, São Paulo and Bella Horizonte.

BRIGADIER GENERAL J. R. REES, consultant psychiatrist to the British Army, will deliver the Salmon Lectures for 1944 at the New York Academy of Medicine at 8:30 P.M., on November 20, 21 and 22. The lectures are—November 20, "The Frontiers Extend," a review of the experiences of the war in so far as they open up new psychiatric responsibilities; November 21, "Opportunities Emerge," and November 22, "The Way Ahead." Following these lectures he will tour the country and plans to present condensations of the three Salmon Lectures at Los Angeles, Boston and Montreal.

DR. SELMAN A. WAKSMAN, microbiologist, of the New Jersey Agricultural Experiment Station, will give the second Harvey Society Lecture of the current series at the New York Academy of Medicine on November 16. He will speak on "The Production and Nature of Antibiotic Substances."

DR. HENRY B. WARD, professor of zoology emeritus of the University of Illinois, will deliver on November 13 the annual D. J. Davis Lecture at the College of Medicine of the university. The subject of his lecture will be "Medical Zoology in America's First Century."

PROFESSOR ALEXANDER SILVERMAN, of the University of Pittsburgh, will lecture on "Glass After the War" on November 6 before the St. Louis Section of the American Chemical Society; on November 8, before the Kansas City Section; on November 9, before the Wichita Section; and on November 11, before the section at Tulsa, Oklahoma.

DR. LEON J. COLE, professor of genetics at the University of Wisconsin, lectured on October 3 at Cornell University on "The Origin of Variability in Domestic Animals." The lecture was sponsored by the Schiff lecture foundation.

A MEETING of the National Academy of Sciences will be held on November 15 and 16 in the auditorium of the U. S. National Museum, Washington. The subject of the meeting will be "Science and War."

THE annual meetings of the American Society of Agronomy and of the Soil Science Society of America, planned from November 15 to 17 at Cincinnati, Ohio, have been cancelled.

MENTAL hygiene problems of peace, international amity, industry and reconversion, rehabilitation of

veterans, race relationships and the community generally will be considered at the thirty-fifth annual meeting of the National Committee for Mental Hygiene, which will be held on November 8 and 9 at the Hotel Pennsylvania, New York City. Morning and afternoon sessions will be held. There will be a luncheon meeting for the executives of the State Mental Hygiene Societies on Wednesday; the annual luncheon of the National Committee will be given on Thursday. At each session about half the time will be reserved for discussion from the floor.

THE Army Ordnance Award for "scientific and engineering achievement" was presented on October 19 to the American Society of Metals at the recent annual congress in session at Cleveland.

THE sum of \$25,000 for cancer research is bequeathed to Cornell University by the will of the late Henry R. Ickelheimer, a private banker, and \$42,500 is left to Mount Sinai Hospital, New York City.

AN endowment for a Helen Putnam Fellowship for Advanced Research by mature women scholars in the fields of genetics or mental health has been given to Radcliffe College. The stipend of the fellowship is \$1,750. It will be awarded each year for an eleven-month period to a resident fellow and will also provide a subsidy for the publication of manuscripts approved by the Radcliffe Committee on Publications. Appointments will be limited to candidates submitting a plan of research that is already under way. It is hoped that the first award will be made on December 1, but if a candidate is not chosen before that time, the fellowship will not be given until next year. Applications for the award should be addressed to the president of the college, Dr. W. K. Jordan.

INTENSIVE one-week courses on the medical, surgical and dental aspects of industrial hygiene have been arranged from October 30 to December 16 at the DeLamar Institute of Public Health of Columbia University, of which Dr. Harry S. Mustard is director. The curriculum is planned to aid in an expanding program for teaching, practice and research in various aspects of public health. Registration is limited to physicians, dentists, engineers, chemists and others professionally qualified. Studies in dermatoses, their diagnosis and control, began on October 30; general health in industry will begin on November 13; metals and their industrial uses and dangers on November 27; the administrative aspects of industrial hygiene on December 4; and dental problems and practices in the field of industrial hygiene on December 11.

THE Nuffield Foundation has allocated £10,000 for ten years to the University of London for the found-

ing of a chair of child health. A postgraduate institute of child health is to be established, associated with the British Postgraduate Medical School.

Nature states that on the recommendation of a special committee, the Council of the University of Leeds has adopted a plan for the establishment of an Ophthalmological Research Center. As soon as the necessary funds are available, the council will proceed to the appointment of research fellows to work on special problems concerned with the prevention and cure of blindness and other diseases of the eye. X-ray equipment, the recently installed electron microscope and other facilities will be made available for the work in the university. The maintenance and development of the center will be in the hands of an Ophthalmological Research Advisory Committee.

It is reported in *Industrial Standardization* that a new national standards association—the Asociación Chilena de Normas—has held a preliminary meeting and has appointed a provisional board of directors to serve until the final organization is completed. The meeting was sponsored by the Chilean Institute of Engineers and other important Chilean organizations. The provisional board of directors, in addition to its work of setting up the Asociación Chilena de Normas and opening the registration of members, is planning to organize technical committees for work on standards. Among the first subjects to be considered, it is expected; will be cartographic drawing, technical drawing, preferred numbers, tolerances, lumber and cement. The association is publishing a magazine on Chilean standards entitled *Normalizacion*.

DISCUSSION

DETERMINATIONS OF GEOGRAPHIC CO-ORDINATES IN GREENLAND

A PAPER recently published in *SCIENCE*, on evidences of differential shifts in position of crustal masses, is of particular interest to geologists.¹ During the past twenty years certain comparative data on determinations of longitude have been cited frequently in support of the concept that whole continents have "drifted" widely and perhaps are still in motion. Geologists realize, and Dr. Stetson reminds us, that verification of changing coordinates would not necessarily indicate movement of continental masses, since we have abundant evidence of translational displacement along thrust surfaces and strike-slip faults, some of which are still active. However, the observations to determine longitude at several points in Greenland have had especial interest, since stations have been occupied in both the eastern and western coastal areas, and the published results, if taken at their face value, seem to indicate progressive movement westward. Geologists in general are not competent to appraise these data critically. Therefore it is gratifying that an astronomer has examined the detailed publications from one of the earlier surveys, in an effort to determine the degree of reliability that can be accorded the results.

Dr. Stetson chose for careful study the data for latitude and longitude resulting from observations in 1870 by Børgen and Copeland at Sabine Island. An error in Stetson's identification of this island should be pointed out; he describes the location as "in the Melville Bay region, off the west coast of Greenland." No doubt this error results from a confusing duplication of names. Maps show southwest of

Melville Bay, near latitude 75°26'N, longitude 60°W, a group of islets labeled "Sabine Islands." Sabine Island, visited by the explorer Sabine in 1823, lies off the east coast of Greenland near latitude 74°36'N longitude 19° W. This correction is not an essential item in the discussion to follow, but it seems desirable in the interest of accuracy.

Sabine, using the inaccurate methods of his day and probably with inferior equipment, made the first recorded observations to determine geographic coordinates of the island, in 1823. Børgen and Copeland failed to identify Sabine's observation point when in 1870 they arrived on the island as members of the Germania Expedition. They made determinations of latitude and longitude on a point which they believed to be within 100 meters of Sabine's location, but the admitted uncertainty makes valueless for scientific use any comparison with Sabine's results. In 1907 J. P. Koch occupied a station at Danmarks-hafen, more than 200 miles farther north, and later ran a triangulation net to include the Sabine Island station of 1870. His values of longitude have been cited as evidence that Sabine Island moved westward 1,190 meters in the 37-year interval. Jelstrup, who in 1932 reoccupied the exact site used by Børgen and Copeland in 1870, was the first to employ modern radio time-signals on the island. He rejected all earlier results except those of 1870, and obtained a value for longitude which appears to indicate a westward shift amounting to 615 meters during the 62-year interval. If we should accept Koch's results as equally reliable—and some advocates of the continental-drift hypothesis do cite them as valid evidence—it would be necessary to conclude that the Sabine Island station moved westward 1,190 meters between 1870 and 1907, and retreated eastward 575 meters in the 25 years following 1907.

¹ Harlan T. Stetson, *SCIENCE*, 100: 87-93, 113-117, 1944.