Astronomy, Seth B. Nicholson, Mt. Wilson Observatory.
Geology and Geography, Howard A. Meyerhoff, Yale University.
Zoology, George T. Hargitt, Duke University.
Botany, R. E. Cleland, Indiana University.
Anthropology, J. Alden Mason, University of Pennsylvania.
Psychology, Edward C. Tolman, University of California.
Social and Economic Sciences, Stanley D. Dodge, University of Michigan.
History and Philological Sciences, E. B. Krumbhaar, University of Pennsylvania.
Engineering, I. Melville Stein, Leeds and Northrup, Philadelphia.
Medical Sciences, Oswald T. Avery, Rockefeller Institute for Medical Research, New York.
Agriculture, R. J. Garber, U. S. Regional Laboratory, State College, Pa.
Education, Harold F. Clark, Columbia University.
Permanent Secretary, F. R. Moulton.
General Secretary, Otis W. Caldwell.
Treasurer, W. E. Wrather.
Director of Publications, F. L. Campbell.
Assistant Secretary, Sam Woodley.
Executive Committee: Burton E. Livingston, the Johns Hopkins University, *Chairman;* Roger Adams, the University of Illinois; Joseph W. Barker, Columbia University; Otis W. Caldwell, Boyce Thompson Institute for Plant Research; Walter B. Cannon, Harvard Medical School; Anton B. Carlson and Arthur H. Compton, University of Chicago; Kirtley F. Mather, Harvard University; F. R. Moulton, Elvin C. Stakman, University of Minnesota, and W. E. Wrather, U. S. Geological Survey.

SCIENTIFIC NOTES AND NEWS

DR. GEORGE HOWARD PARKER, professor of zoology emeritus of Harvard University, in recognition of his work for the advancement of zoology, has been elected a foreign member of the Zoological Society of London.

THREE of the four Charles Mayer fellowships of the New York Academy of Medicine, each of the value of $2,000, for "the study of the relationship between precancerous lesions of the mouth, hepatic insufficiency and gastrointestinal disorders," have been awarded to Dr. Harry Goldblatt, professor of experimental pathology at the School of Medicine of Western Reserve University; to the Cancer Research Laboratory of the Mount Sinai Hospital, New York, and to Dr. John R. Murlin, professor of physiology at the University of Rochester. Further applications should be sent to Dr. Mahlon Ashford, secretary of the committee, 2 East 103rd Street, New York, not later than April 1.

THE Institute of the Aeronautical Sciences has, as already announced, elected Major R. H. Fleet, of San Diego, president. Vice-presidents elected are Wellwood E. Beall, vice-president of the Boeing Aircraft Company; William K. Ebel, vice-president of Glenn L. Martin Company; Elmer A. Sperry, Jr., vice-president of the Sperry Products, Inc.; and G. M. Williams, vice-president of the Curtiss-Wright Corporation. Bennett H. Horchler has been made executive vice-president; Charles H. Colvin, director of the Daniel Guggenheim School of Aeronautics of New York University, treasurer; Robert R. Dexter, secretary, and Lester D. Gardner, chairman of the council and president of the Aeronautical Archives.

DR. GERTRUDE RAND, of the Institute of Ophthalmology of the Presbyterian Hospital, New York City, was the guest of honor on February 7 at a tea meeting at the Hotel Ritz-Carlton, New York City, of the Residence Lighting Forum of the New York Section of the American Illuminating Engineering Society. Dr. Rand spoke on her work on artificial lighting and its relation to the practical study of lighting and vision. George Ainsworth, architect, designer and illuminating engineer, spoke on the practical application of these researches to the lighting of interiors.

THE following have been elected officers for 1944 of the Mineralogical Society of America: *President,* R. C. Emmons, University of Wisconsin; *Vice-president,* Harry Berman, Harvard University; *Editor,* Walter F. Hunt, University of Michigan; *Treasurer,* Earl Ingerson, Geophysical Laboratory, Washington, D. C.; *Secretary,* Paul F. Kerr, Columbia University, and *Councilor, 1944–47,* S. J. Shand, Columbia University.

JOHN H. MONTGOMERY, of Fritzsche Bros., Inc., was elected at the annual meeting on January 15 president of the Essential Oil Association of the United States of America.

R. W. MARSH, of the Long Ashton Research Station, has been elected president for 1944 of the British Mycological Society.

DR. G. WATTS CUNNINGHAM, Susan Linn Sage professor of philosophy at Cornell University, has been appointed dean of the Graduate School. He succeeds Professor G. H. Sabine, now vice-president of the university. Dr. Cunningham has been professor of philosophy at the university since 1927. Dr. Philip A. Munz, dean of the faculty of Pomona College, has been appointed, effective on July 1, professor of botany and horticulture in the Bailey Hortorium.

DR. JOHN G. KIDD has been appointed professor of pathology at the Cornell University Medical College and pathologist of the New York Hospital.

DR. JOSEPH E. MARKEE, professor of anatomy at Stanford University, has been made professor and head of the department of anatomy of the School of Medicine of Duke University.

DR. F. P. LUDUENA, of the medical faculty of the University of Rosario, Argentina, has become assistant professor in the department of pharmacology of the Medical School of Stanford University, San Francisco, and Dr. Robert H. Dreisbach has been appointed instructor.

T. THOMSON, lecturer in the School of Forestry of the University College of North Wales, Bangor, has been appointed the first incumbent of the newly established chair of forestry.

EUGENE PAUL POLUSHKIN has been appointed associate professor of metallurgy at the Stevens Institute of Technology, and Dr. Frances Hurd Clark has been named assistant professor of powder metallurgy.

FRANK M. STEAD, associate professor of sanitation at the School of Medicine at Galveston of the University of Texas, has resigned to take charge of studies on industrial hygiene for the California State Board of Health at Berkeley. He will be succeeded by Joe B. Winton, formerly associated with the Harris County Health Department. Dr. J. Allen Scott, senior statistician in the Division of Vital Statistics in the U. S. Bureau of the Census, formerly on the staff of the Rockefeller Foundation in Egypt, has been appointed associate professor of preventive medicine in the field of statistics and epidemiology.

DR. W. SHERWOOD LAWRENCE, instructor at the Medical School of Stanford University, San Francisco, has been appointed associate pharmacologist to the Food and Drug Administration, Washington.

DR. FRED W. OBERST, of the U. S. Public Health Service Hospital at Lexington, Ky., where he was engaged in biological research on narcotics, has been made head of the newly organized department of biochemistry of the Wm. S. Merrell Research Laboratories, Cincinnati, Ohio.

WILLIAM A. LEWIS, director of the school of electrical engineering of Cornell University, has become consulting electrical engineer to the Armour Research Foundation at the Illinois Institute of Technology and has been named research professor in the department of electrical engineering. Fred J. Vogel, who has been associated with the Westinghouse Electric and Manufacturing Company for the past twenty-four years and who has specialized in the development of power transformers, became professor of electrical engineering on December 1.

DR. HUGH R. STILES, of the department of research in biology of the Commercial Solvents Company, has been appointed head of the newly organized agricultural division, with headquarters at Terre Haute, Ind.

WILLIAM B. LODGE, recently associate director of the division of war research of the Airborne Instruments Laboratory of Columbia University, has been named acting director of the department of engineering of the Columbia Broadcasting System.

THE Council of the British Cotton Industry Research Association has announced that Dr. F. C. Toy has been appointed to succeed Sir Robert Pickard, who is relinquishing the post of director of research that he has filled for the last seventeen years. Dr. D. W. Hill succeeds Dr. Toy as deputy director, and Sir Robert Pickard will be consultant to the association.

DR. HENRY E. MELENEY, Hermann M. Biggs professor of preventive medicine, New York University College of Medicine, visited Puerto Rico during the week of January 9 as guest of the Puerto Rican Medical Association and the School of Tropical Medicine at San Juan. He addressed the medical association on "Recent Advances in the Treatment of Malaria," and the School of Tropical Medicine on "The Relationship of Clinical Amoebiasis to Various Strains and Growth Requirements of *Endamoeba histolytica*." On his return through Cuba he addressed a special meeting of the Cuban Branch of the American Public Health Association and the Cuban Society of Preventive Medicine on "Inter-American Cooperation in Medicine and Public Health."

PROFESSOR I. E. MELHUS and Professor George Goodman, of the department of botany of Iowa State College, have left on an expedition to southern Mexico and northern Guatemala to make a collection and study of varieties of corn. This research is supported by a gift of $75,000 from the Earl E. May Seed Company of Shenandoah, Iowa.

PROFESSOR P. J. W. DEBYE, professor of chemistry at Cornell University, has leave of absence from February 13 to March 20 to enable him to conduct a lecture tour for the Society of the Sigma Xi.

WORD has been received by Dr. T. H. Goodspeed, professor of botany and director of the botanical garden of the University of California at Berkeley, who visited South America last year, of a presidential decree authorizing acquisition of the site selected by him at the request of President Rios, and stating that it would be developed according to the specifications he made at that time. The garden will be close to the

city of Valparaiso and will contain five hundred acres of hilly terrain near the sea where there is still a considerable amount of native vegetation. Fifty acres will receive the more intensive development of the conventional botanical garden and will include examples of the most important plant families, particularly the species of those families native to Chile. There will also be an area for Chilean trees and shrubs, one for water plants, another for cacti and other desert plants. The remainder of the area will be a plant preserve where future generations will be able to see and study elements of the native vegetation of central Chile.

A PORTRAIT of Nicholas Copernicus, which was painted by Maxim Kopf early last year in connection with the four hundredth anniversary of his death, was formally presented on February 3 to Dr. Harlow Shapley for the Harvard College Observatory by Dr. Stephen P. Mizwa, executive director of the Kosciuszko Foundation. The painting, which measures 48 × 54 inches and is done in oils, was presented at a regular meeting at the observatory of the Bond Astronomical Club. In presenting the portrait Dr. Mizwa spoke on the "Quadricentennial Tribute to Copernicus" and after acceptance of the gift, Dr. Shapley gave an address on the "Revision of Globular Star Clusters."

THE sixth winter meeting of the Industrial Research Institute was held on January 28 and 29, at the Westchester Country Club, Rye, N. Y. A hundred research executives and a number of presidents and vice-presidents of member companies and their guests attended. Louis Ruthenberg, president of Servel, Inc., Evansville, Ind., was the principal speaker at an informal dinner on Friday evening. His subject was "Industrial Research under Free Enterprise."

THE Society of the Sigma Xi is encouraging member group activity in non-academic research institutions that qualify because of their participation in, and encouragement of, original research in science. The first group to qualify and to be granted affiliation with Sigma Xi is the Esso Research Club, of Elizabeth, N. J., whose membership is drawn from the chemists, physicists, engineers and other technical research and development personnel of the companies associated with Standard Oil Company of New Jersey. Arrangements are being made for the installation on April 26 of the Esso Research Club by the national officers of Sigma Xi.

THE sixth National Geographic Society-Smithsonian Institution Archeological Expedition to southern Mexico, led by Dr. Matthew W. Stirling, chief of the Bureau of American Ethnology, left Washington on January 28 to continue the study of pre-Columbian civilizations. The object of the expedition this year is an archeological survey of the headwater streams of the Tonalá River in the Tabasco, Veracruz, Chiapas and Oaxaca States. Last year a native told Dr. Stirling about a large ruin in the region. No explorer has ever visited the site. The expedition made an unsuccessful attempt to find the ruin, but, with data now in hand it is hoped to reach it for preliminary examination.

IT is planned in the near future to open a new College of Engineering at the University of California at Los Angeles. A curriculum in pre-engineering, open to freshmen and sophomores, has already been established. It is expected that curricula in various branches of engineering science will be introduced after the appointment of a dean for the college. First emphasis will be placed on practical aspects of aeronautical engineering.

A WINTHROP fellowship in pharmacology has been established at the Stanford University School of Medicine for use in training doctors of medicine in teaching or research in the field of pharmacology. The fellowship is to be financed by a grant of $1,500 from the Winthrop Chemical Company of New York City. An initial instalment of $375 has been received from Dr. J. P. Rice, director of medical research of the company.

The New York Times reports that preparations are underway to convert Winfield Hall, the Long Island Sound estate of the late Frank W. Woolworth, into a chemical and metallurgical institute where university and commercial scientists will assemble for research and conferences to exchange information. Provision will be made for them to live in the residence of the late owner for months at a time. No industrial activities will be conducted at the research center, but limited laboratory facilities will be available in one of the outbuildings for analytical and experimental work for the benefit of industrial chemistry and metallurgy. The legal occupant will be the Reynolds Research Institute, formed by the Reynolds Metals Company and associates. The head of the company, Richard S. Reynolds, Jr., is president of the institute. Application has been made to the Glen Cove Zoning Board for permission to install the institute on the property, which is now assessed at about $200,000.

IT is reported in *Nature* that a Soviet scientific commission is now in Novosibirsk organizing a Western Siberian branch of the Academy of Sciences of the U.S.S.R. The academy will establish four institutes in the city: for chemistry and metallurgy, mining and geology, medicine and biology, and transport and power.

MCGILL UNIVERSITY has established a department

of psychiatry and, in association with the Royal Victoria Hospital, Montreal, an institute for research and teaching. Through the generosity of Sir Montagu and Lady Allan, a building and an extensive site have been provided. Facilities for intensive treatment are being set up. The development of research and treatment will be major objectives, and with this in view large and well-equipped laboratories are to be provided. The project is being supported both by the Rockefeller Foundation and by the Government of the Province of Quebec. Dr. D. Ewen Cameron has been appointed to the chair of psychiatry and will also be the director of the institute.

ACCORDING to a cable to *The New York Times* under date of January 26, the Royal Observatory built at Greenwich in 1675 is probably going to be moved. Sir Harold Spencer Jones, Astronomer Royal, is reported to have said that the proposal of moving has been approved in principle by the Admiralty, but that nothing definite can be done until the King sanctions it. After that the British Treasury will have to be consulted. Sir Harold said in explanation: "We must face the fact that Greenwich is no longer suitable. We used to have a greater record of sunshine than Kew. Now the annual total sunshine at Greenwich is something like 200 hours less than Kew. When the sun gets low sunlight is so weakened by smoky atmosphere that it is impossible to get registrations on the sunshine recorder."

DISCUSSION

THE GENETIC SEX OF INTERSEXUAL GOATS AND A PROBABLE LINKAGE WITH THE GENE FOR HORNLESSNESS

IN the Beltsville herd of goats, according to Eaton and Simmons,[1] the Saanen breed produced 11.1 per cent. of intersexes and the Toggenburgs 6 per cent. Paget[2] has found 14.3 per cent. intersexes in the British Saanen breed, but his figure is probably high representing the incidence in herds where the condition has become a serious problem. At Beltsville, the sex ratio was for Saanens 49.3 per cent. males, 39.6 per cent. females and 11.0 per cent. intersexes; for Toggenburgs it was 46.4 per cent. male, 47.6 per cent. females and 6.0 per cent. intersexes. Paget found 193 males, 105 females and 52 intersexes, but his figure for intersexes includes only those kids which were visibly intersexual at birth. The sex ratio in both sets of data is much more normal if the intersexes are regarded as modified females. If this interpretation is correct it would appear that the gene for intersexuality acts only upon the female so that the percentage of intersexes should be doubled to produce the true number of double recessives. Eaton and Simmons furnished strong evidence that the condition is inherited as a simple recessive. If so, some homozygous recessive males should exist which in certain matings would produce 50 per cent. males, 25 per cent. females and 25 per cent. intersexes. Perhaps this may account for the high incidence in Paget's data, higher than that expected in a Hh × Hh mating, if all intersexes are genetic females.

The suggestion that the intersexes are modified females is in line with other evidence. In vertebrates modification of sex is almost always from female to male, extremely rarely from male to female. Evidently intersexuality is produced by the survival and development of the primary sex cords in the genetic female and not by the growth of secondary cords in the genetic male. The genetic male lacks the possibility of producing the necessary second ingrowth of sex cords.

Some years ago the writer observed that all the intersexual goats he had seen (about 200 now) were hornless. Hornlessness is inherited as a simple dominant. Since then much inquiry and observation have failed to unearth a single horned intersex. If they exist they must be very rare. This suggests that there is a close linkage between the two genes, an important point economically, since selection for hornlessness has been practised by pedigree goat breeders for some time. The goat breeders have evidently been increasing the gene frequency for intersex by selecting for hornlessness and are thus doing themselves harm.

S. A. ASDELL

CORNELL UNIVERSITY

[1] O. N. Eaton and V. L. Simmons, *Jour. Heredity*, 30: 261, 1939.

[2] R. F. Paget, *Monthly Jour. British Goat Society*, 36: 57, 1943.

FUNGUS INFECTION OF EGGS OF THE BLUE CRAB CALLINECTES SAPIDUS RATHBUN

IN 1941 Dr. Margaret Lochhead, working at this laboratory, observed a fungus-like organism on eggs of blue crabs taken directly from the water and from commercial catches. During the summers of 1942 and 1943 the writers began a program of study aimed to establish the identity of the infection, its effect on the hatching of the eggs, the percentage of crabs in the commercial catches that is infected and the distribution of the infection in Tidewater Virginia.