

Cuba and other countries for his collections, the palm collection constituting one of the best in the world.

As a result of his support of the Fairchild Tropical Garden, of which he has been a member since its inception, the directors of this organization now have chosen to honor him with a memorial that is expressive of his great interest in the palm tree. To quote Professor Bailey's own words:

The palms represent what is commonly considered to be the noblest family of plants; and yet they are to this day perhaps the least perfectly known, in general, of any of the great groups of vegetation. . . . The utility of palms is bound to take new directions and to increase, both as ornamental and interesting objects and as sources of important supplies.

THE MEMPHIS MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE 103rd meeting of the American Chemical Society will be held in Memphis from April 20 to 24 under the presidency of Dr. Harry N. Holmes, head of the department of chemistry at Oberlin College. It is expected that more than 3,000 chemists will be in attendance. Sessions will be held by seventeen of the eighteen divisions, embracing practically every field of chemical science. Many of the papers will deal with chemical developments in the South and in the Memphis area. Numerous special symposia, devoted to recent progress in medicinal chemistry, vitamins, nutrition, agriculture and other fields have been arranged. Experts from all parts of the country will participate.

Reports before the divisions will describe the latest researches in rubber, petroleum, plastics, sugar, agriculture and food, gas and fuel, cellulose, water, sewage, and sanitation, paint and varnish, biological chemistry, analytical and micro chemistry, industrial and engineering chemistry, colloid chemistry, organic

chemistry, physical and inorganic chemistry, chemical education and history of chemistry.

W. F. Bowld, general manager of the Buckeye Cotton Oil Company, Memphis, has been appointed general chairman of the convention committee. The honorary chairman is Dr. Victor A. Coulter, of the University of Mississippi. The following have been chosen vice-chairmen: L. N. Rogers, chemical director of the cellulose division, Buckeye Cotton Oil Company; E. R. Barrow, secretary-treasurer of Barrow-Agee Laboratories, Memphis; Paul D. Bowers, chief chemist of the Firestone Tire and Rubber Company of Tennessee; Thomas P. Nash, Jr., dean of the School of Biological Sciences at the University of Tennessee.

The Memphis Section of the society, of which Dr. Nash is chairman, will be host to the visiting chemists. Arrangements are being made at the headquarters of the society in Washington, D. C., under the direction of Dr. Charles L. Parsons, secretary and general manager of the society.

In addition to the professional sessions, meetings will be held by the Council and Board of Directors. Dr. Holmes will preside at the meetings of the council on Monday, April 20. Dr. Thomas Midgley, Jr., of Worthington, Ohio, vice-president of the Ethyl Gasoline Corporation, will preside on Sunday, April 19, at the meeting of the board, of which he is chairman.

Registration will begin on Sunday, April 19, at 2 P.M., in the Memphis Municipal Auditorium. The opening event of the convention will be a general meeting in the Auditorium on Monday, April 20, at 2 P.M.

A program of social and educational events has been arranged, including group luncheons and dinners. The dinner of the society will be given on Wednesday, April 22. Trips will be made to points of industrial and historical interest in the Memphis area.

SCIENTIFIC NOTES AND NEWS

THOMAS MIDGLEY, JR., vice-president of the Ethyl Gasoline Corporation and discoverer of tetra-ethyl lead, which has made possible great advance in automotive and aircraft engines, has been awarded the 1942 Willard Gibbs Medal of the Chicago Section of the American Chemical Society, in recognition of his "discoveries which are outstanding both from the standpoint of pioneering in new fields and from the standpoint of commercial importance." The presentation will be made at a meeting of the section on May 22.

THE 1941 Lawrence B. Sperry Award of \$250 of the Institute of the Aeronautical Sciences has been given to Ernest G. Stout, engineer for the Consolidated

Aircraft Corporation of San Diego, Calif., "for a notable contribution by a young man to the aeronautical sciences." The award was made in recognition of Mr. Stout's work in improving take-off and landing characteristics of flying boats and seaplanes. It was presented on January 27 at the honors-night dinner of the institute at the Hotel Waldorf-Astoria, New York City.

A COMMEMORATIVE volume prepared by a group of former graduates of the department of psychology of Stanford University was presented to Professor Lewis Madison Terman, since 1922 chairman of that department, at a dinner in honor of his birthday, given on January 15 by Judge and Mrs. William F. James.

The volume, "Studies in Personality, Contributed in honor of Lewis M. Terman," contains sixteen original research papers prepared by psychologists who in the past have worked under his direction. The papers range from studies of personality development and measurement to studies of psychical belief and abnormal phenomena. The volume includes an introduction by Professor Robert S. Woodworth, emeritus professor of psychology at Columbia University, and a bibliography of Professor Terman's writings. Editors of the volume were Dr. Maud Merrill James and Dr. Quinn McNemar, members of the faculty of psychology.

Nature reports that Professor Hermann Steudel, emeritus professor and director of the Institute of Chemical Physiology at Berlin, has been awarded the Goethe Medal for Art and Science on the occasion of his seventieth birthday.

At the forty-fourth annual meeting of the Washington Academy of Sciences, on January 15, Dr. Harvey L. Curtis, of the National Bureau of Standards, was elected *president*; Frederick D. Rossini, of the National Bureau of Standards, *secretary*, and Howard S. Rappleye, of the U. S. Coast and Geodetic Survey, *treasurer*. Other officers for 1942 are as follows: *Archivist*, Nathan R. Smith; *Editors of the Journal*, Raymond J. Seeger, G. Arthur Cooper and Jason R. Swallen; *Custodian and Subscription Manager of Publications*, William W. Diehl; *Committee on Membership*, Frank C. Kracek, *chairman*; *Committee on Meetings*, Clement L. Garner, *chairman*; *Committee on Monographs*, Henry B. Collins, Jr., *chairman*; *Members of the Board of Managers*, John E. Graf, Frank H. H. Roberts, Jr., Ferdinand G. Brickwedde, Henry B. Collins, Jr., William G. Brombacher, Ernest P. Walker, Herbert L. Haller, Austin H. Clark, Alexander Wetmore, John B. Reeside, Jr., Fred O. Coe, Allen C. Clark, James E. McMurtrey, Jr., Aleš Hrdlička, William A. Dayton, Paul C. Whitney, Francis B. Silsbee, Walter Ramberg, Emmett W. Price, Leland W. Parr, Clement L. Garner, Herbert Grove Dorsey and Herman Stabler. •

THE Association for Symbolic Logic announces the following elections: *Secretary-Treasurer*, for a term of three years, Dr. J. C. C. McKinsey, of New York University; as members of the *Executive Committee*, for a term of three years, Professor Paul Marhenke, of the University of California, and Professor Alfred Tarski; as member for a term of one year, Professor Arnold Dresden, of Swarthmore College. The council of the association has appointed Dr. J. C. C. McKinsey, of New York University, to be *Managing Editor* of the *Journal*, and has reappointed Professor Alonzo Church, of Princeton University, as *editor*, each for a term of three years.

At the Dallas meeting of the Union of American Biological Societies, Dr. Anton J. Carlson, Frank P. Hixon distinguished professor of physiology, emeritus, of the University of Chicago, was elected president.

OFFICERS of the Entomological Society of America have been elected as follows: *President*, Dr. C. P. Alexander, Massachusetts State College; *First Vice-president*, Professor Miriam A. Palmer, Colorado State College; *Second Vice-president*, William T. Davis, Staten Island, N. Y.; *Secretary-Treasurer*, Dr. Clarence E. Mickel, University of Minnesota.

BRONISLAW K. MALINOWSKI, of Yale University, who now holds the position of Bishop Museum visiting professor of anthropology, has been appointed professor of cultural anthropology at the university, effective on July 1.

DR. RUSSELL F. SULLIVAN, of Brookline, Mass., has been appointed professor of orthopedic surgery at Tufts College Medical School. Dr. Sullivan was a graduate of the college in 1918.

DR. FRED W. RANKIN, of Lexington, Ky., president-elect of the American Medical Association, has been appointed chief consulting surgeon of the Army and will assume the post on March 1 with the rank of colonel. He is a son-in-law of the late Dr. Charles Mayo.

THE *Journal* of the American Medical Association reports that Dr. Lewis R. Thompson, Washington, director of the National Institute of Health and assistant surgeon general in charge of scientific research, has been appointed chief inspecting officer of the U. S. Public Health Service, a new position established in the Office of the Surgeon General. As a result of the increased demands on the Public Health Service because of the expansion of programs of civilian and military defense, the field activities of the district offices of the Public Health Service and its liaison officers in the army corps areas have been consolidated under one head. Dr. Rolla E. Dyer, chief of the Division of Infectious Diseases and assistant director of the institute, has been named to succeed Dr. Thompson as assistant surgeon general in charge of the Division of Scientific Research and as director of the National Institute of Health, effective on February 1.

DR. J. PERCY MOORE, research fellow of the department of mollusks and chairman of the library committee of the Academy of Natural Sciences of Philadelphia, has been elected a member of the Board of Trustees.

DR. RAYMOND G. SPENCER, formerly associate professor of physics at Albion College, has been ap-

pointed chairman of metallurgical research of the Armour Research Foundation.

DR. ALEXANDER FORBES, professor of physiology at the Harvard Medical School, has become the first president of the George Junior Republic Association, Inc., formed by a merger of the association and the Boy Conservation Bureau.

ACCORDING to a United Press dispatch, Dr. Karl Otto Heinrich Lange, instructor at Blue Hill Meteorological Observatory, Harvard University, formerly research physicist for the German Government, has been in Federal custody as an enemy alien since December 8.

PRESIDENT ROOSEVELT has appointed Dr. George Baehr, chief medical officer of the Office of Civilian Defense, to be a member of the Health and Medical Committee of the Office of Defense Health and Welfare Services. Dr. Irvin Abell, Louisville, Ky., chairman of the Committee on Medical Preparedness of the American Medical Association, is chairman of the Health and Medical Committee and other members are the Surgeon General of the U. S. Army, Major General James C. Magee; the Surgeon General of the U. S. Navy, Rear Admiral Ross T. McIntire; the Surgeon General of the U. S. Public Health Service, Dr. Thomas Parran, and the chairman of the Division of Medical Sciences, National Research Council, Dr. Lewis H. Weed, Baltimore. The Office of Defense Health and Welfare Services is a part of the Office for Emergency Management, which in turn is part of the Executive Office of the President. The director of the Office of Defense Health and Welfare Services is Paul V. McNutt, who is also Federal Security Administrator.

THE Hitchcock lectures of the University of California will be given by Dr. A. H. Reginald Buller, emeritus professor of botany at the University of Manitoba, during the month of February. The titles of the lectures are as follows: "Mushrooms and Toadstools as Organs for the Production and Liberation of Spores"; "Hyphal Fusions and Protoplasmic Streaming"; "The Sexual Process in the Rust Fungi"; "Recent Discoveries Concerning the Bird's-Nest Fungi."

DR. NORMAN JOLLIFFE, associate professor of medicine at New York University, a member of the nutrition committee of the National Research Council, gave the first of a series of lectures and discussions on nutrition on January 14 at the School of Education of New York University. The lecture was entitled "The Prevalence of Malnutrition."

Nature states that a dietetic council has been set up in Ireland under the leadership of Dr. P. T. Farrell

to experiment on ways and means of aiding the people's nutrition under war-time conditions, paying special attention to the diet of children.

THE Mexican Embassy in Washington announces that the President of Mexico, General Manuel Avila Camacho, has issued invitations for an Inter-American Scientific Congress to be held in Mexico from February 16 to 26. Ambassador Castillo Najera said that scientific men and scholars from all the countries of the Western Hemisphere had been invited to attend, and that acceptances already had been received from thirty residents of the United States. The conference will coincide with the dedication of the new Mexican National Astrophysical Observatory at Tonanzintla, State of Puebla.

THE first Mexican Congress of Internal Medicine will be held in Mexico City from May 3 to 10, under the auspices of the President of Mexico and the Departments of Education and Public Health, with the cooperation of the medical societies of Mexico and the National University. The congress will be made up into various sections covering a wide range of subjects.

THE second Congress of Dental Education and Licensure, conducted by the Council on Dental Education of the American Dental Association, will take place at the Palmer House, Chicago, on February 21. Dr. Franklyn Bliss Snyder, president of Northwestern University, will make an address on "The University and Professional Education."

At a recent meeting of the executive committee of the National Parks Association, the importance of carrying on its educational program was emphasized. It is planned to continue the advocacy of National Primeval Parks as a distinct category, to promote worthy park projects that have already been authorized, to encourage appreciation and the proper use of America's natural and historic heritage, to combat each threat of commercial encroachment upon protected reservations and to divert destructive uses of all kinds from superlative natural areas.

THE Bermuda Biological Laboratory for Research, Inc., has established scholarships for work in Bermuda for a limited number of special investigators. Although the original laboratory building is not available, working space with simple equipment and running sea water has been placed at the disposal of biological workers at the Government Aquarium through the kindness of its director, Dr. Louis Moberg. The scholarship stipend is intended to cover travel and living expenses. Should travel to Bermuda become impossible or inadvisable, scholarships might be awarded for work at a laboratory in some

part of the United States having a semitropical marine fauna or flora. Applications giving an outline of the proposed investigation, the place of proposed study and the time of stay should be sent to the Committee on Award, care of Dr. Columbus Iselin II, Woods Hole Oceanographic Institution; Professor Ross G. Harrison, Yale University, or Professor E. Newton Harvey, chairman, Princeton University.

APPOINTMENT for the year 1942-43 to the Charles W. Hargitt Research Fellowship in Zoology, at Duke University, will be made on March 15. The fellowship for post-doctoral work, carrying a stipend of \$1,000, is restricted to research work in cytology; appointment is for a single year with the possibility of reappointment. Applications must be filed by March 1. Inquiries should be made to, and application blanks obtained from Dr. Geo. T. Hargitt, Biology Building, Duke University, Durham, N. C.

AFTER over thirty years of operation with a mechanically recording Wiechert seismograph, the Spring Hill College Seismological Observatory (Mobile, Ala.) began the New Year of 1942 with the installation of two sensitive photographic instruments. Two drum synchronous motor-driven recorders and two rebuilt McComb-Romberg tilt-compensating seismometers have been sent on indefinite loan to the observatory by the Franklin Institute of Philadelphia. The seismographs were used in Little America during the last Antarctic expedition of Rear Admiral Richard E. Byrd. The U. S. Coast and Geodetic Survey undertook to rebuild and increase the sensitivity of the instruments and assisted in placing them in operation. The seismologist in charge of the Spring Hill Observatory is Fr. A. J. Westland, S.J., who recently completed four years special study in seismology under the direction of Rev. Dr. J. B. Macelwane, S.J., director of the Institute for Geophysics at St. Louis University.

DISCUSSION

SEX-DETERMINATION IN MELANDRIUM AND LYMANTRIA

IN a series of reports Warmke and Blakeslee¹ announced the important discovery that in Melandrium the Y-chromosome contains the male-determining factors balanced against the female ones in the X-chromosomes, the autosomes playing hardly any role in the mechanism. This constitutes a mechanism identical with what I had considered for many years to be the situation in Lymantria (of course with M and F exchanged on account of female heterogamety, ♀ = XY or WZ). In Lymantria it is unequivocally proven that the male determiners (M) are located in the X-chromosomes and that the female determiners (F) are inherited maternally, the autosomes containing only secondary modifiers for femaleness. This maternal inheritance of F, confirmed in innumerable and decisive checks, may mean either cytoplasmic or Y-chromosome localization. I decided for the Y-chromosome when cases were found in which a weak female crossed to a strong male produced, in addition to sex-reversal males, a few exceptional females which turned out to be strong and inherited this character maternally. This excludes the cytoplasm and can be explained by non-disjunction and fertilization by an XXY male from the strong race. Thus I considered the location of F in the Y-chromosome as most probable and repeatedly discussed the conse-

quences. Having for about 15 years accepted this solution, which was borne out by all available facts, I finally made up an experiment which I considered crucial.² The idea was the following: If F is located in the Y-chromosome, a sex reversal male produced by crossing a weak mother to a strong father is XY and therefore has a weak F in the Y-chromosome, a strong M in the X. Some of the daughters of such males derive their Y from the XY-father, which is then a Y with a weak F. This can be tested by crossing all daughters to strong males. If F is located in the Y-chromosome a part of the crosses will produce only males (half by sex-reversal). This experiment carried out with over 100,000 individuals never gave an all male brood. I considered this final proof in favor of the cytoplasm, though the above-mentioned data, explained by non-disjunction and location of F in the Y-chromosome, now became unexplainable, though the facts were found over again.

Blakeslee's new work suggests a need for reconsidering the situation: perhaps, after all, the old explanation was correct, and the sex-determining mechanism is the same as in Melandrium. To answer this question it is necessary to re-examine the experiment, considered to be crucial, for a possible loophole. The test presupposes, first, that half of the F₁ individuals from all-male broods are XY, as had been found in previous work; second, that in the offspring of these males females are present which have been sired by

¹ See H. E. Warmke and A. F. Blakeslee, *SCIENCE*, 89: 1939, *et al.*

² R. Goldschmidt, *Ztschr. ind. Abstl.*, 67: 1934; *Bibl. genet.*, 11: 1934.