

sachusetts Institute of Technology. Dr. Conant will remain in England for about a month and Mr. Hovde will stay there as permanent secretary.

The White House statement said that "first-hand observation of recent English scientific research and experience is important for the prosecution of America's program of research on problems of national defense.

"As such collaboration proceeds, other American scientists will be sent from time to time to study different phases of British scientific research of interest to the United States and exchange information through the medium of the National Defense Research Committee.

"It is the duty of the National Defense Research Committee to 'correlate and support scientific research on the mechanics and devices of warfare.' Dr. Conant's mission is essential to that function."

Besides Dr. Conant, other technical members of the committee are Dr. Vannevar Bush, head of the Carnegie Institution of Washington and of the National Advisory Committee for Aeronautics, who is chairman; Dr. Richard C. Tolman, California Institute of Technology; Dr. Karl T. Compton, president of the Massachusetts Institute of Technology; Conway P. Coe, United States Commissioner of Patents; Dr. Lyman J. Briggs, director of the National Bureau of Standards, and Dr. F. B. Jewett, president of the National Academy of Sciences.

#### RECENT DEATHS

DR. FRANK CRAIG JORDAN, professor of astronomy and director of the Allegheny Observatory, Pittsburgh, and Mrs. Jordan, died in a fire that occurred in their

home at Pittsburgh on February 15. Dr. Jordan was seventy-five years old.

DR. WILLIAM WEBBER FORD, professor emeritus of bacteriology at the Johns Hopkins University, died on February 10 at the age of sixty-nine years.

SAMUEL HENSHAW, director emeritus of the Harvard Museum and of the Harvard Museum of Comparative Zoology, died on February 5 at the age of eighty-nine years. He retired in 1927 after serving as director of the Harvard Museum since 1918 and of the Museum of Comparative Zoology since 1912.

DR. DE LISLE STEWART, lecturer in astronomy at the University of Cincinnati, president of the Cincinnati Astronomical Society, died on February 8 in his seventy-first year.

DR. WENDELL T. BUSH, professor emeritus of philosophy at Columbia University, who was connected with the university from 1905 until his retirement in 1938, died on February 12 at the age of seventy-four years.

DEATHS in England include: Dr. William Bulloch, professor emeritus of bacteriology at the University of London, a fellow of the Royal Society of Medicine, on February 11, in his seventy-third year; Frank Thomas Paul, professor emeritus of surgery at the University of Liverpool, on January 17, at the age of eighty-nine years; Dr. Miles Walker, for twenty years professor of electrical engineering on the faculty of technology of the University of Manchester, on January 22, at the age of seventy-three years, and Dr. D. Robertson, since 1902 professor of electrical engineering at the University of Bristol, on January 8, at the age of sixty-five years.

### SCIENTIFIC NOTES AND NEWS

AT the Founders Day exercises of Temple University, Philadelphia, on February 14, an honorary degree was conferred on Dr. Henry A. Pilsbry, special curator of the department of Mollusca of the Philadelphia Academy of Natural Sciences.

DR. ALDEN H. MILLER, who was recently appointed to succeed the late Dr. Joseph Grinnell as director of the Museum of Vertebrate Zoology of the University of California at Berkeley, has been elected a corresponding member of the Zoological Society of London.

DR. PAUL DYER MERICA, assistant to the president of the International Nickel Company, received at the British Embassy, on February 10, a platinum medal awarded by the Council of the Institute of Metals of Great Britain in recognition of "distinguished services to nonferrous metallurgy." Dr. Merica originated the "precipitation theory" of hardening, developed in connection with research on aluminum alloys.

THE Marconi Memorial Medals of the Veteran Wireless Association were awarded at the sixteenth annual dinner in New York on February 10 to Major General J. O. Mauborgne, chief signal officer of the United States Army, and Admiral Leigh Noyes, director of naval communications. A plaque was presented to James L. Fly, chairman of the Federal Communications Commission, and Marconi Memorial Scrolls of Honor were awarded Richard Nebell, radio aid to the signal officer of the Second Corps Area, and David Karp, for meritorious service in the world war. G. H. Clark, former president of the association, received the Marconi Medal of History.

THE Association of American Geographers at its annual meeting, which was held at the State University of Louisiana, elected Dr. Griffith Taylor, of the University of Toronto, *president*; and Dr. Forrest Shreve, of the Desert Laboratory, Tucson, Ariz., *vice-president*.

DR. LAWRENCE CRAWFORD, professor of pure mathematics at the South African College at Cape Town, has been elected president of the Royal Society of South Africa.

SIR GEORGE SIMPSON has been reelected president of the Royal Meteorological Society, London.

SIR OWEN WILLANS RICHARDSON, Yarrow research professor of the Royal Society, has been elected to an honorary fellowship in Trinity College, Cambridge. Sir Owen was professor of physics at Princeton University from 1906 to 1914.

PROFESSOR W. M. SMART, regius professor of astronomy in the University of Glasgow, has been appointed Halley Lecturer at Oxford for 1941.

SURGEON REAR-ADMIRAL G. GORDON-TAYLOR has been appointed Bradshaw Lecturer of the Royal College of Surgeons, London, and Dr. L. R. Braithwaite has been appointed Moynihan Lecturer.

DR. GEORGE W. HOLMES, clinical professor of roentgenology at the Harvard Medical School and chief roentgenologist at the Massachusetts General Hospital, Boston, will become professor emeritus on September 1.

PROFESSOR CLARENCE T. JOHNSTON, chairman of the department of geodesy and surveying of the University of Michigan, has retired from active service.

PROFESSOR IDA OGILVIE, chairman of the department of geology of Barnard College, will retire at the end of this semester after thirty-eight years' service at the college.

DR. HENRY FRIEZE VAUGHAN, for twenty-two years Commissioner of Health of the City of Detroit, a son of the late Dr. Victor C. Vaughan, who was dean of the School of Medicine of the University of Michigan from 1891 to 1921, will join the faculty of the new School of Public Health of the University of Michigan as professor of public health. With Dr. John Sundwall, director of the Division of Hygiene and Public Health, and members of his staff, Dr. Vaughan will work out the reorganization of the present curriculum for application in the school. They will also supervise the planning of the new building.

DR. ALFRED BLALOCK, professor of surgery at Vanderbilt University, with which he has been connected for sixteen years, has been appointed professor of surgery at the Johns Hopkins University, the appointment to take effect on July 1. He is the third incumbent of the chair, the first being the late Dr. William S. Halsted. His immediate predecessor was Dr. Dean DeWitt Lewis, who retired in 1939.

DR. CHESTER ARTHUR STEWART, clinical professor of pediatrics at the School of Medicine of the Uni-

versity of Minnesota, an authority on child tuberculosis, has been appointed professor and head of the department of pediatrics in the School of Medicine of the Louisiana State University, the appointment to become effective on July 1.

PROFESSOR DAVID L. ARM, of Purdue University, has been appointed professor of mechanical engineering at the Iowa State College.

DR. S. A. GOUDSMIT, professor of physics at the University of Michigan, has leave of absence for the second semester to conduct graduate courses at Harvard University.

DR. FRITZ LEVY, director of laboratories of the Davis Memorial Hospital, The Golden Clinic, Elkins, W. Va., has received a grant from the Committee on Scientific Research of the American Medical Association, in aid of his work on megacariocytes and abnormalities of cell division.

DR. S. ANSBACHER, associate in charge of vitamin research in the Division of Experimental Medicine at the Squibbs Institute of Medical Research at New Brunswick, N. J., has become research director of the International Vitamin Corporation, New York City.

DR. J. E. GORDON, professor of preventive medicine and epidemiology at Harvard University, now head of the hospital recently established in England under the auspices of the university and the American Red Cross, has been appointed United States liaison officer with the British Ministry of Health on the invitation of Malcolm MacDonald, minister of health.

CHARLES P. TAFT, of Cincinnati, has been appointed by Paul V. McNutt, security administrator, assistant coordinator of all health, welfare, nutrition and recreation activities affecting national defense.

THE *Journal* of the American Medical Association states that Professor Chaim Weizman, president of the Jewish Agency and director of the Daniel Sieff Research Institute at Rehovot, Palestine, has been appointed a scientific adviser to the British government, and that a permanent laboratory has been put at his disposal. In 1914 Professor Weizman was lecturer in chemistry at the University of Manchester.

DR. P. W. BRIDGMAN, Hollis professor of mathematics and natural philosophy at Harvard University, spoke on February 20 at a joint meeting of the Washington Academy of Sciences and the Philosophical Society of Washington. His address was entitled "The Changing Position of Thermodynamics."

DR. PETER K. OLITSKY, member of the Rockefeller Institute for Medical Research, lectured in the auditorium of the Children's Hospital Research Foundation, Cincinnati, on February 12, under the auspices

of the local chapter of Sigma Xi, the Rachford Memorial Lectureship Fund and the Children's Hospital Research Foundation. The title of his address was "Hans Zinsser and His Studies on Typhus Fever."

DR. CYRUS C. STURGIS, professor of internal medicine at the Medical School of the University of Michigan, delivered the Henry Sewall Memorial Lectures at the School of Medicine of the University of Colorado at Denver on February 11 and 13. His subjects were "The Therapeutic Value of Blood and Blood Substitutes" and "The Hemorrhagic Diseases."

THE sixth annual Hughlings Jackson lecture of the Montreal Neurological Institute was delivered on January 29 by Dr. S. W. Ranson, whose subject was "Some Experimental Studies on the Corpus Striatum."

CAPTAIN NICHOLAS HUNTER HECK, chief of the Division of Geomagnetism and Seismology of the U. S. Coast and Geodetic Survey, delivered a Sigma Xi lecture entitled "Some Recent Developments in Earthquake Study" at the Utah State Agricultural College on January 24. While in Logan, he inspected the Oldham Seismograph Station which is conducted by the department of geology of the college with the cooperation of the Coast and Geodetic Survey.

THE fifty-seventh meeting of the American Association of Anatomists, by invitation of the University of Chicago, will be held at the university on April 9, 10 and 11. The chairman of the Local Committee is Dr. Charles H. Swift.

THE National Foundation for Infantile Paralysis will hold a semi-annual meeting of its Medical Committees on May 15. At this time applications for grants for the study of the cause, prevention and treatment of this disease will be considered. Applications to be considered at the semi-annual meeting must be received at the office of the Foundation, 120 Broadway, New York City, on or before March 15.

THE Chicago Academy of Sciences, in cooperation with the Wm. I. Lyon Bird-banding Council, is sponsoring a conference at the academy on Saturday, March 15. Papers will be presented on various phases of ornithological work with special reference to bird-banding. In addition a photographic exhibit and various types of traps used in bird-banding will be on display. There will be a dinner in the evening followed by an address by Bob Becker, of *The Chicago Tribune*.

WORD has been received by Dr. Leonard Carmichael, president of Tufts College, that a new "China Institute of Physiology and Psychology" has been established at Chungking. The well-known Chinese psychologist and experimental embryologist, Dr. Zing Yang Kuo, has been named director of the institute.

AN institute for endocrinology has been founded at São Paulo, Brazil, consisting of three departments devoted, respectively, to experimental endocrinology, human endocrinology and a laboratory for testing opo-therapeutic products.

A NEUROPHYSIOLOGICAL section has recently been added to the Carolinian Medical Institute in Stockholm, principal medical school of Sweden. It is under the direction of Professor Ragnar Granit, an authority on electrophysiology. Professor Granit has taken with him from Helsingfors electrical and optical precision instruments, partly acquired or designed with funds contributed by the Rockefeller Foundation.

BEQUESTS amounting to a million and a half dollars are made in the will of Caroline White, of New York City, to churches, institutions and individuals. Among these six New York hospitals receive each the sum of \$100,000.

ACCORDING to the will of Mrs. Charles Henry Thomas, the bulk of her estate of \$1,359,654 will go eventually to Radcliffe College, Yale University and the Massachusetts Historical Society, Boston. Radcliffe College will receive the residuary estate, valued at \$548,397, plus the remainder of a \$500,000 life trust fund, and the remainder of a life trust fund of \$35,000. It is requested that the money be used to establish scholarships or fellowships in music. Yale University will receive an outright gift of \$50,000, plus the remainder of a \$50,000 trust fund.

THE Journal of the American Dental Association announces a gift of \$50,000 to Northwestern University for the study and treatment of cleft palate, hare-lip and similar facial and oral abnormalities. The work will be under the direction of Dr. Frederick W. Merrifield of the medical and dental faculties.

THE Blandy Experimental Farm of the University of Virginia at Boyce, has been granted \$40,000 by the General Education Board for additions to the present brick building and for equipment to provide adequate laboratories and living quarters and \$5,000 for the construction of a greenhouse.

At a recent meeting of the Royal College of Surgeons, London, a resolution of thanks was passed for the gift of \$7,500 from the Rockefeller Foundation for evacuating the library and research laboratories.

PROFESSOR JAMES R. JEWETT, of Cambridge, Massachusetts, has recently presented to the Arnold Arboretum the sum of \$5,000 to be known as the James R. Jewett fund. Under the terms of gift the income may be used for first and second prizes to be known as the James R. Jewett and the Vieno T. Johnson prizes. These prizes are, for the present, to be awarded to individuals who have made significant con-

tributions to the improvement of our native beach plum (*Prunus maritima*), or who, through the development of beach plum products, may have made contributions of social significance. It is planned to make the first awards in August, 1941. Those interested may secure additional information by communicating with the director, Arnold Arboretum, Jamaica Plain, Mass. The awards will be made by a special committee to be appointed later in the year.

UNDER the will of the late Sir Henry Head, the Royal Society is named as residuary legatee of his estate, which is valued at £144,588. It is provided that the money "shall be applied for the purpose of the advancement in England of the science of medicine in the widest sense." The will suggests that the fund, or part of it, might be used to establish professorships or similar posts or research scholarships in some branch of medical science.

THE J. T. Baker Chemical Company has announced that its Eastern fellowship for research in analytical chemistry is open for 1941-42. This fellowship is to encourage fundamental research in analytical chemistry. The recipient will receive \$1,000 annually and will be expected to devote at least nine months to research in an institution conferring the Ph.D. or Sc.D. degree in chemistry in one of the New England states, New York, New Jersey, Pennsylvania, Delaware, Maryland or Virginia. The fellowship is awarded by a committee consisting of N. H. Furman, chairman, Princeton University; J. H. Yoe, secretary, University of Virginia; G. P. Baxter, Harvard University; H. A. Fales, Columbia University, and C. W. Mason, Cornell University.

WITH the approval of the United States Office of Education, Cornell University has opened a course in Mechanics and Elementary Design of Aircraft Structures

in Buffalo in cooperation with the University of Buffalo. This course, supplementing one established on October 7 without Federal aid, is also given at the request of the Curtiss-Wright and Bell Aircraft Companies. Federal approval of the new course means that there will be no tuition charge, since the expenses will be assumed by the Government under the recent act appropriating funds for Engineering Training for National Defense. The course is designed to meet an urgent national defense need for men trained for junior engineering positions in the airplane industry. High-school graduates who have completed trigonometry and mechanical drawing are eligible to enroll. The course will comprise an intensive study of statics, mechanics of materials and elementary design, with special attention to design of details of aircraft structures. More than three hundred students are enrolled, according to Dr. Arthur S. Adams, professor of mechanics in the College of Engineering at Cornell and director of the Buffalo courses.

A NEW division of chemotherapy has been formed in the National Institute of Health of the U. S. Public Health Service to be under the direction of Dr. William H. Sebrell, Jr. The *Journal* of the American Medical Association states that the new unit will be concerned with research on sulfanilamide products and with new synthetic drugs with antimalarial properties to make the United States independent from the Dutch East Indies supply of quinine, new synthetic drugs to supplement the supplies of opiates and studies relating to aging and nutrition. The chemotherapy division will have quarters at the National Institute of Health in Bethesda, Md., in a laboratory building now being equipped. The building will also be the headquarters of the divisions of chemistry and zoology.

## DISCUSSION

### AN IMPORTANT FACTOR IN EVOLUTION

SEWELL WRIGHT in Julian Huxley's "The New Systematics" (Oxford, 1940, p. 174) says: "The one systematic effect of mutation seems to be a tendency towards degeneration (as may be seen from a casual survey of the effects of most of the *Drosophila* mutations)." I believe that this observation reveals an evolutionary factor of primary importance.

It has long been appreciated that most of the *Drosophila* mutations are degenerative. We have been told that such mutations are rapidly eliminated under natural conditions by selection, which waits upon the occasional favorable mutation to effect evolutionary change. On the other hand, taxonomists have long

realized that an adaptive significance can not be attributed to most of the known taxonomic differences distinguishing species and genera. Taxonomists and comparative anatomists have likewise appreciated the great extent to which the evolutionary changes in related groups of organisms involve the simplification, fusion or loss of old parts, and how rarely new parts or more complicated parts come in. It is now possible to point out the connection between these several sets of facts.

As a result of the principle that the loss of genes from the chromosomal mechanism is more frequent than their addition, it follows that whenever evolutionary change is unrestricted by natural selection, a degeneration of structure is likely to result.