

during twenty-two years spent in the Philippines, a region noted for its numerous destructive typhoons, he actually experienced higher wind velocities only two or three times. Naturally large property damage resulted, and literally hundreds of thousands of trees were uprooted or so badly damaged that they will have to be removed and replaced. The Arboretum suffered severely. The loss of species, however, was almost negligible, as younger plants survived. The following gives an account of the damage suffered:

The storm was intense at 5:00 P. M. and gradually increased in violence. The worst damage was done in the arboretum between about 5:30 P. M. and 6:30 P. M. A tour of the grounds at 5:30 P. M. revealed relatively slight damage; for example there were only three or four trees in the extensive pine grove back of the administration building that were down or showed signs of weakening at that time; an hour later nearly all the trees in the entire planting were prostrate. The sound of rus-

ling leaves, breaking branches, and creaking trunks was at times almost deafening. The worst of the storm was over by 8:00 P. M.

A hurried survey made early the next morning showed that approximately 1,500 trees were either uprooted, broken off, or their tops so badly damaged that they will have to be removed. Many others were injured, but can be saved by judicious pruning. The losses include some of the oldest and largest trees in the arboretum, as well as some of the rarest ones. Some of the roads were impassable, and all paths and roads were strewn with debris, broken branches, and fallen trunks. Damage was particularly serious in certain exposed areas, notably on the slopes back of the administration building, on the southeast or exposed side of hemlock hill, where scores of century old native hemlocks fell, in the southern part of the pinetum, where many of the largest pines, firs, and spruces are prostrate, and along the southeast side of the Peters hill area, particularly in the collections of poplars and oaks.

## SCIENTIFIC NOTES AND NEWS

THE American Society of Mechanical Engineers announces the election to the presidency of the society on September 27 of Professor Alexander G. Christie, of the Johns Hopkins University. He will assume office on December 9.

DR. WILLIAM S. MIDDLETON, dean of the Medical School of the University of Wisconsin, has received the award of the council of the Wisconsin State Medical Society. The inscription on the award reads in part: "A son of Pennsylvania, twenty-six years an educator of physicians and now dean of the University of Wisconsin Medical School, distinguished consultant and clinician, deviser of the council on scientific work of the State Medical Society of Wisconsin, for your accomplishments and lofty inspiration in the teaching of students and practitioners, for your quarter of a century of public service, and for your outstanding influence in the development of a high quality of medical service for the citizenry of Wisconsin."

ACCORDING to *Nature*, Dr. Hermann Fink, professor of the biochemistry and technology of fermentation in the University of Basle, has been awarded the Scheele Medal of the Stockholm Chemical Society.

H. W. DICKINSON, of London, a founder and past president of the Newcomen Society of England and for thirty years one of the heads of the Science Museum at South Kensington, was the guest of honor at a reception held at the New York Museum of Science and Industry on September 28. The gathering followed an informal dinner tendered Mr. Dickinson by the American branch of the Newcomen Society. The speakers included Dr. Frank B. Jewett, president of

the museum; Charles Penrose, senior vice-president of the American branch of the Newcomen Society, and Mr. Dickinson.

DR. REINHOLD RUEDENBERG, consulting engineer of the General Electric Company, Inc., in London, has been appointed Gordon-McKay professor of electrical engineering at Harvard University, and Dr. John Everett Gordon, of Chicago, field director of the International Health Division of the Rockefeller Foundation, has been appointed professor of preventive medicine and epidemiology in the Medical School.

DR. VIKTOR FRANCIS HESS, formerly professor of experimental physics at the University of Innsbruck, who in 1936 shared a Nobel Prize for his work on cosmic rays with Dr. Carl David Anderson, of the California Institute of Technology, has joined the faculty of Fordham University.

At Radcliffe College, Harvard University, Dr. William F. Ross, research associate of organic chemistry at the Massachusetts Institute of Technology, has been appointed resident director of the laboratories of chemistry, and Dr. M. Gene Black has been appointed director of the department of health education.

IN the College of Medicine of the University of Vermont, Dr. Harold B. Pierce has been appointed head of the department of biochemistry and acting head of the department of pharmacology, and Dr. John E. Davis has been appointed instructor in pharmacology and biochemistry.

PROFESSOR FRED E. FOSS, head of the department of civil engineering at Cooper Union, New York City,

retired at his own request at the end of the last academic year. Ray C. Brumfield, assistant professor of civil engineering, has been appointed acting head of the department for 1938-39.

DR. NEIL E. RIGLER, of the North Carolina Agricultural Experiment Station, has been appointed plant physiologist in the division of plant pathology and physiology of the Texas Agricultural Experiment Station, College Station.

DR. E. C. OGDEN, of the Gray Herbarium of Harvard University, has been appointed instructor in botany at the University of Maine.

At the University of Cambridge, Dr. A. J. Bradley has been appointed assistant director of research in crystallography, and Dr. J. E. Driver has been appointed university demonstrator in the department of chemistry.

THE board of directors of the Herty Foundation has appointed Frank Heyward, Jr., state forester, field director, and Dr. Charles H. Carpenter, technical director, to carry on the work in pulp wood development of the late Dr. Charles H. Herty at Savannah. Mr. Heyward has leave of absence from the State Forestry Department to accept the acting field directorship of the foundation. Dr. Carpenter, chief chemist of the Herty Foundation Laboratory, has served as executive director since Dr. Herty's death.

WILLIAM HUDSON BEHNEY, assistant professor of zoology at the University of Vermont, has been given leave of absence to become director of the State Fish and Game Service, where he succeeds Dr. Russell P. Hunter, who resigned recently in order to accept a similar position in Connecticut.

At the Field Museum of Natural History, Dr. Francis Drouet has been appointed a member of the department of botany. He will have charge of the collections of cryptogamic plants. Bryan Patterson, assistant curator of paleontology, has returned to the museum after spending several months in Europe, making studies of fossil mammal collections in the Museum national d'Histoire naturelle in Paris and in the British Museum (Natural History) in London. Dr. Julian A. Steyermark, assistant curator of the herbarium, has returned from a collecting trip, during which a botanical survey was made of the flora of the St. Francis River in Wayne County, Missouri. Dr. C. E. Hellmayr, associate curator of birds, who for some years has been in Vienna, where he has been working on the preparation of the "Catalogue of Birds of the Americas," is now in London, where he moved on account of political conditions in central Europe.

DR. GEORGE E. BARKER has been appointed incum-

bent of the industrial fellowship established at the Mellon Institute by the Elgin National Watch Company, Elgin, Ill. The research program will cover broadly the chemical aspects of technical problems in the watch industry. One of the first subjects of investigation will be watch lubrication.

DR. ERMA A. SMITH, associate professor of physiology in the Iowa State College, has been allotted a grant by the Committee on Research of the American Medical Association to be used in a study of the effects of carbon monoxide gas on gastro-intestinal motility.

ELLSWORTH MCSWEENEY has become a research associate at Battelle Memorial Institute, Columbus, and is beginning a study of organic tin compounds, one of several fundamental research projects financed by the institute.

PROFESSOR E. LOEWENSTEIN, formerly of Vienna, known for his investigations on the immunology and bacteriology of tuberculosis, has taken up work at the University of California.

DR. ALFRED C. REED, professor of tropical medicine in the University of California, is at present in Europe. He planned to visit a number of hospitals in London and to go to Beirut, Damascus, Jerusalem, Cairo, Rhodes, Athens, Italy, France, Stockholm, Copenhagen and Holland. He is president-elect of the American Society of Tropical Medicine, which will meet in Oklahoma City from November 14 to 17.

DR. WALTER CARTER, of the Pineapple Experiment Station, Honolulu, returned recently after an eleven-month tour of the pineapple areas in Africa, Malaya, Dutch East Indies, Philippine Islands, Australia and Fiji.

A. H. G. ALSTON, an assistant keeper in the department of botany of the British Museum (Natural History), plans to visit Trinidad and then to travel across Venezuela and Colombia to Buenaventura, collecting plants for the museum and studying the ferns of northern South America. He expects to be away for about seven months. On his way he will attend the first South American Botanical Assembly, which will be held at Rio de Janeiro from October 12 to 19.

IN connection with the recent allotment of funds to the Geological Survey by the Public Works Administration for a study of strategic metals, D. F. Hewett spent the latter part of August in examining tin prospects and possibilities in the vicinity of Tinton and Keystone, S. Dak.

PROFESSOR JULES DRACH, of the University of Paris, in attendance as the representative of the Paris Academy of Sciences at the fifth Congress of Applied Mechanics recently held at the Massachusetts Institute

of Technology, delivered a course of four lectures from September 22 to 26 on "The Logical Integration of Differential Equations, with Applications to the Equations of Geometry and of Mechanics," at the Rice Institute.

LECTURES will be given at the University of Buffalo under the Foster Fund by Professor E. M. K. Geiling, of the University of Chicago, at the end of October on "Recent Trends in Endocrinology" and on "Some Biological Adaptations of the Whale," and during the week of November 7 by Professor M. S. Kharasch, also of the University of Chicago, on the general subject, "Chain Reactions Involving Atoms and Free Radicals in Solution." The Foster Fund was given to the university by Mrs. Orin D. Foster, in memory of her husband, to endow a lectureship in chemistry and related fields. Mr. and Mrs. Foster also gave the university Foster Hall, which houses the department of chemistry and the School of Pharmacy.

SIR WILLIAM BRAGG, president of the Royal Society, opened the Sir Robert Hadfield Metallurgical Laboratories of the department of applied science of the University of Sheffield on September 14. The new extensions and improvements, which were built at a cost of £30,000, represent the first stage in a plan of development for which an appeal for £250,000 was made two years ago. Sir Robert Hadfield, chairman and managing director of Hadfield's, Limited, Sheffield, gave £10,000 of the £30,000 required and equipped one of the research laboratories at a cost of £2,000. He also gave £5,000 for the plans for the new foundation.

THE Academy of Medicine of Washington, D. C., held its first autumn meeting on September 28. Dr. Philip Manson-Bahr, clinical director of the London School of Tropical Medicine, gave an address on "The Life and Works of Patrick Manson, Father of Tropical Medicine." Dr. Manson-Bahr is the author of a life of Sir Patrick Manson. The academy met this fall without one of its members, lost in the Hawaiian Clipper tragedy of July the twenty-ninth. Dr. Earl Baldwin McKinley was the moving spirit in the founding of the academy. Dr. Harry H. Donnelly addressed the academy in tribute to Dr. McKinley.

THE Cotton States Branch of the American Association of Economic Entomologists will hold its 1939 annual meeting on February 21, 22 and 23, 1939, at Tampa, Fla. The Hillsboro Hotel has been selected as headquarters, where special rates of from \$2.50 up have been obtained for delegates. Due to the overcrowded condition of Florida cities during the tourist season, reservations should be placed early by those who expect to attend.

A MISSOURI Minerals Industry Conference, sponsored by the Missouri School of Mines and Metallurgy and the Missouri Geological Survey, will be held at the School of Mines on October 21 and 22. The object of the conference, according to Dr. William R. Chedsey, director of the School of Mines, is for the mutual benefit of the producers of mineral products and the service institutions that are supported by the states. It will take the form of the presentation of problems of the various mineral industries by mineral producers. Dr. H. A. Buehler, of the Missouri Geological Survey; S. M. Shelton, supervising engineer of the Mississippi Valley Experiment Station of the U. S. Bureau of Mines, and Dr. Chedsey will outline the services that are now available to the producers of minerals in Missouri.

THE Society for the Promotion of Engineering Education will hold its annual convention in 1940 at the University of California in Berkeley.

FELLOWSHIPS in the Medical Sciences, administered by the Medical Fellowship Board of the National Research Council, of which Dr. Francis G. Blake, of Yale University, is chairman, will be available for the year beginning July 1, 1939. These fellowships are open to citizens of the United States and Canada who possess an M.D. or a Ph.D. degree. They are intended for recent graduates and not for persons already professionally established. Fellows will be appointed at a meeting of the board about March 1. Applications to receive consideration at this meeting must be filed on or before January 1. Appointments may begin on any date determined by the board. For further particulars address the Secretary of the Medical Fellowship Board, National Research Council, 2101 Constitution Avenue, Washington, D. C.

## DISCUSSION

### WAR AND SCIENCE

For a number of months European civilization has been making history around sharp curves at high and rapidly increasing speed. With brakes ineffective and accelerators pushed down to the floor, on September 14 it appeared to be crashing through the guards and about to plunge into the abyss of another world war.

Then something happened, something unparalleled in the history of the world. It began to respond to control and changed its course to a smoother and safer road.

There were undoubtedly many factors that restrained Herr Hitler from precipitating Europe into war. In spite of his 10,000 airplanes and Germany's capacity