to withdraw from the position. His resignation, necessitated by the pressure of other duties, is accepted with regret. The good wishes of the officers and members of the Pacific Division go with him.

It was moved, seconded and unanimously carried that the foregoing resolution be spread upon the minutes, a copy transmitted to Dr. Luck, and a copy sent to the editor of SCIENCE.

SCIENTIFIC NOTES AND NEWS

DR. CHARLES LATHROP PARSONS, for thirty-seven years secretary of the American Chemical Society, formerly chief chemist of the U. S. Bureau of Mines, received on December 17 the honorary degree of doctor of science from the University of New Hampshire, where from 1892 to 1911 he was a professor of chemistry. The degree was conferred at ceremonies held on the occasion of the inauguration of Harold Walter Stoke as tenth president of the university.

PROFESSOR DETLEV W. BRONK, director of the Johnson Research Foundation of the University of Pennsylvania and coordinator of research in the Office of the Air Surgeon, headquarters of the Army Air Forces, delivered in Paris on November 3 the Liberation Lecture of the Société Philomathique de Paris. He was awarded the medal of the society. Dr. Bronk has recently returned from a military mission in France, Belgium and England.

THE Edison Medal for 1944 of the American Institute of Electrical Engineers has been awarded to Dr. E. F. W. Alexanderson, consulting engineer of the General Electric Company, "for his outstanding inventions and developments in the radio, transportation, marine and power fields." The presentation will take place on January 24 at a joint session with the Institute of Radio Engineers, during the winter technical meeting of the institute.

THE annual Captain John H. Linnard Prize for 1943 of the Society of Naval Architects and Marine Engineers has been presented to Professor C. Richard Soderberg, of the Massachusetts Institute of Technology, and Ronald B. Smith, director of research and development of the Elliott Company, Jeannette, Pa., for an article on the gas turbine as a possible marine prime mover.

THE Osborne Medal of the American Association of Cereal Chemists, awarded for distinguished contributions to cereal chemistry and related sciences, will be conferred at Toronto at the forty-fifth annual meeting of the association on Dr. John Clark Baker, vice-president and director of research at Wallace and Tiernan Company, Inc.

DR. WILLIAM H. ROSS, of the Bureau of Plant Industry and Soils of the U. S. Department of Agriculture, has been elected president of the Association of Official Agricultural Chemists.

PROFESSOR SAMUEL J. RECORD, dean of the School of Forestry of Yale University, will retire on June 30. He will be succeeded by Professor George A. Garratt, a member of the faculty of the school. Professor Record will continue his work as professor of forestry.

WILLIAM E. STANLEY, professor of sanitary engineering at Cornell University and consulting sanitary engineer, has been appointed professor in charge of sanitary engineering at the Massachusetts Institute of Technology.

DR. CHARLES A. DOAN, since 1936 chairman of the department of medicine of the Ohio State University, has been made dean of the College of Medicine and director of the University Hospital. Dr. Hardy A. Kemp, formerly dean, who has leave of absence for work at the Army Medical School at Washington, will on his return to the university become professor of public health and hygiene.

DR. JOSEPH C. BOYCE, technical aide and section chief for the National Defense Research Committee of the Office of Scientific Research and Development, has been appointed professor of physics and chairman of the department of physics of the College of Engineering of New York University. From 1932 to 1941 he was a member of the department of physics of the Massachusetts Institute of Technology.

AT a recent meeting of the Board of Directors of Washington University, St. Louis, approval was given to the reorganization of the department of geology and geography as two separate departments. Dr. Lewis F. Thomas has become head of the department of geography, and Dr. Carl Tolman, who is on war leave with the Foreign Economic Administration, of the department of geology.

DR. DAVID F. MARSH, assistant professor of pharmacology at the School of Medicine of the University of Georgia, Augusta, has been appointed associate professor of pharmacology and head of the department of the School of Medicine of the University of West Virginia at Morgantown.

DR. WILLIAM HAMPTON MARSHALL has been appointed associate professor of entomology and economic zoology in charge of the work in game management and wildlife conservation at the University of Minnesota. He succeeds Dr. Gustav Swanson, who

recently became biologist in the U. S. Fish and Wildlife Service.

EARLE B. PHELPS, professor emeritus of sanitary science of the College of Physicians and Surgeons of Columbia University, has become research engineer at the Engineering and Industrial Experiment Station of the University of Florida.

AT the School of Economics of the University of London, Dr. R. W. Firth has been appointed to the university chair of anthropology. Since 1941 he has been in government employment at the Admiralty, and last July he was appointed secretary to the Colonial Social Science Research Council. Dr. R. G. D. Allen has been appointed to the university chair of statistics. Since 1940 he has been in the United States on Government service, and is at present British director of statistics to the Combined Production and Resources Board at Washington.

BRIGADIER GEORGE MACDONALD, emeritus professor of physiology of the University of Liverpool, has been appointed director of the Ross Institute of Tropical Hygiene of the London School of Hygiene and Tropical Medicine. He has been assistant director of the institute since 1939.

DR. ROBERT P. FISCHELIS, director of the Division of Drugs, Chemicals and Health Supplies in the Office of Civilian Requirements of the War Production Board, has been elected to succeed on January 1 the late Dr. E. F. Kelly as secretary and general manager of the American Pharmaceutical Association.

HOWARD ROSS TOLLEY, chief of the Bureau of Agricultural Economics of the U. S. Department of Agriculture, has been designated as the American representative on the Interim Food Commission of the United States.

The Experiment Station Record reports that Dr. J. H. Martin, head of the department of poultry husbandry at Purdue University, has leave of absence for a year to serve as director of experiments in animal breeding for the DeKalb Agricultural Association, Inc., of Illinois.

Chemical and Engineering News states that General A. G. L. McNaughton, who had leave of absence to serve as General Officer Commanding the Canadian Army Overseas, has returned to Canada. He has resigned his post as president of the National Research Council of Canada to which he was appointed in 1935, and has been sworn in as senior Minister of National Defense. C. J. Mackenzie, dean of the faculty of engineering at the University of Saskatchewan, and since 1939 acting president of the National Research Council of Canada, has been appointed president in succession to General McNaughton.

AT the Virginia Fisheries Laboratory of the College of William and Mary Dr. John G. Mackin, of the East Central State Teachers College, has been appointed associate biologist; Mrs. Ruth Ellis Allen and Miss Rosalie Rogers have been made research assistants.

COLONEL ESMOND R. LONG, Medical Corps, Army of the United States, Office of the Surgeon General, will deliver on the evening of January 8 at the Palmer House the ninth Christian Fenger Lecture of the Institute of Medicine of Chicago and the Chicago Pathological Society. His subject will be "Tuberculosis as a Military Problem."

DR. CHUNG CHIEN YOUNG, of the Caenozoic Research Laboratory of the Chinese Geological Survey, addressed on December 7 members of the departments of biology and geology of the University of Kansas.

DR. HENRY B. COLLINS, JR., ethnologist of the Bureau of American Ethnology of the Smithsonian Institution, has been appointed director of the Ethnogeographic Board to succeed Dr. Wm. Duncan Strong, who has returned to Columbia University to resume his work as professor of anthropology. The Ethnogeographic Board was established in 1942 under the joint sponsorship of the National Research Council, the American Council of Learned Societies, the Social Science Research Council and the Smithsonian Institution. Its primary function is to make accessible to Washington military and war agencies such specific regional information and evaluated personnel data as may be available to the sponsoring institutions and other scientific organizations with which they are affiliated or in contact. The offices of the board are in the Smithsonian Institution Building in Washington. Its present members are Carl E. Guthe, New York State Museum, *chairman;* Wendell C. Bennett, Yale University; Isaiah Bowman, the Johns Hopkins University; Carter Goodrich, Columbia University; John E. Graf, the U. S. National Museum; Mortimer Graves, the American Council of Learned Societies, and Wm. Duncan Strong, Columbia University.

DR. CARL C. LINDEGREN, of Washington University, St. Louis, recently addressed the Chapter of the Society of Sigma Xi of Purdue University. He spoke on "The Improvement of Industrial Yeast." He also made an address before the Biology Club on "The Inheritance of Adaptive Enzymes in Yeast."

THE Lavoisier Bicentenary lecture was delivered on November 16 before the Royal Society, London, by Sir Harold Hartley, F.R.S.

THE Astronomer Royal, Sir Harold Spencer Jones, will give the one hundred and fiftieth course of Christmas lectures adapted to a juvenile audience at the Royal Institution on December 28 and 30 and January

2, 4, 6 and 9. The title of the course will be "Astronomy in Our Daily Life."

THE sixth annual scientific award of the American Pharmacological Manufacturers' Association was presented at the meeting held in New York on December 11 and 12 to the National Research Council in recognition of its "fundamental contributions to public health in the field of the medical sciences; and also in recognition of its essential services to our country in World Wars I and II." The nominating report was made by Dr. George R. Cowgill, professor of nutrition at Yale University. Dr. Alan Gregg, director of medical sciences, of the Rockefeller Foundation, made the presentation address. It was entitled "The Essential Need of Fundamental Research in Medical Sciences for Social Progress." Dr. Ross G. Harrison, chairman of the National Research Council, accepted the award. He spoke on the "National Research Council and Its Action in the Field of the Medical Sciences." Dr. Frank B. Jewett, president of the National Academy of Sciences, made the concluding statement.

THE tenth award of the Oberly Memorial Fund, in memory of Eunice Rockwood Oberly, will be made in the spring of 1945. This prize is awarded every two years to the compiler submitting the best bibliography in the field of agriculture or the related sciences. The amount of the prize is approximately $100, the interest on the fund for two years. It is administered by the American Library Association. Those submitting bibliographies in competition for the prize should send four typewritten or printed copies to the chairman of the committee before March 1, 1945. The bibliography must be accompanied by a letter stating that it is being submitted in competition for the Oberly Memorial Award, 1944–45. The members of the committee are Nelle Uree Branch, Mary G. Burwash, Marvin A. Miller, Caroline E. Reinke and Margaret C. Schindler. W. P. Kellam, librarian of the University of West Virginia, Morgantown, is chairman.

IT was recently stated in SCIENCE that Nobel Prizes were to be presented in the United States for the first time on December 10. A correspondent calls our attention to the fact that the Nobel Prize in Physics for 1939, awarded to Professor Ernest O. Lawrence, of the University of California, was presented to him at the University of California in Berkeley on February 29, 1940. The presentation was made on behalf of King Gustavus V by Mr. Carl E. Wallerstedt, Consul-General of Sweden in San Francisco.

DISCUSSION

THE MAGNIFICATION OF DIFFERENCES BY A THRESHOLD

CONSIDERING the political implications of the subject, the discussion in SCIENCE regarding the effect of heredity upon human physiology and psychology has been carried on with unusual clarity and objectivity, and it is likely that all who have taken part in it would agree that in everyday life we need to encourage a respect for human differences, whether caused by culture, physical and biological environments or heredity. As Mead[1] has put it, we may assume that each human group has something of value to contribute to mankind as a whole.

The problem discussed is part of a much larger one, the effect of heredity upon the behavior of any animal, and on this basis it is possible to be somewhat more objective.

That heredity can affect behavior is a matter of fact. The well-known cases of the waltzing mice which run endlessly in narrow circles, of the vestigially winged Drosophila which can not fly and the nervous disease of Huntington's chorea among human beings represent a few of many obvious examples. But these bizarre cases are also rare, and there remains a problem of determining just how important hereditary effects may be. The author has made certain experiments along these lines on fruit-flies[2] and house mice[3] which indicate one special type of conditions in which heredity may produce important results.

Professor Dobzhansky[4] has admirably summarized the theoretical reasons for believing that variability of behavior caused by heredity should be relatively very small compared to that produced by environmental factors. This expectation has been confirmed and the author has been struck by the difficulty of finding differences caused by heredity and the ease with which they could be modified by slight changes in the environment. Among the mice two inbred strains were found in which (under special conditions) one type of male would react peaceably and the other aggressively to a strange mouse. Later it was found that either strain could be trained in a few days to either fight fiercely or be wholly pacific.

However, one very interesting situation was observed, that in which the ordinarily minor effects of heredity appeared to be magnified by a threshold. Among the fruit-flies it was found that in a given

[1] "And Keep Your Powder Dry." New York: Morrow & Co. 1942.

[2] *Am. Naturalist*, 77: 184–190, 1943.

[3] *Jour. Heredity*, 33: 11–15, 1942.

[4] SCIENCE, 100: 406, 1944.