

elements is exceedingly slow and difficult. We must, therefore, turn to more effective weapons as soon as education has pervaded the public mind sufficiently to permit their employment.

Legislation in the United States prohibiting the sale of impoverished white bread and flour is a possibility. Undoubtedly any attempt to prohibit the sale of white wheat products in the United States would meet with insuperable public opposition. However, it is now possible to add artificially the principal valuable vitamins and minerals of wheat at a cost of something less than twenty-five cents per capita per annum.

Increased economic productivity of the bulk of the population would repay the cost perhaps a thousand-fold to say nothing of improved health and sense of well-being. Yet this great reform is being sabotaged or damned with faint praise by half the nutritionists of the country on the ground that it would be still better if we could arrange breakfasts of ham and eggs, whole wheat buns and a glass of milk for everybody. Of course it would, but shall we wait for the millennium to take our first steps to mass repair of our nutritional errors?

Pending the day when such legislation can be secured and the necessary scientific methods of control are developed, we must look largely to the food industries for correction of our dietary faults. These industries have been made very conscious of their public obligations, to a great extent through the operation of the pure food laws during recent decades. Within the limits of practicality, they are in general ready to cooperate in such reforms on a voluntary basis.

You are doubtless asking what all this vitamin knowledge will get us in terms of health, strength and longevity. No quantitative estimates are possible. Very few long-term experiments with animals have been carried out since all the major vitamins became available in pure form and since several of the lesser ones have been at least recognized. The testimony of the clinics, the results of experiments with school lunches or supplementary feeding, as well as the observation of health trends in nutrition-conscious populations, are very reassuring.

Since partial deficiencies are often most apparent in middle or later life when the body mechanism is beginning to feel the strain of the years, it seems reasonable to hope that nutritional reform will extend the span of life measurably. Control of infectious disease has principally affected mortality in infancy and early life. Those who survive to old age tend to be those who have acquired immunity to infectious disease or at least to have undergone a selection for resistance to disease. In nutritional disease, the phenomenon of immunity is absent. We do not grow accustomed to deficiencies with the years. Early damage remains and later damage accumulates till the slowing bloodstream of age leaves our cells grossly undernourished, so it seems.

When nutritional reforms have been in full operation for some years, the physician will have little occasion to treat deficiencies of the major vitamins. Until that happy day, which must be some years hence, he will encounter an abundance of avitaminoses, especially in clinics for the under-privileged. His immediate task is to recognize the symptoms.

SCIENTIFIC NOTES AND NEWS

THE American Education Award of the American Association of School Administrators was presented on February 24 at the San Francisco meeting to Dr. Robert A. Millikan, chairman of the Executive Council of the California Institute of Technology, as "a tribute to and in recognition of outstanding contributions made in the broad field of education."

THE Longstaff Medal of the Chemical Society of London has been awarded to Dr. Hugh S. Taylor, David B. Jones professor of chemistry and chairman of the department at Princeton University. The medal is conferred every three years upon a fellow of the society "who, in the opinion of the council, has done the most to promote the science of chemistry by research."

THE Wollaston Medal of the Geological Society, London, has been awarded to Professor R. A. Daly, Sturgis Hooper professor of geology in the Museum of Comparative Geology at Harvard University, "in recognition of his fundamental researches in many branches of geology, especially those concerned with the origin of igneous rocks, the constitution of the interior of the earth and the controls of coral-reef formation."

THE *Journal* of the American Medical Association reports that Dr. Juan P. Garrahán, a pediatrician of Buenos Aires, has been awarded the 1941 prize of the Academia Nacional de Medicina of Buenos Aires for his article on "Prothrombin, Vitamin K and Hemorrhages in New-born Infants." The prize was established by the academy in memory of the Argentine pediatrician, Dr. Juan Carlos Navarro, who died in 1936.

PRESENTATION of the gold medal of the Society of Women Geographers was made on February 23 at the annual meeting of the society in New York to Dr. Margaret Mead, assistant curator of ethnology at the American Museum of Natural History.

OFFICERS of the Society of Economic Paleontologists and Mineralogists have been elected as follows: *President*, Herschel L. Driver, Standard Oil Company of California, Los Angeles; *Vice-president*, Parker D. Trask, U. S. Geological Survey; *Secretary-Treasurer*, H. B. Stenzel, University of Texas.

PROFESSOR RAYMOND E. DAVIS, of the College of Engineering of the University of California, was installed as president of the American Concrete Insti-

tute at the close of the Chicago meeting. He succeeds Admiral Ben C. Morell, of the United States Navy.

At Fordham University, the Reverend Francis W. Power, S.J., has been promoted to a professorship in chemistry.

Dr. ROBERT H. SHULER, of the University of Chicago, has been appointed assistant professor of physiology at the School of Medicine of the University of Georgia.

Dr. RONALD F. BROWN, instructor in chemistry at Purdue University, was promoted to an assistant professorship of organic chemistry at the beginning of the second semester of the University of Southern California.

Dr. JAMES L. MORRISON, instructor in pharmacology at the West Virginia University School of Medicine, has been appointed instructor in pharmacology at the Medical School of Emory University.

Dr. ELSIE S. L'ESPERANCE has been placed at the head of a new cancer-prevention clinic for women at the Memorial Hospital for the Treatment of Cancer and Allied Diseases, New York. She is a member of the board of managers of the hospital and is one of the founders of the Kate Depew Strang Tumor Clinic at the New York Infirmary for Women and Children.

Dr. LEONA BAUMGARTNER, pediatrician, who has been acting director of the Bureau of Child Hygiene of the New York City Health Department, became director of the bureau in January.

The Borden Vitamin Company announces that Dr. Hugh H. Darby, research assistant in the department of biochemistry of the College of Physicians and Surgeons of Columbia University, has joined the staff for research and development in the production and application of vitamins and hormones.

Dr. ROBERT S. BREED, head of the division of bacteriology of the New York State Agricultural Experiment Station at Geneva, has leave of absence in order to conduct a survey of dairy research and education in South America for the Inter-American Committee for the Dairy Industry.

MEMBERS of the faculty of the University of Michigan who are serving under the National Defense program include in the sciences: Elmore S. Pettyjohn, associate professor of chemical and metallurgical engineering; Walter C. Sadler, professor of civil engineering; Jesse Ormondroyd, professor of engineering mechanics; Robert B. Hall, professor of geography; Preston E. James, professor of geography, and Samuel A. Goudsmit, professor of physics.

Dr. MAXWELL E. LAPHAM, dean of the School of Medicine of Tulane University of Louisiana, has left

for Washington to work in the Bureau of Medicine and Surgery, U. S. Navy. In his absence Dr. Hiram W. Kostmayer, director of the department of graduate medicine, has been appointed acting dean.

Dr. W. R. HUTCHERSON, head of the department of mathematics at Berea College, Kentucky, has been granted leave of absence which he is spending at Brown University on a defense mechanics fellowship. His work at Berea College will be carried on by Professor D. W. Pugsley; Dr. Waldemar Noll, head of the department of physics, is teaching in the College of the City of New York.

Dr. WILLIAM J. ROBBINS, of the New York Botanical Garden, gave on February 26 a lecture before the Lancaster Branch of the American Association for the Advancement of Science. His lecture, which was illustrated with colored motion pictures, was entitled "Plant Life in a Botanical Garden."

Dr. DONALD D. VAN SLYKE, of the Rockefeller Institute for Medical Research, New York City, and Dr. Warfield T. Longcope, professor of medicine at the Johns Hopkins University, gave the Abraham Flexner lectures at the School of Medicine of Vanderbilt University. Dr. Van Slyke spoke on the "Physiology of the Kidney" and "Renal Function in Diseases of the Kidney" on February 2 and 3, and Dr. Longcope on "Clinical Nephritis" on February 5 and 6.

A SYMPOSIUM entitled "What Is Research?" was presented on February 20 at a meeting in New York City of the American Section of the Society of Chemical Industry, held jointly with the American Institute of Chemical Engineers. Dr. Lincoln T. Work, director of research of the Metal and Thermit Corporation, presided over the meeting and introduced the subject "Research," which was discussed "from the Consultant's Viewpoint" by Frank G. Breyer, of Singmaster and Breyer; "from the Industrial Viewpoint" by Dr. George O. Curme, Jr., vice-president of the Carbide and Carbon Chemicals Corporation; and "from an Institutional Viewpoint" by Dr. L. W. Bass, assistant director of research at Mellon Institute.

THE thirteenth annual meeting of the American Association of Physical Anthropologists will be held at Harvard University on April 16, 17 and 18. Two symposia are planned, one for Thursday on "Fossil Man and Primates" and one on Friday on "Techniques and Interests of Physical Anthropologists." The annual dinner will be given on Friday, and will be followed by a motion picture of Point-Hope Eskimos which will be presented by Dr. H. L. Shapiro.

THE three hundred and eighty-sixth meeting of the American Mathematical Society will be held at Columbia University, New York City, on Friday and Sat-

urday, April 3 and 4. On Friday afternoon, there will be a symposium on topics in the theory of functions, consisting of two addresses, "On Entire Functions of Exponential Type," by Dr. R. P. Boas, of Duke University, and "On the Zeros of the Derivatives of a Function and Its Analytic Character," by Professor George Polya, of Smith College. The discussion leaders are Professors Norman Levinson, of the Massachusetts Institute of Technology, and I. J. Schoenberg, of the University of Pennsylvania. A symposium on aeronautics is being arranged for Saturday afternoon. One of the speakers will be Dr. Theodore Theodorsen, of Langley Field, Virginia, whose subject is "Theory of Wing Flutter." The discussion leader will be Professor Willy Prager, of Brown University.

THE next general meeting of the International Association for Dental Research will be held in the Commodore Hotel, New York City, on March 14 and 15. It will be followed by a meeting of the American Association of Dental Schools which will be held on March 16, 17 and 18.

AN examination for appointment as assistant sanitary engineer in the Regular Commissioned Corps of the U. S. Public Health Service will be held at Washington, D. C.; Cincinnati, Ohio; New Orleans; Kansas City and San Francisco, at 9 A.M. on May 11. Candidates must be not less than twenty-three years nor more than thirty-two years of age on that date and must have had at least seven years of educational (exclusive of high school) and professional training, or experience equivalent thereto; and shall have graduated from a reputable professional school granting a degree in engineering (sanitary engineering course). In addition the applicant will be required to pass a satisfactory physical, academic and professional examination. Commissioned officers are not appointed to any particular station, but to general service. They are subject to change of station as the exigencies of the service may require and shall serve wherever assigned to duty. Compensation, including allowance for quarters and subsistence, will be \$3,158 and \$2,699 for officers with and without dependents, respectively.

THE American Library Association has established a Committee on Aid to Libraries in War Areas, with John R. Russell, librarian of the University of Rochester, as chairman. After the first World War there was difficulty in completing foreign institutional sets of American scholarly, scientific and technical periodicals. The attempt to avoid a duplication of that situation is now the concern of the committee. Many sets of journals will be broken by the financial inability of the institutions to renew subscriptions. Many

more will have been broken through mail difficulties and loss of shipments and the destruction of libraries. The size of the eventual demand is impossible to estimate. In so far as possible, sets will be completed from a stock of periodicals being purchased by the committee. With an imminent paper shortage, attempts are being made to collect old periodicals for pulp. Fearing this possible reduction to the already limited supply of scholarly and scientific journals, the committee hopes to enlist cooperation to prevent the sacrifice of this type of material. Information in regard to the project can be obtained from Wayne M. Hartwell, executive assistant to the Committee on Aid to Libraries in War Areas, Rush Rhees Library, University of Rochester, Rochester, N. Y.

THE Science-Technology group of the national Special Libraries Association has undertaken to compile, for the benefit of users of the Russian scientific and technical periodicals, current or otherwise, a complete list of the holdings of such periodicals in all the libraries of the United States and Canada, so far as possible, whether personal, institutional or industrial. Owners and librarians in charge of such materials are asked to cooperate by sending a detailed statement of their holdings to Miss Nathalie D. Frank, 512 West 162nd Street, New York City. It should be stated whether or not the journals can be borrowed on inter-library loan and whether the library has facilities for photostating or microfilming.

THE Executive Committee of the National Parks Association met recently in Washington and agreed upon the importance of carrying on its educational program. It is planned to continue advocacy of National Primeval Parks as a distinct category, to promote worthy park projects that have already been authorized, to encourage appreciation and proper use of America's natural and historic heritage, to combat each threat of commercial encroachment upon our protected reservations, and to divert destructive uses of all kinds from this country's superlative natural areas.

THE newly established French School of Higher Learning has opened its courses in the building of the New School for Social Research. Professor Boris Mirkine-Guetzevitch gave his first lecture on the constitutional history of France, beginning with the French revolution; Professor Fred G. Heffherr spoke of the history of French civilization, and Professor Georges Gurvitch, of French sociology. All lectures are given in French. The school has at present a faculty of letters and a faculty of law and a special institute of Oriental and Slavic studies. The faculty of science under Professor Jean Perrin will be organized later.