

Foods". Dr. Cox assumed that, in normal times, fortification will be optional and not compulsory. If optional fortification becomes general, the law will need fortification to deal with the chaotic conditions which would probably result from wild claims made for various fortified foods. At present the Ministry of Food has control of fortification, but, in times of peace this control should pass to the Ministry of Health, when fresh legislation will be necessary to empower the Minister to issue regulations covering fortification. Indeed, Dr. Cox argued that the present activities of the Ministry of Food are directly contrary to the will of Parliament as expressed in the Foods and Drugs Act 1938.

According to this Act the Ministry of Health may restrict or prohibit additions to food, but has no power to order that additions be made. When the emergency control of the Ministry of Food is ended, the new regulations should prescribe maximum and minimum limits for fortification as is now being done in the United States. These limits must be capable of detection by analysis, hence the urgent need for the standardization of methods of analysis. Eventually this analytical control should be done by the public analyst and not by nominees of the Ministry of Food. If the public analyst is to guard the public against fraudulent claims, all fortified foods must be clearly marked with the actual amount of added nutrient present in the food, and no vague claims that vitamins have been added should be allowed.

The final paper, on "Analysis of Fortified Foods", was given by H. E. Monk. As methods of analysis for minerals are well known, Mr. Monk confined his remarks to a well-balanced summary of the methods of analysis for vitamins and of the difficulties likely to be encountered by the public analyst employing these methods. Since fortification with vitamins is to be carried out for nutritional purposes, it might appear at first sight that biological assay should be used when possible. Chemical and physical methods have the advantages of speed, accuracy and cheapness and, except possibly for vitamin D, are likely to replace the lengthy biological assays. Microbiological assay such as is used for riboflavin should not, however, be excluded.

To carry out a physical or chemical estimation it is first necessary to extract the vitamin from the foodstuff, and great care is needed to ensure that this extraction is complete. Having obtained the vitamin extract, precautions must be taken against loss during the estimation. Finally, the method used should be specific for the vitamin, and in cases of doubt, alternative methods should be used wherever possible in order to guard against erroneous results due to the presence of interfering substances.

In the spirited discussion which followed, repeated reference was made to the necessity for disclosing the vitamin content of fortified foods. Thus it was stated that the vitamin D content of margarine has recently been doubled in order to make up for the lack of eggs. Only three members present admitted that they were aware of this change.

It was generally agreed that the meeting had been one of the most successful of its kind and that the knowledge of the tasks which lay ahead should inspire the chemist to investigate the accuracy of present methods and devise new methods for the rapid estimation of vitamins.

E. R. D.

## FORTHCOMING EVENTS

SATURDAY, DECEMBER 20

BRITISH PSYCHOLOGICAL SOCIETY (at Tavistock House, Tavistock Square, London, W.C.1.), at 11 a.m.—Discussion on "Problems Affecting the Under-Fives in Total War"

## APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

LECTURER IN THE DEPARTMENT OF CIVIL AND MECHANICAL ENGINEERING—The Registrar, The University, Leeds 2 (December 29).

EDUCATIONAL PSYCHOLOGIST and a PSYCHIATRIST—The Secretary for Education, Education Offices, York (December 30).

TEACHER OF ENGINEERING DRAWING in the Department of Mathematics and Physics of the Polytechnic, Regent Street, London, W.1, now at Lancaster—Dr. J. Topping, Storey Institute Technical College, Lancaster.

## REPORTS AND OTHER PUBLICATIONS

(not included in the monthly Books Supplement)

### Great Britain and Ireland

Proceedings of the Royal Irish Academy. Vol. 47, Section A, No. 1: On the Solutions of Wave Equations for Non-Vanishing Rest-Mass including a Source-Function. By Erwin Schrödinger. Pp. 24. 1s. Vol. 47, Section A, No. 2: Experiments on Condensation Nuclei. By P. J. Nolan. Pp. 25-38. 1s. Vol. 47, Section B, No. 1: Descriptions of Five New Species of Atyshidae (Hymenoptera) and Notes on some Others. By A. W. Stelfox. Pp. 16. 1s. Vol. 47, Section B, No. 2: The Cytoplasmic Bodies of Drosera. By J. Brontë Gatenby and J. D. Smyth. Pp. 17-20. Vol. 47, Section B, No. 3: The Nuclear Apparatus as shown by Feulgen's "Nuclealfärbung" Reaction. By Mildred M. Moore. Pp. 21-52. 2s. Vol. 47, Section B, No. 4: A List of the Microlepidoptera of Ireland. By Bryan P. Beirne. Pp. 53-148. 4s. Vol. 47, Section B, No. 5: The Neck Body in Normal and X-radiated Insect Spermatogenesis. By J. Brontë Gatenby. Pp. 149-160. 1s. (Dublin: Hodges, Figgis and Co., Ltd.; London: Williams and Norgate, Ltd.) [2411]

### Other Countries

U.S. Office of Education: Federal Security Agency. Bulletin 1940, No. 6 (Monograph No. 14): Supervision of Health and Physical Education as a Function of State Departments of Education. By Dr. James Frederick Rogers. (Studies of State Departments of Education.) Pp. vi+106. (Washington, D.C.: Government Printing Office.) 15 cents. [1311]

Cornell University Agricultural Experiment Station. Bulletin 748: Fertilizers and Field Crops. 1: Results of Sixteen Years of Experiments on Volusia Silt Loam in Allegany County, New York. By E. L. Worthen. Pp. 28. Bulletin 749: Fertilizers and Field Crops. 2: Results of Sixteen Years of Experiments on Homeoye Silty Clay Loam in Monroe County, New York. By E. L. Worthen. Pp. 26. Bulletin 750: Fertilizers and Field Crops. 3: Results of Twenty Years of Experiments on Volusia Silt Loam in Cortland County, New York. By E. L. Worthen. Pp. 16. Bulletin 751: Costs of Farm Power and Equipment. By J. P. Hertel and Paul Williamson. Pp. 38. Bulletin 752: Studies on the Control of Internal Breakdown of Table Beets by the use of Boron. By G. J. Raleigh, O. A. Lorenz and C. B. Sayre. Pp. 16. Bulletin 754: A Comparative Study of High-Temperature, Short-Time, and Holder Pasteurization. By A. Millenky and H. J. Brueckner. Pp. 26. Bulletin 756: Costs and Returns from Farm Enterprises. By Paul S. Williamson. Pp. 41. Bulletin 762: Controlled-Atmosphere Storage of Apples. By R. M. Smock and A. Van Doren. Pp. 45. Bulletin 766: Controlling the Pre-Harvest Drop of Apples. By M. B. Hoffman. Pp. 18. Memoir 234: Studies on Bitter Pit of Apple. By R. M. Smock. Pp. 45. Memoir 235: A Study of Dormancy in Seeds of Polygonum. By Oren L. Justice. Pp. 43. Memoir 237: Reproduction of the Field Mouse *Microtus pennsylvanicus* (Ord). By W. J. Hamilton, Jr. Pp. 23. (Ithaca, N.Y.: Cornell University.) [1311]

Proceedings of the California Academy of Sciences, Fourth Series. Vol. 22, No. 11: The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 40: The Genus *Scaleasia*. By John Thomas Howell. Pp. 221-272. Vol. 23, No. 30: Notes on a California Earthworm, *Plutellus papillifer* (Eisen, 1893). By Gordon E. Gates. Pp. 443-452. (San Francisco: California Academy of Sciences.) [1311]

U.S. Department of Agriculture. Circular No. 610: Adsorption of Mercuric Chloride from Solution by *Gladiolus Corms*. By R. H. Nelson and C. C. Cassil. Pp. 12. (Washington, D.C.: Government Printing Office.) 5 cents. [1311]

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