

APPOINTMENTS VACANT

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

TEACHERS OF ELECTRICAL ENGINEERING—The Principal, County Mining and Technical School, Nuneaton, Warwickshire (January 3).

EXPERIMENTAL OFFICERS (male or female) in the Chemical Inspection Department, Woolwich, or at Provincial Stations in Great Britain—The Ministry of Supply (S.E.3.B), The Adelphi, W.C.2 (quoting Appts. 016/S.E.3(B) (January 4).

A MASTER FOR PHYSICS AND MATHEMATICS—P. Abson, Haberdashers' Aske's School, Chase Lodge, N.W.7.

TEMPORARY METEOROLOGICAL ASSISTANTS (male) in the Meteorological Office—The Under-Secretary of State, S.2.B.(Met.), Department Q.J., Air Ministry, Adastral House, Kingsway, W.C.2.

A PART-TIME TEACHER OF ENGINEERING DRAWING—The Director of Education, The Polytechnic, 309 Regent Street, W.1.

REPORTS AND OTHER PUBLICATIONS

(not included in the monthly Books Supplement)

Great Britain and Ireland

Proceedings of the Royal Irish Academy. Vol. 45, Section A, No. 5: On Matrices of Quaternions and the Representation of Eddington's E-Numbers. By W. H. McCrea. Pp. 65-72. Vol. 45, Section B, No. 13: Larval Stages of the Euphausiid *Thysanopoda acurifrons* (Holt and Tattersall) taken off the South-West Coast of Ireland. By Winifred E. Frost. Pp. 301-320. 1s. 6d. Vol. 45, Section B, No. 14: River Development in Southern Ireland. By A. Austin Miller. Pp. 321-354. 2s. Vol. 45, Section B, No. 15: The Significance of Monomolecular Layers of Fatty Acids in the Control of Animal Oxidation. By J. M. O'Connor. Pp. 355-372. 1s. (Dublin: Hodges, Figgis and Co., Ltd.; London: Williams and Norgate, Ltd.) [3011]

Department of Scientific and Industrial Research. Methods for the Detection of Toxic Gases in Industry. Leaflet No. 11: Aniline Vapour. Pp. iv+9. (London: H.M. Stationery Office.) 3d. net. [3011]

Charity and the Struggle for Existence. (The Huxley Memorial Lecture for 1939.) By Dr. R. R. Marett. Pp. 14. (London: Royal Anthropological Institute.) [112]

University of Reading: National Institute for Research in Dairying. Annual Report for the Year ending 30th September 1938. Pp. 96. (Shinfield, Reading: National Institute for Research in Dairying.) [112]

University of Cambridge: Solar Physics Observatory. Twenty-seventh Annual Report of the Director of the Solar Physics Observatory to the Solar Physics Committee, 1938 August 1-1939 July 31. Pp. 4. (Cambridge: Solar Physics Observatory.) [412]

National Institute of Industrial Psychology. Annual Report and Statement of Accounts for the Year ended 30 September 1939. Pp. 24. (London: National Institute of Industrial Psychology.) [412]

Philosophical Transactions of the Royal Society of London. Series A: Mathematical and Physical Sciences. No. 791, Vol. 233: The Effects of Thunderstorms and Lightning Discharges on the Earth's Electric Field. By Dr. T. W. Wormell. Pp. 249-303+plates 2-17. (London: Cambridge University Press.) 22s. [512]

University of Sheffield. Summaries of Theses submitted by Successful Candidates for Higher Degrees, Session 1938-39. Pp. 4. (Sheffield: The University.) [612]

British Museum and British Museum (Natural History). Annual Report of the General Progress of the Museums for the Year 1938. Pp. 20. (London: H.M. Stationery Office.) 6d. net. [712]

Department of Scientific and Industrial Research. Methods for the Detection of Toxic Gases in Industry. Leaflet No. 8: Phosgene. Pp. iv+8+2 plates. 2s. 6d. net. Leaflet No. 9: Arsine. Pp. iv+6+2 plates. 2s. 6d. net. (London: H.M. Stationery Office.) [812]

Other Countries

National Research Council of Japan. Report. Vol. 2, No. 8, April 1938-March 1939. Pp. iii+609-723. (Tokyo: National Research Council of Japan.) [2911]

Journal of the Indian Institute of Science. Vol. 22A, Part 16: The Relation between the Iodine Values and Refractive Indices. Part 3: Hardened Safflower Oil. By R. V. Joglekar and S. K. K. Jatkari. Pp. 219-224. 10 annas. Vol. 22A, Part 17: Reactions of Chromates at High Temperatures. Part 10: Decomposition of Mixtures of Calcium Chromate with Sodium Carbonate and with Ferric Oxide. By D. S. Datar and S. K. K. Jatkari. Pp. 225-236. 1 rupee. Vol. 22A, Part 18: Researches on Utilisation of Cane Molasses. Part 5: Nitrogen Fixation by the Solid-Lime Compound in the Soil and its Bearing on Plant Growth. By T. R. Bhaskaran, S. C. Pillai and V. Subrahmanyam. Pp. 237-247. 1 rupee. (Bangalore: Indian Institute of Science.) [2911]

Symposium on Molecular Spectra, held in August 1934. (Supplement to the "Proceedings of the Indian Academy of Sciences".) Pp. 129. (Bangalore: Indian Academy of Sciences.) 2 rupees; 3s. [2911]

Wood is Good. No. 1: Vencers. By W. Nagle. (Woodworking Series.) Pp. v+7+6 plates. (Dehra Dun: Forest Research Institute.) [3011]

Canada: Department of Mines and Resources, Mines and Geology Branch. Geological Survey Paper 39-4: Preliminary—The Stratigraphy and Structure of Turner Valley, Alberta. By G. S. Hume. Pp. iii+20. (Ottawa: King's Printer.) 10 cents. [3011]

Astrophysica Norvegica. Vol. 3, No. 5: The Meteor Train of March 24, 1935. By Carl Størmer. Pp. 117-133+3 plates. Vol. 3, No. 6: Über die Schwingungen eines stabil geschichteten, durch Meridiane begrenzten Meeres. Von Egil A. Hylleberg. Pp. 139-164. (Oslo: Jacob Dybwad.) [3011]

Svenska Linné-Sällskapet Årsskrift. Årgång 22, 1939. Pp. vi+148. (Uppsala: Almqvist and Wiksells Boktryckeri A.-B.) [3011]

Ministry of Agriculture, Egypt: Technical and Scientific Service. Bulletin No. 221: Water-Table Effects. 4: Relative Incidence of Diseases on Cucurbits. By Dr. Amin Fikry. Pp. ii+9+19 plates. P.T. 3. Bulletin No. 225: An Expedition to Arabia for Locust Investigations. By M. Hussein. Pp. ii+22+10 plates. P.T. 2. (Cairo: Government Press.) [3011]

Report on the Administration of the Meteorological Department of the Government of India in 1938-39. Pp. iii+41+4 plates. (Delhi: Manager of Publications.) 14 annas; 1s. 3d. [112]

Journal of the Indian Institute of Science. Vol. 22A, Part 15: The Effect of Refining on the Digestibility of Edible Oils and Fats. By F. G. T. Menezes and B. N. Banerjee. Pp. 203-218. (Bangalore: Indian Institute of Science.) 1.2 rupees. [112]

National Institute of Sciences of India. Symposium on Coal in India (August 25-26, 1939): Abstracts of Papers. Pp. 20. (Calcutta: National Institute of Sciences of India.) [112]

The Observer's Handbook for 1940. (Thirty-second Year of Publication.) Pp. 80. (Toronto: Royal Astronomical Society of Canada.) [412]

Publications of the Dominion Observatory, Ottawa. Vol. 13: Bibliography of Seismology. No. 2: Items 4379-4503, April, May, June, 1939. By Ernest A. Hodgson. Pp. 25-44. (Ottawa: King's Printer.) 25 cents. [412]

Ministry of Finance, Egypt: Survey and Mines Department. Contributions to the Geography of Egypt. By Dr. John Ball. Pp. xv+208+9 plates. (Cairo: Government Press.) P.T. 50; 10s. 6d. [412]

U.S. Department of the Interior: Office of Education. Bulletin, 1937, No. 2: Biennial Survey of Education, 1934-1936. Vol. 2. Pp. iv+972+4. (Washington, D.C.: Government Printing Office.) [512]

Annals of the New York Academy of Sciences. Vol. 39, Art. 3: Electrophoresis. By Harold A. Abramson, Edwin J. Cohn, Bernard D. Davis, Frank L. Horsfall, Lewis G. Longworth, D. A. MacLimes, Hans Mueller and Kurt G. Stern. Pp. 105-212. (New York: New York Academy of Sciences.) [512]

Geological Series of Field Museum of Natural History. Vol. 6, No. 25: A Specimen of *Elasmosaurus serpentinus*. By Elmer S. Riggs. Pp. 385-392. 10 cents. Vol. 6, No. 26: *Nanodelphys*, an Oligocene Didelphine. By Paul O. McGraw. Pp. 393-400. 15 cents. Vol. 7, No. 5: Radioactive Determination of Proactinium in Siliceous Terrestrial and Meteoritic Material. By Robert D. Evans, Jane L. Hastings and Walter C. Schumb. Pp. 71-78. 15 cents. (Chicago: Field Museum of Natural History.) [512]

University of Illinois: Engineering Experiment Station. Bulletin Series No. 316: The Effect of Range of Stress on the Torsional Fatigue Strength of Steel. By James O. Smith. Pp. 38. 45 cents. Bulletin Series No. 317: Fatigue Tests of Connection Angles. By Wilbur M. Wilson and John V. Coombe. Pp. 24. 30 cents. Circular Series No. 39: Papers presented at the Fifth Short Course in Coal Utilization held at the University of Illinois, May 23-25, 1939. Pp. 174. 50 cents. Reprint Series No. 15: Stress, Strain and Structural Damage. By Herbert F. Moore. Pp. 24. 15 cents. (Urbana, Ill.: University of Illinois.) [512]

Ceylon Journal of Science. Catalogue of the Contents of Ceylon Journal of Science Publications. Pp. iv+78. (Colombo: Colombo Museum.) [612]

Advisory Board of the Imperial College of Tropical Agriculture. Report on the Department of Agriculture, St. Lucia, 1938. Pp. iv+60. (St. Lucia: Government Printing Office.) 6d. [612]

U.S. Department of the Interior: Office of Education. Bulletin, 1939, No. 4: The School Auditorium as a Theater. By Alice Burrows and Lee Simonson. Pp. v+51. 10 cents. Vocational Division Bulletin No. 200 (Trade and Industrial Series No. 58): Related Instruction for Plumber Apprentices. By Robert W. Hiambrook. Pp. xi+87. 15 cents. (Washington, D.C.: Government Printing Office.) [612]

Rubber Research Institute of Malaya. Annual Report 1938. Pp. 226. (Kuala Lumpur: Rubber Research Institute of Malaya.) 1 dollar. [712]

Indian Central Cotton Committee. Annual Report of the Director, Technological Laboratory, for the Year ending 31st May 1939. Pp. 42. 6 annas. Technological Bulletin, Series A, No. 50: Technological Reports on Trade Varieties of Indian Cottons, 1939. By Dr. Nazir Ahmad. Pp. vi+109. 1-8 rupees. (Bombay: Indian Central Cotton Committee.) [712]

Proceedings of the United States National Museum. Vol. 87, No. 3074: A Revision of the Soapfishes of the Genus *Ryphticus*. By Leonard P. Schultz and Earl D. Reid. Pp. 261-270. (Washington, D.C.: Government Printing Office.) [712]

Proceedings of the American Academy of Arts and Sciences. Vol. 73, No. 5: Chang Po-tuan of T'ien-T'ai, his Wu chên p'ien. Essay on the Understanding of the Truth; a Contribution to the Study of Chinese Alchemy. By Tenney L. Davis and Chao Yün-t'ung. Pp. 97-118. (Boston, Mass.: American Academy of Arts and Sciences.) 70 cents. [712]

Catalogues, etc.

Practical Hints on the Use and Maintenance of Platinum Laboratory Apparatus. (Publication No. 47.) Pp. 16. (London: Johnson, Matthey and Co., Ltd.)

Roxburghe Club Publications. (No. 643.) Pp. 8. Books on Scandinavia and Northern Europe. (No. 644.) Pp. 14. (London: Francis Edwards, Ltd.)