

With three instruments distributed as already indicated, some storms have been recorded simultaneously at each site, and thus a location of the source has been obtained. It is frequently not possible, however, to locate in this way the widespread storms which are common in summer, as the extent of the storm is often of the same order as its distance from the recording instrument. Experience indicates that the records of a single instrument provide ample warning of the occurrence of a storm in the district; and the author appears to doubt whether it is worth while to use, for this purpose, several instruments with the necessary telephone communication facilities between the sites.

The later portions of the paper point out that the recording apparatus set up for the above application may also be used to obtain a permanent and objective record of thunderstorm activity over certain areas; and a comparison is made between such records and the statistics on the frequency of thunderstorms obtained from observers' reports. Diagrams in the paper indicate typical diurnal variations of atmospheric and the general contrast between summer and winter conditions. In the winter months, there is relatively little variation in intensity throughout the twenty-four hours; whereas in the summer, the intensity is on the whole much greater, with a pronounced maximum in the afternoon between 1500 and 1600 G.M.T. In conclusion, it is worth remarking that for storms within the range of the instrument, the rate at which lightning flashes are recorded has been found to vary from seven per hour to eighty per hour, the lower rate being associated with winter storms.

## FORTHCOMING EVENTS

(Meeting marked with an asterisk is open to the public)

### Saturday, March 6

GEOLOGISTS' ASSOCIATION (at the Geological Society of London, Burlington House, Piccadilly, London, W.1), at 2.30 p.m.—Annual General Meeting. Prof. H. H. Read, F.R.S.: "Meditations on Granite" (Presidential Address).

### Saturday, March 6—Sunday, March 7

INSTITUTE OF INDUSTRIAL ADMINISTRATION (at the Waldorf Hotel, Aldwych, London, W.C.2). Conference on "Training for Industrial Management".\*

### Saturday, March 6

10 a.m.—Management and the Nation.  
11.15 a.m.—Address by His Grace the Lord Archbishop of Canterbury.  
12.30 p.m.—Management and Industry.  
3 p.m.—External Training for Industry.  
5.30 p.m.—Internal Training in Industry.

### Sunday, March 7

10 a.m.—Management and the Board Room.  
11.30 a.m.—Review of Conference.

### Monday, March 8

ROYAL GEOGRAPHICAL SOCIETY (at Kensington Gore, London, S.W.7), at 5 p.m.—Mijnheer Wibo Peekema: "Javanese Colonization of Sumatra".

### Wednesday, March 10

ROYAL SOCIETY OF ARTS (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Miss M. Digby: "Agriculture To-day and To-morrow", 6: "Co-operation as a Factor in Agricultural Stability".

### Friday, March 12

ROYAL INSTITUTION (at 21 Albemarle Street, London, W.1), at 5 p.m.—Sir Lawrence Bragg, F.R.S.: "Seeing Ever-smaller Worlds".

## APPOINTMENTS VACANT

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

LECTURER IN CIVIL AND MECHANICAL ENGINEERING—The Principal, Huddersfield Technical College, Huddersfield (March 15).

LECTURER IN ELECTRICAL ENGINEERING in the Oxford Schools of Technology, Art and Commerce—The Chief Education Officer, 77 George Street, Oxford (March 15).

TEACHER OF MECHANICAL ENGINEERING SUBJECTS, and a TEACHER OF MATHEMATICS AND/OR SCIENCE—The Principal, Luton Technical College, Park Square, Luton, Beds. (March 15).

VETERINARY INVESTIGATION OFFICER for the Aberystwyth Advisory Province—The Principal, University College of Wales, Aberystwyth (March 20).

TEACHER OF MECHANICAL ENGINEERING—The Principal, Wolverton Technical College, Wolverton, Bucks. (March 22).

SCIENCE ASSISTANT TO ASSIST IN THE LABORATORIES—The Acting Headmistress, County School for Girls, Beaverwood Road, Perry Street, Chislehurst, Kent.

LECTURER IN CHEMISTRY—The Secretary, Woolwich Polytechnic, Woolwich, London, S.E.18.

## REPORTS and other PUBLICATIONS

(not included in the monthly Books Supplement)

### Great Britain and Ireland

Medical Research Council: Committee on the Care of Shipwrecked Personnel. A Guide to the Preservation of Life at Sea after Shipwreck. (M.R.C. War Memorandum No. 8.) Pp. 22. (London: H.M. Stationery Office.) 4d. net. [201]

Geological Survey of Great Britain: England and Wales. Wartime Pamphlet No. 31: Some Refractory Materials in North-Eastern England. By R. G. Carruthers and W. Anderson. Pp. 19. (London: Geological Survey and Museum.) 1s. [211]

Experimental Researches and Reports published by the Department of Glass Technology, The University, Sheffield. Vol. 24, 1941. Pp. iv+342. (Sheffield: The University.) 7s. 6d. [211]

Department of Scientific and Industrial Research. Index to the Literature of Food Investigation. Vol. 14, No. 1, June 1942. Compiled by Agnes Elisabeth Glennie assisted by Catherine Alexander. Pp. iv+72. (London: H.M. Stationery Office.) 4s. 6d. net. [271]

### Other Countries

Bulletin of the American Museum of Natural History. Vol. 80, Art. 8: A Second Supplement to the American Land and Fresh-Water Isopod Crustacea. By Willard G. Van Name. Pp. 299-320. (New York: American Museum of Natural History.) [201]

Annals of the New York Academy of Sciences. Vol. 43, Art. 5: The Ultracentrifuge. By D. A. MacInnes, W. J. Archibald, J. W. Beams, W. B. Bridgman, Alexandre Rothen and J. W. Williams. Pp. 173-251. (New York: New York Academy of Sciences.) [211]

U.S. Department of Agriculture. Technical Bulletin No. 834: Morphology and Composition of some Soils of the Miami Family and the Miami Catena. By Irwin C. Brown and James Thorp. Pp. 55. (Washington, D.C.: Government Printing Office.) 10 cents. [211]

Bulletin of the American Museum of Natural History. Vol. 80, Art. 7: Results of the Archbold Expeditions, No. 47: Review of the Vespertilionine Bats, with special attention to Genera and Species of the Archbold Collections. By G. H. H. Tate. Pp. 221-298. (New York: American Museum of Natural History.) [211]

League of Nations: Economic Intelligence Service. Wartime Rationing and Consumption: (Publication 1942.II.A.2). Pp. 87. (Geneva: League of Nations: London: George Allen and Unwin, Ltd.) 3s. 6d. [221]

Pushkin: a Collection of Articles and Essays on the Great Russian Poet A. S. Pushkin. Pp. 188+79 plates. (Moscow: U.S.S.R. Society for Cultural Relations with Foreign Countries.) [251]

Smithsonian Miscellaneous Collections. Vol. 103, No. 8: The 1914 Tests of the Langley 'Aerodrome'. By C. G. Abbot. (Publication 3699.) Pp. ii+8. (Washington, D.C.: Smithsonian Institution.) [251]

U.S. Office of Education: Federal Security Agency. Bulletin 1942, No. 1: Opportunities for the Preparation of Teachers in Health Education; a Survey of 20 Teachers Colleges. By Dr. Earl E. Kleinschmidt. Pp. vii+117. (Washington, D.C.: Government Printing Office.) 20 cents. [251]

Proceedings of the United States National Museum. Vol. 92, No. 3148: Osteology of Polyglyphandon, an Upper Cretaceous Lizard from Utah. By Charles W. Gilmore. Pp. 229-266+plates 24-28. Vol. 92, No. 3149: Notes and New Species of Microlepidoptera from Washington State. By J. F. Gates Clarke. Pp. 267-276+plates 27-32. Vol. 92, No. 3150: The Genotypes of some of Ashmead's Genera of Ichneumon-Flies. By R. A. Cushman. Pp. 277-290. (Washington, D.C.: Government Printing Office.) [251]

Bulletin of the Madras Government Museum. New Series, General Section, Vol. 4: Amaravati Sculptures in the Madras Government Museum. By C. Sivaramamurti. Pp. xviii+376+65 plates. (Madras: Government Press.) 14-8 rupees. [271]

Indian Forest Records (New Series). Botany, Vol. 3, No. 7: A Sketch of the Flora of the Bailadila Range in Bastar State. By H. F. Mooney. Pp. iv+197-253. (Delhi: Manager of Publications.) 2.6 rupees; 4s. [271]