

character of the two types of preliminary waves of an earthquake.

The seismograph room is in the basement of the main college building, the approximate geographical location being latitude  $41^{\circ} 45' N.$ , longitude  $111^{\circ} 47' W.$  The station is equipped with two horizontal component Wood-Anderson seismographs bought with the gift, and an accelerograph installed by the United States Coast and Geodetic Survey. The seismometers are mounted on concrete blocks 28 cm. high, keyed into the surface of a pier, resting in well-cemented gravels of the Bonneville delta, and standing at a height of 4,772.3 ft. above sea-level. Installation of the accelerograph was completed in July 1939 and the Wood-Anderson instruments began operation on January 26, 1940. Since October 1, 1940, all seismograms have been checked by the United States Coast and Geodetic Survey, and the results will be published in the monthly seismographic report.

The north-south seismometer has a static magnification of 716.8, the east-west seismometer one of 697.9. The period for both is maintained at 6.0 seconds, the damping ratio at 20 : 1. The recording drum has so far been run at 15 mm./m. The seismometers are in protective coverings which are also provided with water cans in an attempt to eliminate temperature variations near the instruments. The accelerograph, lent and maintained by the United States Coast and Geodetic Survey, is a No. M-45, with a 12-in. recorder, and has three components.

The site appears to be a particularly happy one, especially for the accelerographs, since Utah appears to be the most seismically active of the Rocky Mountain States. This latter may be related to the zone of faulting that marks the eastern margin of the Great Basin. One centre of activity has been in Washington and Iron Counties, adjacent to the Hurricane fault, and another centre lies in Sevier County between the Tushar and Sevier faults. Nearly one third of the earthquakes of Utah have occurred close to the Wasatch fault.

## FORTHCOMING EVENTS

(Meetings marked with an asterisk are open to the public)

### Wednesday, May 27

PHYSICAL SOCIETY (COLOUR GROUP) at the Royal Photographic Society, 16 Princes Gate, London, S.W.7, at 2.30 p.m.—Discussion on "The Relative Merits of Spectrophotometry and Colorimetry" (to be opened by Miss Dorothy L. Tilleard).

INSTITUTE OF CHEMISTRY (LONDON AND SOUTH EASTERN COUNTIES SECTION) at 30 Russell Square, London, W.C.1, at 6 p.m.—Dr. H. Baines: "Recent Advances in Photographic Theory".

### Thursday, May 28

BRITISH PSYCHOLOGICAL SOCIETY (INDUSTRIAL SECTION) at the National Institute of Industrial Psychology, Aldwych House, Aldwych, London, W.C.2, at 1.20 p.m.—Miss May Smith: "Fatigue, a Revision of Past and Survey of Present Problems".

### Friday, May 29

ROYAL INSTITUTION OF GREAT BRITAIN (at 21 Albemarle Street, London, W.1), at 5.15 p.m.—Mr. Seton Gordon: "Wild Life in the Western Highlands".\*

BRITISH INSTITUTION OF RADIO ENGINEERS (LONDON SECTION) at the Federation of British Industries, 21 Tothill Street, London, S.W.1, at 7 p.m.—Mr. O. S. Puckle: "Time Bases".\*

INSTITUTE OF PHYSICS (MANCHESTER AND DISTRICT BRANCH) (in the Physics Department, University of Manchester), at 7 p.m.—Dr. J. McG. Bruckshaw: "Physics in the Search for Oil".\*

### Saturday, May 30

NUTRITION SOCIETY (at the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1), at 11 a.m.—Conference on "Problems of Collective Feeding in War-time".

## APPOINTMENTS VACANT

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

METALLURGIST for research work in connexion with problems attending colliery wire ropes and other coal-mining appliances—The Chief Executive Officer, Safety in Mines Research Laboratories, Portobello Street, Sheffield 1 (May 29).

SPEECH THERAPIST (WOMAN)—The Director of Education, Education Offices, Woodlands Road, Middlesbrough (May 30).

TEACHER OF MATHEMATICS and a TEACHER OF PHYSICS—The Principal, South-West Essex Technical College and School of Art, Forest Road, Walthamstow, London, E.17 (May 30).

LECTURER IN SCIENCE—The Principal, Domestic Science Training College, Knighton Fields, Leicester (May 31).

ELECTRICAL ENGINEER AND MANAGER—The Town Clerk, Town Hall, St. Helens, Lancs. (endorsed 'Appointment of Electrical Engineer and Manager') (June 1.)

SENIOR LECTURER (MAN OR WOMAN) in the SCIENCE DEPARTMENT of the City of Leeds Training College, with special qualifications in BIOLOGY—The Director of Education, Education Offices, Leeds 1 (June 1).

CHIEF LABORATORY STEWARD—The Principal, Technical College, Doncaster.

SENIOR WOMAN LECTURER IN BIOLOGY—The Principal, Southlands Training College (London), at Highbury, Atlantic Road, Weston-super-Mare.

MISTRESS TO TAKE CHARGE OF THE GENERAL SCIENCE WORK—The Headmistress, Day Technical School for Girls, Fort Pitt, Chatham.

## REPORTS and other PUBLICATIONS

(not included in the monthly Books Supplement)

### Great Britain and Ireland

South-West Essex Technical College and School of Art. Annual Report, Session 1940-41. Pp. 23+4 plates. (London: South-West Essex Technical College and School of Art, Walthamstow.) [45]

Proceedings of the Royal Irish Academy. Vol. 47, Section A, No. 6: Inherent Relations between Random Variables. By Dr. R. C. Geary. Pp. 63-76. 1s. Vol. 47, Section B, No. 13: R. Liffey Survey, 4: The Fauna of the Submerged "Mosses" in an Acid and an Alkaline Water. By Winifred E. Frost. Pp. 293-369+plate 6. 5s. Vol. 47, Section B, No. 14: The Exploration of some Caves near Castletown-roche, Co. Cork (Studies in Irish Quaternary Deposits, No. 4). By A. M. Gwynn, G. F. Mitchell and A. W. Steffox. Pp. 371-390+plate 7. 1s. 6d. Vol. 48, Section B, No. 1: The Distribution of Phytoplankton in some North-West Irish Loughs. By W. H. Pearsall and Edna M. Lind. Pp. 24. 1s. (Dublin: Hodges, Figgis and Co., Ltd.; London: Williams and Norgate, Ltd.) [45]

### Other Countries

Smithsonian Institution: United States National Museum. Bulletin 161: The Foraminifera of the Tropical Pacific Collections of the *Albatross*, 1899-1900. Part 3: Heterohellicidae and Buliminidae. By Joseph Augustine Cushman. Pp. v+67+15 plates. (Washington, D.C.: Government Printing Office.) 20 cents. [274]

Ministry of Finance: Survey of Egypt. Survey Paper No. 45: Map Projections in Practice. By J. H. Cole. Pp. iii+43. (Cairo: Survey of Egypt.) [304]

U.S. Department of Agriculture. Circular No. 632: Rice-Field Insects. By W. A. Douglas and J. W. Ingram. Pp. 32. (Washington, D.C.: Government Printing Office.) 10 cents. [15]

Indian Central Cotton Committee: Technological Laboratory. Technological Bulletin, Series A, No. 53: Technological Reports on Trade Varieties of Indian Cottons, 1941. By Dr. Nazir Ahmad. Pp. vii+103. 1.8 rupees. Technological Bulletin, Series A, No. 54: Technological Reports on Standard Indian Cottons, 1941. By Dr. Nazir Ahmad. Pp. ii+115. 1.8 rupees. (Bombay: Indian Central Cotton Committee.) [115]

Bureau of Education, India. Education in India in 1937-38. Pp. vii+109. 2.8 rupees; 4s. Education in India in 1938-39. Pp. vii+138. 3 rupees; 5s. (Delhi: Manager of Publications.) [115]

Indian Forest Records (New Series). Botany, Vol. 3, No. 2: Some Additions to the "Botany of Bihar and Orissa". By H. F. Mooney. Pp. v+63-120. 2 rupees; 3s. Botany, Vol. 3, No. 3: Five New Indian and Burmese Flowering Plants—*Ceropegia borii* M. B. Raizada, *Bauhinia lyrata* M. B. Raizada, *Neptunia robertsonii* M. B. Raizada, *Capparis chamoensis* M. B. Raizada, and *Phlogacanthus pochonii* M. B. Raizada. By M. B. Raizada. Pp. iii+121-128+5 plates. 14 annas; 1s. 3d. Botany, Vol. 3, No. 6: The Relict Vegetation of the Shillong Plateau, Assam. By Dr. N. L. Bor. Pp. v+152-195. 2.2 rupees; 3s. 6d. Silviculture, Vol. 4, No. 4: Investigations into Artificial Regeneration Details of the Dry Fuel Forests of Madras. By A. L. Griffith. Pp. iv+161-224+4 plates. 2.8 rupees; 4s. (Delhi: Manager of Publications.) [115]

Forest Research Institute, Dehra Dun. Leaflet No. 6: Note on some Experiments on Cork Substitutes. By Dr. D. Narayanamurti. Pp. ii+4+1 plate. Leaflet No. 7: A New Type of Veneer Drying Rack. By M. A. Rehman and Sultan Mohammad. Pp. ii+4+2 plates. (Dehra Dun: Forest Research Institute.) [115]

Herbertia. Vol. 8: Daylily edition. Edited by Hamilton P. Traub. Pp. 186 (27 plates). (Orlando, Fla.: American Amaryllis Society.) 3.25 dollars. [115]