

excursion to the mountain Vysoká in the Little Carpathians.—F. Němejc: Seeds of *Alethopteris rubescens*.—A. Glazunov: The nature of a crystallisation centre. From one crystallisation centre grows a series of crystals forming one, usually heterogeneous, grain (crystallite).

Mar. 6.—J. Petrboč: Molluscs of the Pleistocene terrace of the Danube near Russe in Bulgaria.—K. Petr: The separation of roots of algebraic equations according to the real parts.—B. Dratvová: The problem of causality.—Hrubý: Biometric observations on blossoms of *Anemona nemorosa* L.—L. Borovansky and Pexiderová: The growth of the body and the progression of ossification in girls from birth to eighteen years of age.

Official Publications Received.

BRITISH.

A Vertical Optical Bench and its use in Practical Light. By Prof. Mohd. A. R. Khan. Pp. 20. (Madras: Diocesan Press, Vepery.)
Proceedings of the Royal Physical Society, Sessions 1928-29, 1929-30, 1930-31. Vol. 22, Part 1. Pp. 74. (Edinburgh: Oliver and Boyd.) 6s.; to Fellows, 5s.

Madras Fisheries Department. Administration Report for the Year 1929-30. By Dr. B. Sundara Raj. (Report No. 1 of 1931, Madras Fisheries Bulletin, Vol. 25.) Pp. vii+104+6 plates. 14 annas. Report on a Systematic Survey of Deep-sea Fishing Grounds by S.T. *Lady Goshen*, 1927-28. By Dr. B. Sundara Raj. (Report No. 3 of 1929, Madras Fisheries Bulletin, Vol. 23.) Pp. 153-187+3 charts. 1.8 rupees. (Madras: Government Press.)

Department of Scientific and Industrial Research. Building Science Abstracts. Vol. 4, New Series, No. 5, May. Abstracts Nos. 748-959. (London: H.M. Stationery Office.) 9d. net.

The Indian Forest Records. Entomology Series, Vol. 16, Part 3: Immature Stages of Indian Coleoptera (8). (Cerambycidae, contd.) By J. C. M. Gardner. Pp. 41+3 plates. (Calcutta: Government of India Central Publication Branch.) 1.2 rupees; 2s.

The Scientific Journal of the Royal College of Science. Vol. 1: containing Papers read during the Session 1930-1931, before the Imperial College Chemical Society, the Royal College of Science Natural History Society, the Royal College of Science Mathematical and Physical Society. Pp. 158. (London: Imperial College Union.) 3s. 6d. net.

Journal of the Marine Biological Association of the United Kingdom. New Series, Vol. 17, No. 2, June. Pp. 277-615. (Plymouth.) 12s. 6d. net.

Transactions and Proceedings of the Royal Society of South Australia (Incorporated). Vol. 54. Edited by Prof. Walter Howchin, assisted by Arthur M. Lea. Pp. iii+215+9 plates. (Adelaide.) 14s.

The Civil Servant's Share of the National Income. By G. D. Rokeling. (Reprint of three Articles from *State Service*, April, May, June, 1931.) Pp. 20. (London: The Institution of Professional Civil Servants.) 3d.

Proceedings of the Geologists' Association. Edited by A. K. Wells. Vol. 42, Part 2, June 25th. Pp. 87-216. (London: Edward Stanford, Ltd.) 5s.

The Journal of the Institute of Metals. Vol. 45. Edited by G. Shaw Scott. Pp. xii+429+59 plates. (London.) 31s. 6d. net.

Hull Museum Publications. No. 170: Roman Pottery and Kilns at Throlam, near Holme-on-Spalding Moor, East Yorkshire. By Philip Corder and Thomas Sheppard. Pp. 35. No. 171: The Architectural Gems of East Yorkshire. By Thomas Sheppard. Pp. 32+8 plates. No. 172: Recent Additions. Edited by T. Sheppard. Pp. 19. No. 173: Exhibition illustrating the Architecture of Modern Transport, in the Mortimer Museum, Carr Lane, June 1st to July 12th, 1931. Pp. 16. (Hull.)

Records of the Geological Survey of India. Vol. 65, Part 1. Pp. 187. (Calcutta: Government of India Central Publication Branch.) 2.12 rupees; 5s.

Memoirs of the Department of Agriculture in India. Botanical Series, Vol. 17, No. 6: The Effect of some Meteorological Conditions on the Growth of Punjab-American Cotton. By Trevor Trought. Pp. 137-154. (Calcutta: Government of India Central Publication Branch.) 7 annas; 9d.

Proceedings of the Royal Irish Academy. Vol. 40, Section A, No. 1: The Spectrum of the Cathode Glow in Nitrogen and other Gases. By Dr. K. G. Emelens and Olive Hall. Pp. 10. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 6d.

The National Central Library, formerly the Central Library for Students. 15th Annual Report of the Executive Committee, 1930-31. Pp. 48. (London.)

Journal of the Chemical Society. June. Pp. vi+1915-1927+x. (London.)

Transactions of the Institute of Marine Engineers, Incorporated. Session 1931, Vol. 43, No. 5, June. Pp. 203-260+xliv. (London.)

FOREIGN.

Instituts Nationaux à l'Étranger. Pp. 124. (Paris: Institut International de Coopération Intellectuelle.) 15 francs; 2s. 6d.
Meddelande från Lunds Astronomiska Observatorium. Ser. 2, Nr. 57: Streams among Stars with large Proper Motions. By W. Gyllenberg. Pp. 37. 2 kr. Lund Observatory Circular. No. 8, May 31. Pp. 35-66. Annals of the Observatory of Lund. No. 2: On Structural Properties of Open Galactic Clusters and their Spatial Distribution; with an Appendix containing a Catalogue of 471 Objects. Academic Dissertation by Per Collinder. Pp. A64+B62+16 plates. (Lund.)

Koninklijk Magnetisch en Meteorologisch Observatorium te Batavia. Verhandelingen No. 23: Gemiddeld aantal regendagen op Java en Madoera in de vier opeenvolgende, voor iedere plaats droogste maanden van het jaar. Door Prof. Dr. J. Boerema. (With English Summary: Average number of rain-days in Java and Madoera during the driest four consecutive months of the year.) Pp. 25. (Batavia: Landsdrukkerij.)

Proceedings of the Academy of Natural Sciences of Philadelphia, Vol. 83. Angolan Birds collected during the Gray African Expedition, 1929. By W. Wedgwood Bowen. Pp. 263-299. (Philadelphia.)

Transactions of the San Diego Society of Natural History. Vol. 6, No. 22: Descriptions of New Birds from the Mountains of Southern Nevada. By A. J. van Rossem. Pp. 325-332. (San Diego, Calif.)

Suomen Geologinen Toimikunta: Geologiska Kommissionen i Finland: Bulletin de la Commission Géologique de Finlande. No. 91: Pre-Quaternary Rocks of Finland; Explanatory Notes to accompany a General Geological Map of Finland. By J. J. Sederholm. Pp. 47, with Map. (Helsinki.) 30 Fmk.

Bulletin of the American Museum of Natural History. Vol. 59, Art. 7: Pleistocene Exploration and Fossil Edentates in Florida. By Walter W. Holmes and George Gaylord Simpson. Pp. 383-418. Vol. 61, Art. 7: South American Lizards in the Collection of the American Museum of Natural History. By Charles E. Burt and May Danheim Burt. Pp. 227-295. (New York City.)

State of Connecticut: State Geological and Natural History Survey. Vol. 9, Bulletins 43-48, 1928-1930. Pp. iii+100+168+32+97+294+94+95 plates. (Hartford, Conn.)

Japanese Journal of Physics. Transactions and Abstracts, Vol. 6, No. 1-2. Pp. v+15+32+3 plates. (Tokyo: National Research Council of Japan.)

Science Reports of the Tokyo Bunrika Daigaku. Section A, Nos. 7-12: On Vector Quantity, 2: Vector Quantity is Reducible from a kind of Probability, by Suminosuke Ono; On the Relative Intensities of the Balmer and Paschen Lines, by Uzumi Doi; Large Displacements in the Spectrum of Singly Ionized Oxygen, by Kwan-ichi Asagoe; Some Peculiar Types of the Secondary Lichtenberg Figures, by Kwai Umeda and Mitsuo Shōyama; On the Reversal-like Phenomena of the Balmer Lines of Hydrogen, by Hideo Nagashima; A Method of Laboratory Device to record the Period of a Pendulum Motion, by Mituo Syōyama. Pp. 85-147+plates 5-11. 90 sen. Section A, No. 13: On the Modulus of some Integral. By Ichiji Kakeya. Pp. 149-157. 15 sen. (Tokyo: Maruzen Co., Ltd.)

Zoologica: Scientific Contributions of the New York Zoological Society. Vol. 9, No. 13: Growth and Age in the Great Tortoise of the Galapagos. By Charles Haskins Townsend. Pp. 459-474. (New York City.)

Carnegie Institution of Washington. Publication No. 406: The Temple of the Warriors at Chichen Itzá, Yucatan. By Earl H. Morris, Jean Charlot, Ann Axtell Morris. Vol. 1. Pp. xix+485. Vol. 2. Pp. viii+170 plates. (Washington, D.C.: Carnegie Institution.) 20 dollars.

CATALOGUES.

Catalogue of Fine Chemical Products for Laboratory Use; including Organic and Inorganic Chemicals, Analytical Reagents, Standard Stains, Indicators. (July 1931.) Pp. 132. B.D.H. Ureameter Outfit. Pp. 4. (London: The British Drug Houses, Ltd.)

Electro-Chemical Apparatus embodying Electro Analysis of Metals, Electrometric Determination of Hydrogen Ions, and Conductivity of Electrolytes. (List No. 80c.) Pp. 44. Catalogue of Surplus Stock Apparatus including Balances and Weights, Glassware (Graduated and Ordinary), Hardware, Metal and Porcelain Ware. (List No. 88 101H.) Pp. 20. (London: A. Gallenkamp and Co., Ltd.)

Diary of Societies.

FRIDAY, JULY 17.

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS (South Midland District Meeting) (at Winchester Street, Acton), at 2.15.—W. G. Cross: Some Recent Works in Acton.—S. W. Slight: New Sewage Pumping Station.—H. Atkinson: New Works Depot.

TUESDAY, JULY 21.

ROYAL SOCIETY OF MEDICINE, at 5.30.—General Meeting.
LONDON NATURAL HISTORY SOCIETY (at London School of Hygiene and Tropical Medicine), at 6.30.—Informal Meeting.

CONGRESSES.

JULY 17 TO 25.

BRITISH MEDICAL ASSOCIATION (at Eastbourne).

JULY 24 TO 30.

BRITISH COMMONWEALTH EDUCATION CONFERENCE (at Bedford College).—Subject: EDUCATION IN A CHANGING EMPIRE:—
Education in India.
Individual Education.
Modern Psychology in Education.
Examinations and Tests.

JULY 26 TO 31.

INTERNATIONAL CONGRESS ON RADIOLOGY (at Paris).

SUMMER MEETING.

JULY 18 TO 23.

INSTITUTION OF ELECTRICAL ENGINEERS (in Northern Italy and Western Switzerland).