seedlings after continued removal of buds. removal of buds in Helianthus the leaves grew notably; this was due to growth in size of the leaf cells. -J. Kisser and M. Lorenz: Chemical stimulation of the germination of Pisum and Triticum under optimum germination conditions. As stimulants the best were manganese salts and ethyl alcohol.—
J. Kisser: Critical remarks on the nature and the concept of seed germination .- A. Jagersberger: Measurement of light transmission through cathodesputtered silver films.-L. Schmid and R. Falke: Measurements of the viscosity of carbohydrates in liquid ammonia, in formamide and in water.—
A. Köhler: (1) Granite of type Eisgarn from the north-western Waldviertel. (2) The monzonitic quartz-mica-diorite of Dornach in Upper Austria .-H. V. Graber: Comparative observations on the eruptive rocks of the circum-Adriatic arc.—E. Haberfelner: Graptolites from the Upper Silurian of the Carnic Alps (2).-O. Reithofer: Report on the conclusion of the rift measurements in the wider neighbourhood of Köfels in the lower Oetz valley .-O. Sickenberg: Geological researches in the northern Osterhorn group (Salzburg).

Forthcoming Events

FRIDAY, APRIL 22

ROYAL ANTHROPOLOGICAL INSTITUTE (Human Biology Research Committee), at 5.30.—Prof. J. B. S. Haldane: Present Knowledge concerning Blood Groups

SOCIETY OF CHEMICAL INDUSTRY (Chemical Engineering Group) (Annual General Meeting) (at Waldorf Hotel, Aldwych), at 6.45, followed by dinner at 7.30.—Sir Robert Horne: Currency and Prices (Address).

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. I. B. S. Heldway, Handlitany, Transpringing of Acquiring

J. B. S. Haldane: Hereditary Transmission of Acquired

Characters.

SATURDAY, APRIL 23

Institution of Electrical Engineers (Irish Centre—Dublin).—Prof. J. K. Catterson-Smith: Everyday Uses of Electricity (Faraday Lecture).

MONDAY, APRIL 25

ROYAL SOCIETY OF ARTS, at 8.—Prof. J. C. Drummond: Recent Researches on the Nature and Function of Vitamins (Cantor Lectures) (2).

WEDNESDAY, APRIL 27

ROYAL SOCIETY OF MEDICINE (Comparative Medicine Section), at 5 .- Annual General Meeting.

NEWCOMEN SOCIETY FOR THE STUDY OF THE HISTORY OF Engineering and Technology (simultaneously in London and New York) (at the Science Museum), at 5.30.—W. W. Mason: Trevithick's First Rail Locomotive.—Hon. Charles L. Chandler: Early Shipbuilding in Philadelphia.

Leicester Literary and Philosophical Society Chemistry Section) (at Museum, Leicester), at 7.30.-Annual General Meeting.

ROYAL SOCIETY OF ARTS, at 8.—H. Ramsbotham: Education for Commerce (Lecture).

THURSDAY, APRIL 28

ROYAL SOCIETY, at 4.30.—Discussion: The Structure of Atomic Nuclei. To be opened by Lord Rutherford, followed by, probably, Dr. J. Chadwick, Dr. C. D. Ellis, Prof. R. H. Fowler, Prof. J. C. McLennan, Prof. F. A. Lindemann, and N. F. Mott.

Institution of Civil Engineers (Birmingham and District Association) (at Chamber of Commerce, Birmingham), at 6.—Annual General Meeting.

At B.M.A. House (Tavistock Square).—Dr. J. H. Sequeira:

The Educational Aspect of Public Health Work in the Tropics (Chadwick Lecture).

FRIDAY, APRIL 29

ROYAL ASTRONOMICAL SOCIETY, at 4.30.—Geophysical Discussion: The Maintenance of the Earth's Electric Field. To be opened by Dr. F. J. W. Whipple, and continued by Dr. G. C. Simpson and others.

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. H. Hartridge: The Rival Theories of Hearing.

Official Publications Received

Proceedings of the Geologists' Association. Vol. 43, Part 1, 30th March. Pp. 96. (L Ltd.) 5s. on. Edited by G. S. Sweeting. (London: Edward Stanford,

Vol. 43, Part 1, 30th March. Pp. 96. (London: Edward Stanford, Ltd.) 5s.
Thirty-second Report of the Felsted School Scientific Society, 1930-1931. Pp. 42. (Felsted.)
Proceedings of the Linnean Society of London, Session 1931-32. Part 2: Containing Account of the Centenary Celebration of Robert Brown's Discovery of the Nucleus of the Vegetable Cell. Pp. 17-56. (London: Linnean Society.) 1s. 6d.
Department of Agriculture: New South Wales. Science Bulletin No. 38: The Control of Ked (Tick) in Sheep, including Report of Investigations by Dr. H. R. Seddon and C. Blumer. Pp. 28. (Sydney: Alfred James Kent.)
Record of the Industrial Bursars of the Royal Commission for the Exhibition of 1851, 1911-1929. Pp. 58. (London: Royal Commission for the Exhibition of 1851.)
The Journal of the Royal Anthropological Institute of Great Britain and Ireland. Vol. 61, July to December 1931. Pp. xii+287-519+18+45+plates 38-57. (London: Francis Edwards.) 15s. net. Quarterly Journal of the Royal Meteorological Society. Vol. 58, No. 244, April. Pp. 89-216. (London: Edward Stanford, Ltd.) 7s. 6d.
Proceedings of the Royal Society. Series A, Vol. 135, No. A828, April 1. Pp. 511-705+xx. (London: Harrison and Sons, Ltd.) 12s. 6d.
Annual Reports on the Progress of Chemistry for 1931. Issued by the Chemical Society. Vol. 28. Pp. 443. (London: Chemical Society.) 10s. 6d. net.
Biological Reviews and Biological Proceedings of the Cambridge Philo-

10s. 6d. net.

Chemical Society. Vol. 28. Pp. 443. (London: Chemical Society.) 10s. 6d. net.

Biological Reviews and Biological Proceedings of the Cambridge Philosophical Society. Edited by H. Munro Fox. Vol. 7, No. 2, April. Pp. 89-179. (Cambridge: At the University Press.) 12s. 6d. net.

Department of Scientific and Industrial Research. Index to the Literature of Food Investigation. Vol. 3, No. 2, September 1931. Compiled by Agnes Elisabeth Glennie. Pp. iv+183. (London: H.M. Stationery Office.) 2s. 6d. net.

Report of the Rugby School Natural History Society for the Year 1931. (Sixty-fifth Issue.) Pp. 43. (Rugby: George Over, Ltd.)

The Journal of the Institute of Metals. Vol. 47: Metallurgical Abstracts and Index to Volumes 45, 46 and 47 of the Journal. Edited by G. Shaw Scott. Pp. viii+854. (London: Institute of Metals.) 80s.

Annals of the Cape Observatory. Vol. 10: Spectroscopic Researches. Part 9: The Spectrum of Nova Pictoris, 1925. By Dr. H. Spencer Jones. Pp. 532+6 plates. (London: H.M. Stationery Office.) 50s. net.

Observations made at the Royal Observatory, Greenwich, in the Year 1930, in Astronomy, Magnetism and Meteorology, under the direction of Sir Frank Dyson. Pp. viii +A102+B9+Cix+C102+D64+10 plates+E48+17. (London: H.M. Stationery Office.) 37s. 6d. net.

Transactions of the Optical Society. Vol. 32, 1930-31, No. 5. Pp. ii+165-212+xv. (London: Optical Society.) 10s.

FOREIGN

Scientific Papers of the Institute of Physical and Chemical Research. Nos. 355-356: Über die Polymerisierung der Methylester höherer ungesättiger Fettsäuren, X: Einfluss der Erhitzungstemperatur und des Zusatzes des Verdünnungsmittels, von Kiichiro Kino; Chemische Untersuchungen in der Saponiureihe, Mitteilung 3: Über die Sapogenine von Panax repens Maxim. und Aralia chinensis, L. var., von Munio Kotake und Yorisaburo Kimoto. Pp. 77-96+2 plates. (Tökyö: Iwanami Shoten)

Panax repens Maxim. und Avalia chinensis, L. var., von Munio Kolake und Yorisaburo Kimoto. Pp. 77-96+2 plates. (Tökyō: Iwanami Shoten.)

U.S. Treasury Department: Coast Guard. Bulletin No. 19: The Marion Expedition to Davis Strait and Baffin Bay under direction of the United States Coast Guard, 1928. Scientific Results, Part 1: The Bathymetry and Sediments of Davis Strait. Pp. vii +81. (Washington, D.C.: Government Printing Office.) 50 cents.

Ministry of Finance, Egypt: Mines and Quarries Department. Report on Boring for Oil in Egypt. By Dr. T. Sutton Bowman. Section 3: Eastern Desert and adjoining Islands. (With Index to Sections 1, 2 and 3.) Pp. xvi+353+39 plates. (Cairo: Government Press.) 30 P.T. Collection des travaux chimiques de Tchécoslovaquie. Rédigée et publiée par E. Votocék et J. Heyrovský. Année 4, No. 3, Mars. Pp. 97-144. (Prague: Regia Societas Scientiarum Bohemica.)

Zoologica: Scientific Contributions of the New York Zoological Society. Vol. 13, No. 3: Bermuda Oceanographic Expeditions, 1931—Individual Nets and Data. By William Beebe. Pp. 37-45. Vol. 13, No. 4: Nineteen New Species and Four Post-Larval Deep-Sea Fish. By William Beebe. Pp. 47-107. Vol. 18, No. 5: New Burmuda Fish, including Six New Species and Forty-three Species hitherto unrecorded from Bermuda. By William Beebe and John Tee-Van. Pp. 109-120. (New York City.) State of Illinois: Department of Registration and Education: Division of the Natural History Survey. Forestry Circular No. 5: Care of Trees. By L. E. Sawyer. Pp. ii+7. (Urbana, Ill.)

U.S. Department of Agriculture. Technical Bulletin No. 275: The Biology and Control of the Blueberry Maggot in Washington County, Me. By F. H. Lathrop and C. B. Nickels. Pp. 77-14 plates. (Washington, D.C.: Government Printing Office.) 25 cents.