of the other. Chester Stock: An Eccene primate from California. Five fragments of jaws, apparently closely related to the tarsiid lemurs (Anaptomorphidae) including the Eocene genera Omomys, Hemiacodon and Euryacodon, have been found at Sespe, north of the Simi Valley. Descriptions and photographs of the fragments are given. J. L. Walsh: Note on polynomial interpolation to analytic functions. Selig HECHT and GEORGE WALD: The influence of intensity on the visual functions of Drosophila. For intensity measurement a series of plates bearing translucent bars of different densities were used; for visual acuity, plates with opaque bars of different widths. A single fly in a glass cell is observed when illuminated with varying intensities of light passing through such plates. At low illumination, two lights are discriminated when the ratio of intensities is nearly 100; this decreases with increased intensity (I) to  $2\cdot 5$ . Visual acuity varies with log I, increasing in a sigmoid manner with increase of log I. Assuming the reciprocal of  $\Delta I/I$ measures visual acuity, the ratios Drosophila/bee/man are 1/60/249 for maximum intensity discrimination, and 1/9.4/1110 for maximum visual acuity. The differences are related to the variation in number of elements functional in the retinal mosaic. T. D. A. COCKERELL and LOUISE M. IRELAND: The relationships of Scrapter, a genus of African bees. Cytological and morphological details of insects often suggest 'lateral evolution', that is, a type gives rise to new types without itself disappearing. Moreover, various genes appear to remain latent for long periods. regards Scrapter, from Africa, and Euryglossidia, from Australia, though superficially closely alike, they seem not to have had a common ancestry with their special generic characters. OSWALD VEBLEN: Spinors in projective relativity. A formal development of the generalised Dirac equations. W. A. ZISMAN: Corrections to earlier papers (see NATURE, 132, 687, Oct. 28, 1933). All values (statistical) of Poisson's ratio are 5.5 per cent too small. The general conclusions are unaffected.

# Forthcoming Events

[Meetings marked with an asterisk are open to the public.] Monday, February 26

ROYAL SCHOOL OF MINES, SOUTH KENSINGTON, at 5.30.—Prof. J. A. S. Ritson: "Explosives and their Use in Breaking Gound" (succeeding lectures on February 27 and 28, and March 1).\*

EAST LONDON COLLEGE, at 5.30.—Prof. G. I. Finch: "High Voltage Oscillographs" (succeeding lectures on March 6, 12 and 19).

ROYAL GEOGRAPHICAL SOCIETY, at 5.30.—G. Rayner: "Observations in the Southern Ocean" (Geographical Film).

## Tuesday, February 27

ROYAL SOCIETY OF ARTS, at 4.30.—Prof. C. G. Seligman: 'Anthropological Research in the Southern Sudan''.

University College, London, at 5.30.—Prof. L. Ruzicka: "The Many Membered Carbon Rings" (succeeding lecture on March 1).\*

## Thursday, March 1

ROYAL SOCIETY, at 4.30.—C. Sykes and H. Evans: "Some Peculiarities in the Physical Properties of Iron-Aluminium Alloys".

A. J. Bradley and J. W. Rodgers: "The Crystal Structure of the Heusler Alloys".

#### Friday, March 2

Bedson Club, at 6.30.—Prof. J. Kendall: "Elements, Old and New" (Twenty-fifth Bedson Lecture).

ROYAL INSTITUTION, at 9.—Dr. H. J. Gough: "Current Research Problems in Engineering".

EOLOGISTS' ASSOCIATION.—Annual General Meeting. A. L. Leach: "The Isle of Caldey: its Geology and Archæology" (Presidential Address). Geologists'

## Saturday, March 3

ROYAL INSTITUTION, at 3.—Lord Rutherford: "The Transmutation of Matter" (succeeding lectures on March 10, 17 and 24).

## Official Publications Received

#### GREAT BRITAIN AND IRELAND

Great Britain and Ireland

The British Electrical and Allied Industries Research Association (Incorporated). Thirteenth Annual Report, October 1, 1932, to September 30, 1933. Pp. 117. (London.)

The Scientific Proceedings of the Royal Dublin Society. Vol. 21 (N.S.), No. 2: Some Difficulties in Current Views of the Thermal History of the Earth. By Dr. J. H. J. Poole. Pp. 9-22. (Dublin: Hodges, Figis and Co.; London: Williams and Norgate, Ltd.) 1s. The University of Sheffield. Report on Research Work carried out in the Departments of Mining and Fuel Technology during the Session 1932-1933. Pp. 28. (Sheffield.)

Leeds University. Report to the Worshipful Company of Clothworkers of the City of London of the Advisory Committee on the Departments of Textile Industries and Colour Chemistry and Dyeing during the Session 1932-53. Pp. 18. (Leeds.)

The Hundredth Annual Report of the Royal Cornwall Polytechnic Society. New Series, Vol. 7, Centenary Number, Part 3, 1933. Pp. xxv-xxxix+203-288+13. (Camborne: Camborne Printing and Stationery Co., Ltd.) 5s.

#### OTHER COUNTRIES

OTHER COUNTRIES

U.S. Department of Agriculture. Circular No. 301: The Cyclamen Mite and the Broad Mite and their Control. By Floyd F. Smith. Pp. 14. (Washington, D.C.: Government Printing Office.) 5 cents.
The Snellius-Expedition in the Eastern Part of the Netherlands East-Indies, 1929-1930. Vol. 5: Geological Results. Part 2: Geology of Coral Reefs. By Dr. Ph. H. Kuenen. Pp. 126+11 plates. (Utrecht: Kemink et Zonen N.V.)
Proceedings of the Academy of Natural Sciences of Philadelphia, Vol. 85. Descriptions of New Fishes obtained 1907 to 1910, chiefly in the Philippine Islands and adjacent Seas. By Henry W. Fowler. Pp. 233-367. (Philadelphia.)
Proceedings of the American Society for Psychical Research. Vol. 22: The Margery Mediumship—The "Walter" Hands: a Study of their Dermatoglyphics. By Brackett K. Thorogood. Pp. xix +228+123 plates. (New York: American Society for Psychical Research.) U.S. Department of the Interior: Geological Survey. Water-Supply Paper 730: Surface Water Supply of the United States, 1932. Part 5: Hudson Bay and Upper Mississippi River Basins. Pp. vi+206, 15 cents. Water-Supply Paper 736: Surface Water Supply of the United States, 1932. Part 10: The Great Basin. Pp. v+107. 10 cents. Water-Supply Paper 736: Surface Water Supply of the United States, 1932. Part 11: Pacific Slope Basins in California. Pp. xi+416. 15 cents. (Washington, D.C.: Government Printing Office.)
Smithsonian Miscellaneous Collections. Vol. 87, No. 19: An Oligocene Eagle from Wyoming. By Alexander Wetmore. (Publica-

Pp. xi+416. 15 cents. (Washington, D.C.: Government Printing Office.)
Smithsonian Miscellaneous Collections. Vol. 87, No. 19: An Oligocene Eagle from Wyoming. By Alexander Wetmore. (Publication 3227.) Pp. 9. (Washington, D.C.: Smithsonian Institution.)
U.S. Department of Agriculture. Circular No. 303: Soil Profile and Root Penetration as Indicators of Apple Production in the Lake Shore District of Western New York. By A. T. Sweet. Pp. 30. (Washington, D.C.: Government Printing Office.) 5 cents.
The Pasteur Institute of Southern India, Coonoor. The Annual Report of the Director for the Year ending 31st December 1932, together with the Twenty-sixth Annual Report of the Central Committee of the Association for the Year ending 31st March 1933. Pp. 74. (Madras: Madras Publishing House, Ltd.)
The Imperial Council of Agricultural Research. Scientific Monograph No. 7: Influence of Manures on the Wilt Disease of Cajanus indicus Spreng., and the Isolation of Types resistant to the Disease. By Dr. W. McRae and Dr. F. J. F. Shaw. Pp. iv+68+16 plates. (Delhi: Manager of Publications.) 2.4 rupees; 4s. 3d.
Memoirs of the Asiatic Society of Bengal. Vol. 12, No. 1: Three Arabic Treatises on Alchemy by Muhammad bin Umail (10th Century A.D.) Edition of the Texts by M. Turab Ali. Excursus on the Writings and Date of Ibn Umail, with edition of the Latin Rendering of the Ma' al-Waraqi by H. E. Stapleton and Dr. M. Hidayat Husain. Pp. iv+213+2 plates. (Calcutta: Asiatic Society of Bengal.) 9 rupees.

## CATALOGUES

The Engineer Directory and Buyers Guide, 1934-35. Pp. 248. (London: The Engineer.) Watson's Microscope Record. No. 31, January. Pp. 24. (London: W. Watson and Sons, Ltd.)

The Protexray Tube. Pp. 56. (London: Cuthbert Andrews.) Botany and Gardening. (Catalogue No. 218.) Pp. 40. (London: Dulau and Co., Ltd.)