

Critical period of the cotton plant. L. POLEZHAYEV : Restoration of the regenerative power in tailless amphibians (2).

#### WASHINGTON, D.C.

National Academy of Sciences (*Proc.*, 21, 143-180, March 15, 1935). JAN SCHILT: Preliminary note concerning a new theory of the motions of the stars. The parallaxes of stars of spectral type A are used to give rectangular equatorial velocity components, and an expression is derived from which other parallaxes have been derived satisfactorily. The formula incorporates the hypothesis of an expanding stellar system. HARRIET B. CREIGHTON and BARBARA MCCLINTOCK: The correlation of cytological and genetical crossing-over in *Zea mays*: a corroboration. Chromosome 9 in maize is characterised by the 1:2 ratio in length of its two 'arms'; in some strains the shorter arm carries a large knob, whereas in others it is small or absent. This knob has been used as a cytological 'marker'. FRANK H. CLARK: Two hereditary types of hydrocephalus in the house mouse (*Mus musculus*). The character is a simple recessive. Since mice with water-on-the-brain are sterile or transit only a low grade of this affection, heterozygous animals were used. When such animals of two strains, one from Michigan and the other from Berlin, were mated, the offspring contained no hydrocephalics, indicating that two different genes are involved in the two strains. TORSTEN TEORELL: Studies on the 'diffusion effect' upon ionic distribution. (1) Some theoretical considerations. Study of an aqueous system of strong electrolytes where steady diffusion across a boundary permeable to ions takes place. The theory predicts a distribution of ions similar to that for non-diffusible ions indicated by the Gibbs-Donnan equilibrium, which appears as a limiting case of the general theory discussed. Great concentration differences such as occur in biological systems are theoretically possible. H. S. VANDIVER: On the foundations of a constructive theory of discrete commutative algebra (2). J. LEVINE: Conformal-affine connexions. OSWALD VEBLEN: Formalism for conformal geometry. H. BATEMAN and S. O. RICE: Some expansions associated with Bessel functions. ROBERT W. WILSON: *Simimys*, a new name to replace *Eumysops*, Wilson, preoccupied: a correction.

#### Forthcoming Events

[Meetings marked with an asterisk are open to the public.]

Sunday, June 23

BRITISH MUSEUM (NATURAL HISTORY), at 3 and 4.30.  
Miss M. Smith: "Reptiles and Fossil Reptiles".\*

Monday, June 24

ROYAL GEOGRAPHICAL SOCIETY, at 3.—Annual General Meeting.

BRITISH WATERWORKS ASSOCIATION, June 25-29. Annual General Meeting and Conference to be held at Cambridge.

SOUTH-EASTERN UNION OF SCIENTIFIC SOCIETIES, June 26-29. Annual Congress to be held at Bournemouth.  
Prof. A. C. Seward: "The Herbarium of the Rocks" (Presidential Address).

#### Official Publications Received

##### GREAT BRITAIN AND IRELAND

The Scientific Journal of the Royal College of Science, Vol. 5: Containing Papers read during the Session 1934-1935 before the Imperial College Chemical Society, the Royal College of Science Natural History Society, the Royal College of Science Mathematical and Physical Society. Pp. 138. (London: Edward Arnold and Co.) 7s. 6d. net.

Report of the National Baby Week Council 1934, presented and adopted at the Eighteenth Annual Meeting of the National Baby Week Council held in London on the 27th March 1935. Pp. 24. (London: National Baby Week Council.)

Annual Report of the Zoological Society of Scotland for the Year ending 31st March 1935. Pp. 63+6 plates. (Edinburgh: Zoological Society of Scotland.)

The Scientific Proceedings of the Royal Dublin Society. Vol. 21 (N.S.), No. 23: On the Characteristics of *Bacterium violaceum* (Schroter) and some Allied Species of Violet Bacteria. By George Cruess-Callaghan and M. J. Gorman. Pp. 213-221+1 plate. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd., 1935.) 1s.

The Men of the Trees. Tenth Year's Report and Review of the Tree Year 1934. Pp. 39-4 plates. (London: Men of the Trees.) 6d.

Right and Might: an Argument for an International Police Force. By Alan Burnett Rae. (Series B, No. 7B). Pp. 18. (London: The New Commonwealth.) 3d.

The Strangeways Research Laboratory, Cambridge. Report for 1934. Pp. 26. (Cambridge: Strangeways Research Laboratory.)

Department of Scientific and Industrial Research. Report of the Chemistry Research Board for the Period ended 31st December 1934; with Historical Introduction and Report by the Director of Chemical Research. Pp. v+94. (London: H.M. Stationery Office.) 1s. 6d. net.

Empire Cotton Growing Corporation. Report of the Administrative Council of the Corporation submitted to the Fourteenth Annual General Meeting on May 28th, 1935. Pp. ii+66. (London: Empire Cotton Growing Corporation.)

Report on the Fisheries of Palestine. By James Hornell. (Published on behalf of the Government of Palestine.) Pp. 106. (London: Crown Agents for the Colonies.) 7s. 6d.

Report of the Astronomer Royal to the Board of Visitors of the Royal Observatory, Greenwich, read at the Annual Visitation of the Royal Observatory, 1935, June 1. Pp. 24. (Greenwich: Royal Observatory.)

The Institution of Gas Engineers. Communication No. 107: 72nd Annual Report and Accounts of the Council of the Institution of Gas Engineers to be presented at the 72nd Annual General Meeting to be held at the Institution of Civil Engineers, Great George Street, London, S.W.1, on the 4th, 5th and 6th June 1935. Pp. 39. (London: Institution of Gas Engineers.)

##### OTHER COUNTRIES

Indian Central Cotton Committee: Technological Laboratory. Technological Bulletin, Series B, No. 19: Effect of Storage prior to Ginning on the Spinning Quality of Cotton. By Dr. Nazir Ahmad. (Pp. 13). (Bombay: Indian Central Cotton Committee.) 8 annas.

Canada: Department of Mines: Mines Branch. Investigations in Ore Dressing and Metallurgy (Testing and Research Laboratories), July to December 1933. (No. 744.) Pp. iv+194. (Ottawa: King's Printer.)

Scent and the Weather. By Flight-Lieut. R. G. Vervard. (No. 1935/3.) Pp. iv+33+5 plates. (Chaman, Baluchistan: The Masters of Foxhounds Association of India.) 3 rupees.

Studies from the Connaught Laboratories, University of Toronto. Vol. 6: 1933-1934. Pp. vii+78 papers. (Toronto: University of Toronto Press.)

Survey of India. General Report, 1934, from 1st October 1933 to 30th September 1934. Pp. vi+73+11 plates. (Calcutta: Survey of India.) 1.8 rupees; 2s. 6d.

India Meteorological Department. Scientific Notes, Vol. 6, No. 61: Evaporation in India calculated from other Meteorological Factors. By P. K. Raman and V. Satakopan. Pp. 51+6 plates. (Delhi: Manager of Publications.) 1.12 rupees; 3s.

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 119: Buckling and Failure of Thin Rectangular Plates in Compression. By Mineo Yamamoto and Kazuo Kondo. Pp. 22, 25 sen. No. 120: Further Studies on the Effect of the Ground upon the Lift of a Monoplane Aerofoil. By Sasumu Tomotika. Pp. 23-44, 25 sen. (Tôkyô: Kôgyô Toshô Kabushiki Kaisha.)

Ministry of the Interior, Egypt: Department of Public Health. The Research Institute and the Endemic Diseases Hospital: Third Annual Report 1933. Pp. xii+108+14 plates. (Cairo: Government Press.)

Ministry of Public Works, Egypt: Physical Department. Helwan Observatory Bulletin No. 33: Sixth List of Nebulae photographed with the Reynolds Reflector. By M. R. Madwar. Pp. 15. (Cairo: Government Press.) 5 P.T.

Science Reports of the Tokyo Bunrika Daigaku, Section A. No. 40: On the Theory of Multivalent Functions. By Shigeo Ozaki. Pp. 167-188. (Tokyo: Maruzen Co., Ltd.) 35 sen.

The University of Colorado Studies. Vol. 22, Nos. 2 and 3: The Poetry of José Mármol. By Dr. Stuart Cuthbertson. (University of Colorado Bulletin, Vol. 35, No. 12.) Pp. iv+83-276. (Boulder, Colo.: University of Colorado.) 2 dollars.

Meddelanden från Statens Meteorologisk-Hydrografiska Anstalt. Band 6, No. 4: Höjdbestämmingar vid Sveriges kuster medelst hydrografisk Nivellering. Av Folke Bergsten. Pp. 10. (Stockholm: Statens Meteorologisk-Hydrografiska Anstalt.) 1.50 kr.

Statens Meteorologisk-Hydrografiska Anstalt. Årsbok, 14, 1932. iii. Vattenståndet vid Rikets kuster. Pp. 25. 2.00 kr. Årsbok, 15, 1933. v. Hydrografiska mätningar i Sverige. Pp. 39. 3.00 kr. vi. Aerologiska iakttagelser i Sverige. Pp. 11. 2.50 kr. Årsbok, 16, 1934. i. Månadsöversikt över väderlek och vattentillgång jämte anstaltens årsrättelse. Pp. 89. 2.50 kr. (Stockholm: Statens Meteorologisk-Hydrografiska Anstalt.)