

FRIDAY, Nov. 25

CHADWICK PUBLIC LECTURE, at 7.30—(at the Town Hall, Gateshead).—Dame Louise McIlroy: "Maternal and Infant Welfare".

CHEMICAL SOCIETY, at 5.30—(Fourth Liversidge Lecture, in the Chemistry Lecture Theatre, University of Birmingham).—Dr. F. W. Aston: "Physical Atomic Weights".

UNIVERSITY COLLEGE, LONDON, at 5.30.—Sir James Frazer: "The Fear of the Dead in Primitive Religion" (succeeding lectures on Nov. 29 and Dec. 1).

ROYAL INSTITUTION, at 9.—Dr. H. Knox-Shaw: "Observational Evidence for the Expansion of the Universe".

SATURDAY, Nov. 26

UNIVERSITY OF CAMBRIDGE, at 5—(Henry Sidgwick Memorial Lecture in the College Hall, Newnham College).—Sir James Jeans: "The Farthest Depths of Space".

Official Publications Received

GREAT BRITAIN AND IRELAND

Birmingham Bureau of Research on Russian Economic Conditions. Memorandum No. 7: i. Foreign Trade; ii. Monetary Conditions; iii. Indices of Wholesale Prices; iv. State Budget. Pp. 24. (Birmingham: The University.)

Medical Research Council. Special Report Series No. 174: Medical Uses of Radium; Summary of Reports from Research Centres for 1931. Pp. 59+4 plates. (London: H.M. Stationery Office.) 1s. 3d. net.

Journal of the Chemical Society. October. Pp. iv+2505-2667+vi. (London: Chemical Society.)

University of Reading: The National Institute for Research in Dairying. Annual Report for the Year ending 31st July, 1931. Pp. 90. (Reading.)

Proceedings of the Royal Society of Edinburgh, Session 1931-1932. Vol. 52, Part 3, No. 21: Relative Co-ordinates. By A. G. Walker. Pp. 345-353. 9d. Nos. 22 and 23: Tables of the Elliptic-cylinder Functions and Zeros and Turning Points of the Elliptic-cylinder Functions. By Dr. E. L. Ince. Pp. 355-433. 7s. No. 24: Adrenaline and the Oestrous Cycle in the Mouse. By Dr. J. M. Robson. Pp. 434-444. 1s. (Edinburgh: Robert Grant and Son; London: Williams and Norgate, Ltd.)

Transactions of the Institute of Marine Engineers, Incorporated. Session 1932. Vol. 44, No. 9, October. Pp. 427-474+xxxiv. (London.)

Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1472 (T.3246): Measurement of Position Error on High Speed Aircraft. By R. K. Cushing. Pp. 5+5 plates. 6d. net. No. 1487 (S.91): Effect of Float Setting on Take-off and Top Speed of the HIF. By J. L. Hutchinson. Pp. 2+1 plate. 3d. net. (London: H.M. Stationery Office.)

A Mosquito Summary. By John F. Marshall. Pp. 8. (Hayling Island: British Mosquito Control Institute.) 9d.

A Report on the Museums of Canada, by Sir Henry A. Miers and S. F. Markham, to the Carnegie Corporation of New York, to which is appended a Directory of the Museums of Canada and other parts of the British Empire on the American Continent. Pp. vi+63+2 plates. Directory of Museums and Art Galleries in Canada, Newfoundland, Bermuda, the British West Indies, British Guiana and the Falkland Islands. Compiled by Sir Henry A. Miers and S. F. Markham. Pp. 92. 5s., with Report. (London: The Museums Association.)

OTHER COUNTRIES

The Imperial Council of Agricultural Research. Scientific Monograph No. 3: The Open Pan System of White Sugar Manufacture. By R. C. Srivastava. Pp. vi+141+7 plates. (Calcutta: Government of India Central Publication Branch.) 3.2 rupees; 5s. 6d.

Education, India. Education in India in 1929-30. Pp. iv+76. (Calcutta: Government of India Central Publication Branch.) 1.4 rupees; 2s.

Report of the Botanical Survey of India for 1930-31. Pp. 12. (Calcutta.)

Survey of India. Geodetic Report. Vol. 7, from 1st October 1930 to 30th September 1931. Pp. xvii+150+20 plates. (Dehra Dun.) 3 rupees; 5s. 3d.

State of Illinois: Department of Registration and Education: Division of Natural History. Bulletin, Vol. 20, Article 1: Initial Studies of American Elm Diseases in Illinois. By Hubert A. Harris. Pp. iii+70. (Urbana, Ill.)

Indian Central Cotton Committee: Technological Laboratory. Technological Bulletin, Series B, No. 14: Variations in the Properties of the Cotton Fibre in relation to its Position on the Surface of the Seed. Part 1: Fibre-Length; Part 2: Fibre-Weight; Part 3: Fibre-Strength. By Ram Saran Koshal and Dr. Nazir Ahmad. Pp. ii+56. (Bombay.) 1 rupee.

L'influence solaire et les progrès de la météorologie: résultats de 50 années d'observations solaires et météorologiques comprenant les observations et les recherches effectuées à Talence à partir de 1900. Par Henri Mémery. Pp. iv+23. (Talence: Observatoire de Physique solaire et de Météorologie.)

U.S. Department of Commerce: Bureau of Standards. Bureau of Standards Journal of Research, Vol. 9, No. 4, October, Research Papers Nos. 482-492. Pp. 457-582. (Washington, D.C.: Government Printing Office.) 25 cents.

Proceedings of the American Philosophical Society. Vol. 71 No. 6. Pp. 309-410. (Philadelphia.)

Veröffentlichungen aus dem Kaiser Wilhelm-Institut für Silikatforschung in Berlin-Dahlem. Herausgegeben von Prof. Dr. Wilhelm Eitel. Band 5. Pp. iv+212. (Braunschweig: Friedr. Vieweg und Sohn A.-G.) 28 gold marks.

Annals of the Observatory of Lund. No. 3: Lund Observatory Tables for the Conversion of Equatorial Co-ordinates into Galactic Co-ordinates based on the Galactic Pole R.A. $12^{\text{h}} 40^{\text{m}}$; Dec. $+28^{\circ}$ (1900.0). Computed under the direction of and provided with an Introduction by John Ohlsson. Pp. xxiii+147. (Lund.)

Meddelande från Lunds Astronomiska Observatorium. Ser. 2, Nr. 65: Second List of Stars with Large Proper-Motions in the α -Zone of Lund. By W. Gyllenberg. Pp. 19. 1.50 kr. Ser. 2, Nr. 66: Positions of 241 Stars, mainly Long-period and Irregular Variables, and Proper Motions for 117 of these Stars. By Frida Palmér. Pp. 63. 5.50 kr. (Lund.)

Tätigkeitsberättelse der Sternwarte Lund für das Berichtsjahr 1931. Von Knut Lundmark. Pp. 11. (Lund.)

Commonwealth of Australia: Council for Scientific and Industrial Research. Bulletin No. 66: The Influence of Growth Stage and Frequency of Cutting on the Yield and Composition of a Perennial Grass, *Phalaris tuberosa*. By Dr. A. E. V. Richardson, H. E. Trumble and R. E. Shapter. Pp. 35. Pamphlet No. 32: The Chemistry of Australian Timbers. Part 2: The Chemical Composition of the Woods of the Ironbark Group. By W. E. Cohen, A. L. Baldock and A. G. Charles. Pp. 36. (Melbourne: H. J. Green.)

Indian Journal of Physics, Vol. 7, Part 4, and Proceedings of the Indian Association for the Cultivation of Science, Vol. 16, Part 4, Conducted by Sir C. V. Raman. Pp. 285-351. (Calcutta.) 1.8 rupees; 2s.

Paleontologiese Navorsing van die Nasionale Museum, Bloemfontein. Deel 2, Stuk 3: Die Stamlyn van die Sebras. Deur Dr. Ir. E. C. N. Van Hoepen. Pp. 23-37. (Bloemfontein.)

Annale van die (Annals of the) Transvaal Museum. Vol. 15, Part 1, 1st October. Pp. 122. (Pretoria: Government Printer.)

Scientific Papers of the Institute of Physical and Chemical Research. No. 383: On the Singlet Principal Series of Mercury. By Yoshio Ishida and Shigeru Hiyama. Pp. 79-82+plates 13-15. 15 sen. Nos. 384-392: The Effect of Humidity on Supersonic Velocity in Air, by Masao Kinoshita and Chihiro Ishii; The Most Probable Values of e, η and h , by Kamekichi Shiba; Carotin in Mango Fruit (*Mangifera indica* Lin.), by Ryo Yamamoto, Yasuyosi Osima and Teroo Goma; On the Carotinoids in Fresh Tea-Leaf and Fermented Tea, by Ryo Yamamoto and Tosiuro Muraoka; On the Organic Acids in the Fruits of Ceylon Olive (*Elaeagnus serratus* Lin.), by Ryo Yamamoto, Yasuyosi Osima and Teroo Goma; On the Red Colouring Matter of *Hyiscus babariffa* L. (a new Glycoside Hiviscin), by Ryo Yamamoto and Yasuyosi Osima; The Carotin in the Fruit of *Azeca catechu* Lin., by Ryo Yamamoto and Tosiuro Muraoka; On the Size of Fog Droplets, by Masao Kinoshita and Kiyoshi Uchiyama; The Effect of Superimposed Alternating Magnetic Fields upon Dielectric Loss-Angles, by Yoshitaro Fujikawa and Jiro Kitasato. Pp. 83-162. 60 sen. (Tokyo: Iwanami Shoten.)

U.S. Department of the Interior: Office of Education. Bulletin, 1931, No. 20: Biennial Survey of Education in the United States, 1928-1930. Chapter 1: Statistical Summary of Education, 1929-30. By Emery M. Foster. Pp. 12. (Washington, D.C.: Government Printing Office.) 5 cents.

Paleontologia Sinica. Series C, Vol. 7, Fascicle 3: On the Fossil Vertebrate Remains from Localities 2, 7 and 8 at Choukoutien. By C. C. Young. Pp. iv+24+1 plate. (Peiping: Geological Survey of China.)

Field Museum of Natural History. Zoological Series, Vol. 18, No. 11: Birds of Western China obtained by the Kelley-Roosevelts Expedition. By Outram Bangs. (Publication 314.) Pp. 341-379. (Chicago.) 25 cents.

Proceedings of the United States National Museum. Vol. 81, Art. 13: The Trematode Parasites of Marine Mammals. By Emmett W. Price. (No. 2936.) Pp. 68+12 plates. (Washington, D.C.: Government Printing Office.)

Ceylon. Part 4: Education, Science and Art (D). Administration Report of the Director of Agriculture for 1931. By Dr. W. Youngman. Pp. D163. (Colombo: Government Record Office.) 1.65 rupees.

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 85: Thomson Effect of Crystalline Substances. By Yositoshi Endô. Pp. 115-149. 0.40 yen. No. 88: On the Balancing of Two-stroke 12-Cylinder Engines. By Fujio Nakanishi. Pp. 151-169. 0.15 yen. No. 87: A New High-Speed Indicator for Internal Combustion Engines. By Fujio Nakanishi, Masaharu Itô and Kikuo Kitamura. Pp. 161-177. 0.25 yen. (Tôkyô: Koseikai Publishing House.)

Journal of the Faculty of Science, Imperial University of Tokyo. Section 2: Geology, Mineralogy, Geography, Seismology. Vol. 3, Part 5: The Seven Islands of Izu Province, a Volcanic Chain. By Dr. Bundjiro Kotô. Pp. 205-219+4 plates. 0.70 yen. Vol. 3, Part 6: Tertiary Mollusca from the Coalfield of Uryu, Ishikari. By Matajuro Yokoyama. Pp. 221-247+4 plates. 0.70 yen. Section 3: Botany. Vol. 2, Part 6: Morphological Studies of *Anemoneopsis*, *Actaea* and *Cimicifuga*. By Masao Kumazawa. Pp. 413-454. 0.70 yen. Vol. 2, Part 7: On the Structure and Affinities of some Cretaceous Plants from Hokkaido. Second Contribution. By Yuzuru Ogawa. Pp. 455-483+plates 22-24. 0.70 yen. Vol. 4, Part 1: On the Systematic Importance of Spodograms in the Leaves of the Japanese Bambusaceae. By Kiichi Ohki. Pp. 130. 1.70 yen. (Tokyo: Maruzen Co., Ltd.)

Memoirs of the College of Science, Kyoto Imperial University. Series B, Vol. 8, No. 1. Pp. 80. (Tokyo and Kyoto: Maruzen Co., Ltd.)

Government of India: Meteorological Department. Magnetic, Meteorological and Seismographic Observations made at the Government Observatories, Bombay and Alibag, in the Year 1929 under the direction of Dr. S. K. Banerji. Pp. iv+138+5 plates. (Calcutta: Government of India Central Publication Branch.) 12.2 rupees; 19s. 6d.

Tanganyika Territory: Geological Survey. Annual Report, 1931. By Dr. E. O. Teale. Pp. ii+51. (Dodoma.) 2s. 6d.