

## THURSDAY, DECEMBER 3.

SCIENCE MUSEUM, SOUTH KENSINGTON (in connexion with Exhibition of Modern Glasses), at 4.45.—J. W. Wilson: Safety Glass.

INSTITUTION OF MECHANICAL ENGINEERS.—J. D. Watson: The Need for More Effective Treatment of Sewage Sludge (Chadwick Lecture).

## SATURDAY, DECEMBER 5.

HORNIMAN MUSEUM (Forest Hill), at 3.30.—Prof. J. R. Ainsworth-Davis: Insect Pests and their Enemies.

## Congress and Exhibition of Apparatus.

DECEMBER 2 TO 4.

BRITISH INSTITUTE OF RADIOLOGY (at Central Hall, Westminster).

Wednesday, Dec. 2, at 2.30.—Lord Rutherford: Official Opening.

At 3.30.—Prof. F. Haensch: Experiments upon the Inflammability of Films (Cinematograph Film).

At 5.—Sir James Jeans: What is Radiation? (Silvanus Thompson Memorial Lecture).

Thursday, Dec. 3, at 10 A.M.—Dr. G. Grossman: Advances in X-ray Engineering with Special Reference to High Potentials.

Dr. A. Bouwers: Economy and Quality in Radiology. Dr. O. Bloch: The X-ray Emulsion.

W. E. Schall: Power Factor in Radiography.

C. G. Osment: Experimental Radiography Utilising the Gamma Rays of Radium.

At 3.—Dr. R. G. Canti: The Effects of Radium on Living Tissues cultivated *in vitro* (Cinematograph Film).

At 5.—Prof. H. Holfelder: Comparison of Medical, Surgical, and Radiological Conceptions in Relation to the Treatment of Disease (Mackenzie Davidson Memorial Lecture).

Friday, Dec. 4, at 10 A.M.—Discussion: The Radiation Treatment of Leukæmia.

At 11.30 A.M.—Discussion: Lipiodol in the Diagnosis of Intrathoracic Disease.

At 3.—The Third International Congress of Radiology, Paris, 1931 (Cinematograph Film).

At 5.—Dr. A. E. Barclay: Presidential Address.

## Official Publications Received.

## BRITISH.

Proceedings of the Royal Society. Series A, Vol. 133, No. A822, October 1. Pp. 851-695+xiv. (London: Harrison and Sons, Ltd.) 18s.

The Year's Photography, 1931-1932. Pp. 22+xlvi+75 plates. (London: Royal Photographic Society of Great Britain.) 2s. 6d.

International Federation of University Women. Bulletin No. 13: Report of the Sixteenth Council Meeting, Wellesley, April 1931. Pp. 48. (London.)

The Smoke Abatement Handbook, 1931. Pp. 48. (Manchester: National Smoke Abatement Society.) 6d.

Colony and Protectorate of Kenya. Forest Department Annual Report, 1930. Pp. 27. (Nairobi.) 1s.

Tanganyika Territory. Tsotse Research Annual Report for the Year ended 31st December 1930. Pp. iii+48+7 plates. (Dar es Salaam: Government Printer.)

Journal of the Indian Institute of Science. Vol. 14A, Part 5: Contributions to the Study of Spike-Disease of Sandal (*Santalum album*, Linn.). Part 12: Ecology of Sandal. By M. Sreenivasaya and S. Rangaswami. Pp. 59-65. (Bangalore.) 8 annas.

Commonwealth of Australia: Council for Scientific and Industrial Research. Bulletin No. 50: The Poisonous Action of Ingested Saponin. By Prof. Alfred J. Ewart. Pp. 28. Pamphlet No. 20: The Identification of Wood by Chemical Means, Part 1. By H. E. Dadsell. (Division of Forest Products, Technical Paper No. 1.) Pp. 16. Pamphlet No. 21: The Density of Australian Timbers, a Preliminary Study. By H. E. Dadsell. (Division of Forest Products, Technical Paper No. 2.) Pp. 16. Pamphlet No. 22: The Chemistry of Australian Timbers. Part 1: A Study of the Lignin Determination. By W. E. Cohen and H. E. Dadsell. (Division of Forest Products, Technical Paper No. 3.) Pp. 27. (Melbourne: H. J. Green.)

Straits Settlements. Annual Report of the Education Department for the Year 1930. By Dr. R. O. Winstedt. Pp. ii+67. (Singapore: Government Printing Office.)

Anthropological Bulletins from the Zoological Survey of India. Bulletin No. 1: A Report on the Human Relics recovered by the Naga Hills (Burma) Expedition for the Abolition of Human Sacrifice during 1926-27. By Dr. B. S. Guha and P. C. Basu. Pp. 68+22 plates. (Calcutta.) 1.12 rupees; 3s.

Union of South Africa: Department of Mines and Industries: Geological Survey. Memoir No. 27: A Bibliography of South African Geology for the Years 1926 to 1930 (Inclusive). Author's Index. By Dr. A. L. Hall. Pp. 160. (Pretoria: Government Printing Office.) 5s.

Transactions of the Royal Society of Edinburgh. Vol. 57, Part 1, No. 4: The Electric Field in Terrestrial Magnetic Storms. By A. H. R. Goldie. Pp. 148-177. (Edinburgh: Robert Grant and Son; London: Williams and Norgate, Ltd.) 4s. 6d.

Memoirs and Proceedings of the Manchester Literary and Philosophical Society, 1929-30. Vol. 74. Pp. iv+111+iii. (Manchester.) 12s.

Bradford Education Committee. Journal of Research of the Bradford Technical College: a Series of Papers dealing with Investigations undertaken by Members of the Technical College, Bradford. Vol. 1, 1930. Pp. xii+295. (Bradford.)

Report of the Government Chemist upon the Work of the Government Laboratory for the Year ending 31st March 1931; with Appendices. Pp. 45. (London: H.M. Stationery Office.) 9d. net.

Transactions of the Institution of Chemical Engineers. Vol. 8, 1930. Pp. 232. (London.)

The Scientific Proceedings of the Royal Dublin Society. Vol. 20, N.S., Nos. 8-12: Award of the Boyle Medal to Sir John Purser Griffith; A Study of Bacteria belonging to the Sub-genus *Aerobacter*, by M. Grimes and A. J. Hennerty; Report of the Irish Radium Committee for the Year 1930; On a Method of distinguishing the Seedlings of Swedish Turnip (*Brassica napus* L. var. *Napobrassica* (L.) Reichb.) from those of Rape (*Brassica napus* L. var. *Biennis* (Schübl. et Mart.) Reichb.), by M. J. Gorman and A. J. Hennerty; The Influence of the Work of Sir William Rowan Hamilton on Modern Mathematical Thought, by Prof. A. W. Conway. Pp. 85-128. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 3s.

The Journal of the Institution of Electrical Engineers. Vol. 69, No. 418, October. Pp. 1189-1328+xx. (London: E. and F. N. Spon, Ltd.) 10s. 6d.

## FOREIGN.

Conseil Permanent International pour l'Exploration de la Mer. Bulletin statistique des pêches maritimes des pays du nord et de l'ouest de l'Europe. Rédigé par D'Arcy Wentworth Thompson. Vol. 19: Pour l'année 1929. Pp. 81. 3.25 kr. Rapports et procès-verbaux des réunions. Vol. 74: Procès-verbaux (Mars 1931). Pp. 203. 7.75 kr. Vol. 75: General Marine Physiology; Conditions of Growth of Phytoplankton. Reports of the Proceedings of a Special Meeting held on March 27th, 1931, at Copenhagen. Pp. 70. 2.75 kr. Vol. 76: The Mixing Question, viewed Theoretically and Practically, together with a Consideration of Internal Waves. Reports of the Proceedings of a Special Meeting held on March 27th, 1931, at Copenhagen. Pp. 62. 2.50 kr. (Copenhagen: Andr. Fred. Høst et fils.)

Bulletin of the National Research Council. No. 83: A Compendium of the Statute Law of Coroners and Medical Examiners in the United States. Issued under the Auspices of the Committee on Medicolegal Problems. By George H. Weinmann. Pp. 240. 3 dollars. Reprint and Circular Series of the National Research Council. No. 97: The Committee on State Archaeological Surveys of the Division of Anthropology and Psychology, National Research Council. By Carl E. Guthe. Pp. 9. 15 cents. No. 98: Report of the Committee on Sedimentation, 1929-1930. Pp. ii+97. 1 dollar. No. 99: Bibliography of Acoustics of Buildings. By F. R. Watson. Pp. 31. 50 cents. No. 100: In Quest of Glacial Man; a Plan of Cooperation between Excavators and the Representatives of the Sciences of Man and of the Earth. Prepared by Madison Bentley. Pp. 20. 40 cents. No. 101: Doctorates conferred in the Sciences by American Universities, 1930-1931. Compiled by Callie Hull and Clarence J. West. Pp. 55. 50 cents. (Washington, D.C.: National Academy of Sciences.)

Journal of the Faculty of Science, Hokkaido Imperial University. Series 2: Physics. Vol. 1, No. 2: Further Studies on the Striated Electric Discharge Figure. By Tadasi Itoh. Pp. 77-85+2 plates. Series 4: Geology and Mineralogy. Vol. 1, No. 2. Pp. 113-255+18 plates. (Sapporo.)

Abisko Naturvetenskapliga Station. Observations météorologiques a Vassijaure. 6, 1911. Exécutées et rédigées par Fritz Hallberg. Pp. iv+68. 7, 1912. Exécutées et rédigées par Fritz Hallberg. Pp. iii+66. (Stockholm.)

Philippine Earthquake Epicentres (1920 to 1929) North of Latitude 14° 30'. By the Rev. William G. Repetti. Pp. 69-95. (Manilla: Bureau of Printing.)

Journal of the Federated Malay States Museums. Vol. 8: Results of an Expedition to Korinchi Peak, 12,400 ft., Sumatra. Part 3: Invertebrates. Pp. 205-225. (Kuala Lumpur.)

Federated Malay States. Annual Report of the Education Department for the Year 1930. By Dr. R. O. Winstedt. Pp. ii+58. (Kuala Lumpur: Government Press.)

Memoirs of the College of Science, Kyoto Imperial University. Series A, Vol. 14, No. 3, May. Pp. 79-130. 1.20 yen. Series B, Vol. 6, No. 4, June, Article 6: Über die Beeinflussung des Wachstums des Mesokotyls und des Koleoptile von *Avena-Keimlingen* durch das Licht. Von Hideo Hamada. Pp. 161-238. (Tokyo and Kyoto: Maruzen Co., Ltd.)

U.S. Department of Commerce: Bureau of Standards. Bureau of Standards Journal of Research. Vol. 7, No. 3, September, Research Papers Nos. 348-360. Pp. 419-615. (Washington, D.C.: Government Printing Office.)

Bulletin of the University of Wisconsin. Serial No. 1760, General Series No. 1534: A Method of making Short Traffic Counts and Estimating Traffic Circulation in Urban Areas. By Prof. Franz A. Aust, Prof. H. F. Janda, assisted by John R. Campbell and Robert S. Harrison. Pp. 57. (Madison, Wis.)

Proceedings of the United States National Museum. Vol. 79, Art. 17: A New Species of Trematode of the Family Heterophyidae, with a Note on the Genus *Apophallus* and related Genera. By Emmet W. Price. (No. 2883). Pp. 6. (Washington, D.C.: Government Printing Office.)

## CATALOGUE.

The Cannon House Catalogue of Scientific Books and Serial Publications (Transactions, Journals, Periodicals). (N.S. No. 5.) Pp. 96. (London: Wm. Dawson and Sons, Ltd.)