

researches on atmospherics.—**Pierre Gavaudan**: The identity of the metachromatic vacuome and of the leucosine of the Monadinæ and Chrysomonadinæ.—**A. Damiens and Mlle. S. Blaignan**: Normal bromine in plants: edible plants and fruits. Bromine is a normal constituent of plants, the amount in 100 grams of dry material varying between 0.17 and 2.02 mgm. The amount in the fruits is less.—**Ph. Joyet-Lavergne**: The rôle of the chondriome in the manifestations of cytoplasmic sexualisation.—**A. Magnan and A. Sainte-Laguë**: Flight by wing beats at a fixed point.—**Philippe Fabre**: The exciting efficacy of condenser discharges below the rheobase.—**Mme. Phisalix**: The reciprocal vaccinating action of the poisons of the bee and *Vipera aspis*.—**R. Legroux, Kemal-Djemil, and Mme. Colette Jérôme**: The immunisation of guinea-pigs against glanders.—**J. Lignières**: Paradoxical phenomena of the immunising property of the aphthous virus. A local aphthous lesion does not always confer immunity.

Forthcoming Events

TUESDAY, JULY 26

BRITISH MEDICAL ASSOCIATION—Centenary Meeting (Presidential Address at the Queen's Hall, Langham Place, London).—The Right Hon. Lord Dawson of Penn: "A Hundred Years and After", at 4 P.M.

FRIDAY, JULY 29

BRITISH MEDICAL ASSOCIATION—Centenary Meeting (Popular Lecture at University College, Gower Street, W.C.1).—Prof. Julian Huxley: "The Biology of Human Nature", at 8 P.M.

Official Publications Received

BRITISH

Department of Scientific and Industrial Research. Summary of Progress of the Geological Survey of Great Britain and the Museum of Practical Geology for the Year 1931. Part 1, with Report of the Geological Survey Board and Report of the Director. Pp. iii+81. (London: H.M. Stationery Office.) 1s. 6d. net.

Proceedings of the Royal Irish Academy. Vol. 41, Section B, Nos. 1 and 2: Some Derivatives of Diconmarin, by Dr. Joseph Algar, Anne E. O'Reilly and Mary Joy; Derivatives of Benzo-Difurfurane, by Dr. Joseph Algar, Vincent C. Barry and Tadhg F. Twomey. Pp. 14. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 6d.

University of Durham: Committee of Senate on Entrance Tests and Bachelors' Degrees. Report. Pp. 17. (Durham.)

British Standards Institution. No. 457, 1932: British Standard Specification for the Identification of Chemical Pipe Lines. Pp. 8. (London: British Standards Institution.) 2s. net.

Department of Scientific and Industrial Research. Building Science Abstracts. Vol. 5 (New Series), No. 5, May. Abstracts Nos. 747-933. Pp. 141-176. (London: H.M. Stationery Office.) 1s. net.

Madras Fisheries Department. Administration Report for the Year 1930-31. By Dr. B. Sundara Raj. (Report No. 1 of 1932, Madras Fisheries Bulletin, Vol. 26.) Pp. v+112. (Madras: Government Press.) 14 annas.

India: Meteorological Department. Scientific Notes, Vol. 4, No. 43: On the Extreme Dryness observed at Kodaikanal during the Winter Months. By S. L. Malurkar. Pp. 137-144+11 plates. (Calcutta: Government of India Central Publication Branch.) 1.8 rupees; 2s. 6d.

Proceedings of the Geologists' Association. Edited by G. S. Sweeting. Vol. 43, Part 2, 24th June. Pp. 97-260. (London: Edward Stanford, Ltd.) 5s.

The Kent Incorporated Society for Promoting Experiments in Horticulture. Annual Report (Nineteenth Year) 1931, East Malling Research Station, 1st January 1931 to 31st December 1931. Pp. 89+5 plates. (East Malling.)

Indian Journal of Physics, Vol. 7, Part 1, and Proceedings of the Indian Association for the Cultivation of Science, Vol. 16, Part 1. Conducted by Sir C. V. Raman. Pp. 106. (Calcutta.) 1.8 rupees; 2s.

Report by the Financial Commissioner (Lord Mayne) on certain Questions in Kenya. (Cmd. 4093.) Pp. vi+122. (London: H.M. Stationery Office.) 2s.

The London School of Economics and Political Science (University of London), Houghton Street, Aldwych, W.C.2. Department of Business Administration, Session 1932-33. Pp. 28. Training for Business Management. Pp. 11. (London.)

Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1440 (T. 3116, 3117): Stresses in a Wire Wheel with Non-Radial Spokes under Rim Loads. Part 1, by Prof. A. J. Sutton Pippard and Miss M. J. White; Part 2, by Prof. A. J. Sutton Pippard and W. E. Francis. Pp. 19+19 plates. 1s. 3d. net. No. 1455 (T. 3201): Sideslip and Performance of Multi-Engine Aircraft. By E. T. Jones. Pp. 6+4 plates. 6d. net. (London: H.M. Stationery Office.)

Experimental Researches and Reports published by the Department of Glass Technology, the University, Sheffield. Vol. 14, 1931. Pp. iii+174. (Sheffield.) 7s. 6d.

The North of Scotland College of Agriculture. Guide to Experiments and Demonstration Plots at Craibstone, 1932. Pp. xii+64. (Aberdeen.) City and Guilds of London Institute. Report of the Council to the Members of the Institute, 1932. Pp. xlix+75. (London: Gresham College.)

Committee on Bird Sanctuaries in Royal Parks (England). Report for 1931. Pp. 18. (London: H.M. Stationery Office.) 6d. net.

Mines Department. Tenth Annual Report of the Safety in Mines Research Board, including a Report of Matters dealt with by the Health Advisory Committee, 1931. Pp. 95+9 plates. (London: H.M. Stationery Office.) 2s. net.

Proceedings of the Royal Society of Victoria. Vol. 44 (New Series), Part 2. Pp. 103-326+plates 15-26. (Melbourne.)

Transactions of the Optical Society. Vol. 33, 1931-32, No. 3. Pp. ii+73-136. (London: Optical Society.) 10s.

Society of Biological Chemists, India. Biochemical and Allied Research in India in 1931. Pp. 42. (Bangalore: Indian Institute of Science.)

Proceedings of the Royal Irish Academy. Vol. 41, Section B, No. 3: Some Legendary and Historical References to Irish Woods, and their Significance. By A. C. Forbes. Pp. 15-36. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 6d.

FOREIGN

Bulletin of the American Museum of Natural History. Vol. 64: The Distribution of Bird Life in Guatemala; a Contribution to a Study of the Origin of Central American Bird-Life. By Ludlow Griscom. Pp. ix+439. (New York City.)

U.S. Department of Agriculture. Technical Bulletin No. 294: The Biology and Morphology of the Braconid *Chelonus annulipes* Wesm. a Parasite of the European Corn Borer. By Arlo M. Vance. Pp. 48. (Washington, D.C.: Government Printing Office.)

University of California Publication. Bulletin of the Department of Geological Sciences, Vol. 21, No. 7: The Fossil Passerine Birds from the Pleistocene of Carpinteria, California. By Alden H. Miller. Pp. iii+169-194+plates 12-14. (Berkeley, Calif.: University of California Press.) 35 cents.

University of California Publications in Zoology. Vol. 38, No. 3: Type Localities of Birds described from California. By Joseph Grinnell. Pp. 243-324. 1 dollar. Vol. 38, No. 4: New Pocket Gophers from Nevada. By E. Raymond Hall. Pp. 325-333. 25 cents. Vol. 38, No. 5: Three New Rodents from Lava Beds of Southern New Mexico. By Seth B. Benson. Pp. 335-344+plates 3-4. 25 cents. (Berkeley, Calif.: University of California Press.)

New York Academy of Sciences. Scientific Survey of Porto Rico and the Virgin Islands. Vol. 12 (Supplementary Part): Insects of Porto Rico and the Virgin Islands. Supplementary Report on the Heterocera or Moths of Porto Rico. By W. T. M. Forbes. Pp. 56+6 plates. (New York City.)

Field Museum of Natural History. Zoological Series, Vol. 18, No. 7: Reptiles and Amphibians of the Mandel Venezuelan Expedition. By Karl P. Schmidt. (Publication 309.) Pp. 157-163. 25 cents. Zoological Series, Vol. 18, No. 8: Notes on New Guinean Crocodiles. By Karl P. Schmidt. (Results of the Crane Pacific Expedition.) (Publication 310.) Pp. 165-172+plates 6-7. 25 cents. Zoological Series, Vol. 19: The Birds of Chile. By Charles E. Hellmayr. (Publication 308.) Pp. 472. 2.50 dollars. (Chicago.)

Scientific Papers of the Institute of Physical and Chemical Research. Nos. 366-367: Hyperfine Structure of Mercury, V., by Kiyoshi Murakawa; Hyperfine Structure of Lead, by Kiyoshi Murakawa. Pp. 177-204. 30 sen. Nos. 368-369: Forest Fires and Weathers, by Torahiko Tereda and Tyokurō Utagasaki; Diffraction of Cathode Rays by Single Crystals, Part 1: P-Patterns, by Ken'ichi Shinohara. Pp. 205-236+plates 4-9. 45 sen. (Tōkyō: Iwanami Shoten.)

Smithsonian Institution: United States National Museum. Bulletin 162: Life Histories of North American Gallinaceous Birds, Orders Galliformes and Columbiformes. By Arthur Cleveland Bent. Pp. xi+490+93 plates. (Washington, D.C.: Government Printing Office.) 1 dollar.

Rubber Research Institute of Malaya. Annual Report, 1931. Pp. 134. (Kuala Lumpur.) 1 dollar.

U.S. Department of the Interior: Geological Survey. Water-Supply Paper 638-D: Quality of Water of the Colorado River in 1928-1930. By C. S. Howard. (Contributions to the Hydrology of the United States, 1931.) Pp. ii+145-162. Water-Supply Paper 638: Surface Water Supply of the United States, 1929. Part 3: Ohio River Basin. Pp. viii+272. Water-Supply Paper 692: Surface Water Supply of the United States, 1929. Part 12: North Pacific Slope Drainage Basins. A: Pacific Slope Basins in Washington and Upper Columbia River Basin. Pp. vii+190. 25 cents. Water-Supply Paper 696: Surface Water Supply of the United States, 1930. Part 1: North Atlantic Slope Drainage Basins. Pp. viii+280. Water-Supply Paper 701: Surface Water Supply of the United States, 1930. Part 6: Missouri River Basin. Pp. ix+302. 50 cents. Water-Supply Paper 702: Surface Water Supply of the United States, 1930. Part 7: Lower Mississippi River Basin. Pp. v+115. 20 cents. (Washington, D.C.: Government Printing Office.)

U.S. Department of the Interior: Geological Survey. Bulletin 833: Mineralogy of Drill Cores from the Potash Field of New Mexico and Texas. By Waldemar T. Schaller and Edward P. Henderson. Pp. viii+124+39 plates. 60 cents. Bulletin 838: Nitrate Deposits of the United States. By G. R. Mansfield and Leona Boardman. Pp. vi+107+11 plates. 40 cents. (Washington, D.C.: Government Printing Office.)

CATALOGUES

Catalogue of B.D.H. Fine Chemical Products: including Organic and Inorganic Chemicals, Analytical Reagents, Indicators, Standard Stains. (July, 1932.) Pp. 151. (London: The British Drug Houses, Ltd.)

Telcon Metals: Induction Melted Electrical Resistance Alloys in Rod, Wire and Tapes. Pp. 16. (London: Wild-Barfield Electric Furnaces, Ltd.)