

power.—J. Cojan: Modification of the method of zones (Ritchey) for the determination of the aberration of optical systems. Its extension to aberrations outside the axis. A series of photographs at different determined positions is taken, and the densities measured by the microphotometer. The accuracy (0.01 mm.) is greater than that obtainable by eye observations.—F. Guéry: The magnetic field of the electron in movement. The conclusion is drawn that the magnetic field of the electron is only a mathematical expression without physical reality.—H. Pied: The precipitation of tantalum and niobium by cupferron and their separation from iron. After removal of iron as the sulphide in a solution containing oxalic and tartaric acids, tantalum and niobium can be completely separated by cupferron. Titanium, if present, is also precipitated.—Mme. P. Ramart and Mlle. Amagat: Molecular transpositions. The preparation and dehydration of some *a-a*-diarylethanols and alkyl-diarylethanols.—Léon Piaux: The action of catalysts on the oxidation of uric acid: copper and cuprous urate. Both copper powder and cuprous urate serve as active catalysts in the oxidation of uric acid in alkaline solution by oxygen. Potassium oxonate and allantoin are produced.—E. Kohn-Abrest: The examination of blood for gaseous poisons. An apparatus is described and illustrated capable of detecting and estimating alcohol, sulphuretted hydrogen, hydrocyanic acid, carbon dioxide and carbon monoxide in 50 c.c. of blood.—Marcel Solignac: The eruptive rocks of the archipelago of Galite.—E. Henrijean and W. Kopaczewski: Colloids and mineral waters. A study of a ferruginous mineral water has proved the presence of a colloid in this water. From its chemical composition, this colloid can be only an electropositive hydrosol of iron.—d'Arsonval and —Bordas: Remarks on the preceding note.—E. Rothé and Mme. A. Hée: The earthquakes observed in France during the year 1923. Fifteen earthquakes were felt in France during the year, the most important being in the Pyrenees region.—Ch. Brioux: The influence of urea, used as manure, on the reaction of the soil. Experiments with soil showed that urea, utilised as manure, behaves at first as an alkali on account of its rapid conversion into ammonium carbonate. As the latter is nitrified, it acts as an acid like other ammoniacal manures.—Jules Amar: Course of the vital coagulation.—Gabriel Bidou: An artificial hand or apparatus for replacing a hand after amputation.—E. Lagrange: A reaction of the testicular hormone.—L. M. Betances: New details on cytohaematogenesis.—Alphonse Labbé: An experimental phylogenetic race. An account of variations in some copepods produced by varying the P_{H_2} of sea water.—E. Gley and J. Cheymol: The presence of iodine in venous blood from the thyroid. It was found that the thyroid gland of the goat yielded sufficient venous blood to permit of the determination of the iodine. The blood in the general circulation also contained iodine. Whilst the proportion of iodine in the blood issuing from each lobe of the gland generally increases with the proportion of iodine in the gland itself, the two are not proportional, and there are probably other controlling factors.—H. Lagatu and L. Maume: The study, by the periodical analysis of the leaves, of the influence of manures containing lime, magnesia, and potash on the vine.—Louis Lapicque: The formula of electrical stimulation as a function of the time.—G. Sanarelli: The so-called "intestinal" anthrax. The enteric secretions of the dog, rabbit, and guinea-pig, although without action on the development of several species of organisms (*Proteus*, *Staphylococcus*, *B. mesentericus*), completely prevent the development of anthrax spores.

These results throw some doubt on the views commonly held on "intestinal anthrax."—C. Levaditi, S. Nicolau, Mlles. J. Salgue and R. Schoen: The mechanism of the action of bismuth in syphilis. The destruction of the treponema *in situ* is the effect of quantities of bismuth too small to detect by chemical methods.

Official Publications Received.

- United States Department of Agriculture. Department Bulletin No. 1238: The Canker-worms. By B. A. Porter and C. H. Alden. Pp. 38+3 plates. 10 cents. Department Bulletin No. 1243: Studies of the Mexican Bean Beetle in the Southeast. By Neale F. Howard and L. L. English. Pp. 51+12 plates. 20 cents. (Washington: Government Printing Office.)
- University of Illinois Engineering Experiment Station. Bulletin No. 143: Tests on the Hydraulics and Pneumatics of House Plumbing. By Prof. Harold E. Babbitt. Pp. 80. (Urbana, Ill.) 40 cents.
- The National Institute of Agricultural Botany. Fifth Report and Accounts, 1923-1924. Pp. 19. (Cambridge.)
- Meddelelser fra Kommissionen for Havundersøgelser. Serie Fiskeri, Bind 7, Nr. 5: On the Summer- and Autumn-Spawning Herrings of the North Sea. By Dr. A. C. Johansen. Pp. 119. 8 kr. Serie Fiskeri, Bind 7, Nr. 6: Fish Eggs and Larvæ collected in the Belt Sea in March 1922. By P. L. Kramp. Pp. 19. n.p. (København: C. A. Reitzel.)
- County Borough of Huddersfield. The Tolson Memorial Museum Publications. Handbook 3: Early Man in the District of Huddersfield. By James A. Petch. With an Appendix on the Nature and Making of Graving Tools, by Francis Buckley. Pp. 95. (Huddersfield.) 1s.
- Commonwealth of Australia. Institute of Science and Industry. Bulletin No. 27: Australian Clays in the Manufacture of White Pottery Wares. By R. C. Callister. Pp. 87. (Melbourne: H. J. Green.) Gratis.
- Meddelanden från Statens Meteorologisk-Hydrografiska Anstalt. Band 1. No. 5: Översikt över Sveriges vattankraft. Av Sven Notlindh. Pp. viii+40+3 maps. (Stockholm.) 5.50 kr.
- State of Connecticut. Public Document No. 34: Biennial Reports of the Storrs Agricultural Experiment Station, Storrs, Connecticut; including the 32nd Annual Report for the Nine Months ending June 20, 1920, 33rd Annual Report for the Year ending June 30, 1921, 34th Annual Report for the Year ending June 30, 1922, 35th Annual Report for the Year ending June 30, 1923. Pp. xiii+323. (Storrs, Conn.)
- Smithsonian Institution: United States National Museum. Contributions from the United States National Herbarium. Vol. 20, Part 13: Revision of the American Species of *Rinorea*; New Plants from Venezuela; *Hemibaccharis*, a new Genus of *Baccharidinae*. By S. F. Blake. Pp. x+491-554+plates 31-51. (Washington: Government Printing Office.) 20 cents.
- Field Museum of Natural History. Zoological Series, Vol. 10, No. 16: Contents and Index to Volume 10, Numbers 1 to 15. (Publication 214.) Pp. ix+375-385. Zoological Series, Vol. 15: The Marine Fishes of Panama. Part 1. By Seth E. Meek and Samuel F. Hildebrand. (Publication 215.) Pp. xi+330+24 plates. Anthropological Series, Vol. 16: Japanese Sword-Mounts in the Collections of the Field Museum. By Helen C. Gunsaulus. (Publication 216.) Pp. 135+61 plates. Report Series, Vol. 6, No. 3: Annual Report of the Director to the Board of Trustees for the Year 1923. (Publication 217.) Pp. 167-264+plates 30-46. Zoological Series, Vol. 12, No. 4: New Birds from Central Peru. By John T. Zimmer. (Publication 218.) Pp. 49-67. Zoological Series, Vol. 12, No. 5: New Birds from Chile. By C. E. Hellmayr. (Publication 219.) Pp. 69-75. Zoological Series, Vol. 12, No. 6: Notes on Central American Crocodiles. By Karl P. Schmidt. (Publication 220.) Pp. 77-92+plates 5-9. Zoological Series, Vol. 12, No. 7: New Salamanders of the Genus *Oedipus*, with a Synoptical Key. By E. R. Dunn. (Publication 221.) Pp. 93-100. (Chicago.)
- Department of the Interior: United States Geological Survey. Bulletin 758: Bibliography of North American Geology for 1921-1922. By John M. Nickles. Pp. ii+273. 25 cents. Water-Supply Paper 516: Surface Water Supply of Hawaii, July 1, 1919, to June 30, 1920. Pp. v+159. 20 cents. Water-Supply Paper 518: Ground Water in Musselshell and Golden Valley Counties, Montana. By A. J. Ellis and O. E. Meinzer. Pp. vi+92+5 plates. 20 cents. Water-Supply Paper 520-C: Power Resources of Snake River Basin between Huntington, Oregon, and Lewiston, Idaho. By William Glenn Hoyt. Pp. ii+27-51. n.p. Water-Supply Paper 535: Surface Water Supply of Hawaii, July 1, 1920, to June 30, 1921. Pp. iv+151. 15 cents. Professional Paper 127: The Composition of the Earth's Crust. By Frank Wigglesworth Clarke and Henry Stephens Washington. Pp. v+117. 20 cents. (Washington: Government Printing Office.)
- Department of the Interior: United States Geological Survey. Mineral Resources of the United States in 1923 (Preliminary Summary). Introduction by Frank J. Katz; Statistics assembled by Martha B. Clark. Pp. iv+130A. (Washington: Government Printing Office.) n.p.

Diary of Societies.

SATURDAY, NOVEMBER 29.

- ROYAL IRISH ACADEMY, at 4.15.
- NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (Graduate Section, jointly with the Mining Institute) (at Bolbec Hall, Newcastle-on-Tyne), at 7.
- HULL ASSOCIATION OF ENGINEERS (at Hull Municipal Technical College), at 7.15.—W. J. Bowtell: Lifting Machinery for Docks.
- SOCIETY OF DYERS AND COLOURISTS (West Riding Section).—Dr. F. M. Rowe and V. Tarbett: The Dyeing Properties of some Azo Derivatives of Tetra Hydro Naphthalene.