

of aerial photography and the photo-restitution apparatus.—H. Chaumat: A new wattmeter.—O. Liévin: The kinetic study of alkaline solutions of iodine. In alkaline solutions, iodine is transformed into iodate by different reactions depending on the degree of alkalinity.—E. Toporescu: The preparation of sodium bicarbonate. An experimental study of the reaction  $\text{NaCl} + \text{NH}_4\text{HCO}_3 = \text{NaHCO}_3 + \text{NH}_4\text{Cl}$ . The solubilities of the salts at  $15^\circ\text{C}$ . were taken first singly, then in pairs, and finally omitting one constituent only. The results are plotted on the square diagram due to M. H. le Chatelier (see above).—A. Mailhe: The catalytic decomposition of oleic acid. The vapour of oleic acid passed over copper-aluminium pellets contained in a copper tube maintained at  $600^\circ\text{--}650^\circ\text{C}$ . gives a gas rich in olefines (10 per cent.) and an acid liquid. The hydrocarbons, freed from acids, commenced to distil at  $40^\circ\text{C}$ . (amylene) and contained about 50 per cent. of olefines. These were removed by hydrogenation over nickel at  $180^\circ\text{--}200^\circ\text{C}$ ., and hexane, heptane, benzene, toluene, metaxylene, and nonane were identified in the resulting hydrocarbon mixture.—A. Schoep: Stasite, a new mineral, dimorphous with dewindite. This was obtained from a chalcophile from Kasolo (Katanga, Belgian Congo), and analyses led to the formula  $4\text{PbO} \cdot 8\text{UO}_3 \cdot 3\text{P}_2\text{O}_5 \cdot 12\text{H}_2\text{O}$ , which is identical with the composition of dewindite, from which, however, the new mineral differs in its density, colour, and the form of its crystals. Its radioactivity is a little less than that of dewindite.—L. Blaringhem: Abnormal heredity of the colour of the embryos of a variety of pea, *Pisum sativum*. Certain strains of pea, like hordeum and flax, present striking irregularities in the transmission of discontinuous characters.—H. Ricome: The elongation of roots.—M. Molliard: A new acid fermentation produced by *Sterigmatocystis nigra*. The products can be made to vary by changing the constituents of the culture fluid. If the nitrogen is deficient *d*-glucosic acid is the main acid produced; if the phosphates are reduced, then citric and oxalic acids preponderate.—J. Pellegrin: A new blind fish from the fresh waters of western Africa. This belongs to a new genus named *Typhlosynbranchus* by the author. The character of the branchial apparatus places it in the family of *Synbranchus*.—A. Lécaillon: The characters of a male hybrid arising from the union of a male duck (*Dafila acuta*) and female wild duck (*Anas boschas*).—P. Cristol: Zinc and cancer. The proportions of zinc in various forms of cancerous tumours have been estimated. The preliminary results show that the high proportion of zinc found in cancerous tumours is a function of the proliferation and the cellular and nuclear activity.—J. Mawas: The lymphoid tissue of the middle intestine of the Myxinoidea and its morphological signification.—C. Bourguignon: The treatment of contraction by electrical stimulation of the non-contracted muscles in the lesions of the pyramidal bundle and in the secondary contraction of peripheral facial paralysis. Evolution of the chronaxy in the course of the treatment.—C. Levaditi and A. N. Martin: The preventive and curative action in syphilis of the acetyl derivative of oxyaminophenylarsinic acid (sodium salt). This salt has been shown to be stable, very soluble, rich in arsenic and relatively slightly toxic, and has been used with effect in the cure by injection of experimental syphilis of the rabbit. The present experiments deal with administration by the mouth and not by injection, and it was proved that this salt would cure experimental syphilis rapidly in the rabbit and the ape. Two cases in man were successfully cured in the same way, and its preventive action was also shown on the human subject.

## Official Publications Received.

- The Journal of the Royal Anthropological Institute of Great Britain and Ireland. Vol. 51. July to December 1921. Pp. xii+289-462 +13+27. (London: Royal Anthropological Institute.) 15s. net.
- Transactions of the Geological Society of South Africa. Vol. 24: Containing the Papers read during 1921. Pp. iv+252+13 plates. (Johannesburg: Geological Society of South Africa.) 42s.
- Madras Fisheries Department. Administration Report for the Year 1920-21. (Report No. 1 of 1922. Madras Fisheries Bulletin, Vol. 15.) Pp. 44. (Madras: Government Press.) 4 annas.
- Proceedings of the Indian Association for the Cultivation of Science. Vol. 7, Parts 1 and 2. Pp. 59. (Calcutta.) 4 rupees; 6s. 4.
- The South African Journal of Science. Vol. 18, Nos. 1 and 2: Comprising the Report of the South African Association for the Advancement of Science, 1921, Durban. Pp. xxxviii+200. (Johannesburg.) 15s.
- Canada. Department of Mines: Mines Branch. Summary Report of Investigations made by the Mines Branch during the Calendar Year ending December 31, 1920. Pp. 87. (Ottawa: F. A. Acland.)
- Reports of the Department of Conservation and Development, State of New Jersey. Annual Report for the Year ending June 30, 1921: Department of Conservation and Development, Administering Geology, Soils, Water Resources, Forestry, Forest Fire Service, State Museum, Testing Laboratory, State Parks, Land Registry. Pp. 105. (Trenton, N.J.)
- Sudan Government. Wellcome Tropical Research Laboratories, Khartoum. Report of the Government Chemist for the Year 1921. (Chemical Section: Publication No. 22.) Pp. 38. (Khartoum.)
- Jahrbuch der Geologischen Staatsanstalt. Jahrgang 1921, 71 Band. 1 und 2 Heft. Pp. 100. 3 und 4 Heft. Pp. vii+101-224. (Wien: Geologischen Staatsanstalt.)
- Verhandlungen der Geologischen Staatsanstalt. Jahrgang 1921. Nr. 1 bis 12 (Schluss). (Wien: Geologischen Staatsanstalt.)

## Diary of Societies.

FRIDAY, APRIL 28.

- ZOOLOGICAL SOCIETY OF LONDON, at 4.—Anniversary Meeting.
- ROYAL SOCIETY OF ARTS (Indian Section), at 4.30.—F. G. Royal-Dawson: The Need of an All-India Gauge Policy.
- PHYSICAL SOCIETY OF LONDON (at Imperial College of Science and Technology), at 5.—T. Smith: The Position of Best Focus in the Presence of Spherical Aberration.—F. Twyman and J. Perry: The Determination of the Absolute Stress-variation of Refractive Index.—C. J. Smith: An Experimental Comparison of the Viscous Properties of (a) Carbon Dioxide and Nitrogen Oxide, and (b) Nitrogen and Carbon Monoxide.—F. Twyman: Demonstration of the Optical Sonometer.
- ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—Sir Arthur Keith: Demonstration of Museum Specimens illustrating the Forms of Inguinal Hernia.
- ROYAL SOCIETY OF MEDICINE (Study of Disease in Children Section), at 5.—Sir Robert Jones: Presidential Address.
- INSTITUTION OF AERONAUTICAL ENGINEERS (at Engineers' Club, Coventry Street, W.1), at 6.—Capt. Sayers: Some Unsettled Problems of Aeroplane Design.
- INSTITUTE OF MARINE ENGINEERS, at 6.—Annual Meeting.
- INSTITUTION OF MECHANICAL ENGINEERS, at 6.—Prof. E. G. Coker and Dr. K. C. Chakko: An Account of some Experiments on the Action of Cutting Tools.
- JUNIOR INSTITUTION OF ENGINEERS, at 8.—Capt. H. Whittaker: Some Notes on the Utilisation of Water Power.
- ROYAL SOCIETY OF MEDICINE (Epidemiology Section), at 8.—Dr. F. Dittmar: Outbreaks of Enteric Fever associated with Carrier Cases.
- ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Dr. A. Harden: Vitamin Problems.

MONDAY, MAY 1.

- ROYAL INSTITUTION OF GREAT BRITAIN, at 5.—Annual Meeting.
- INSTITUTE OF ACTUARIES, at 5.—E. H. Brown: The Valuation of Endowment Assurances by Select Tables.
- ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—Prof. Shattock: Demonstration of Museum Specimens illustrating Sarcoma.
- SOCIETY OF ENGINEERS (at Geological Society), at 5.30.—Dr. C. V. Drysdale: The Testing of Small Electrical Plant.
- ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 8.—Annual General Meeting.
- ARISTOTELIAN SOCIETY (at University of London Club, 21 Gower Street, W.C.1), at 8.—Miss M. MacFarlane: Prof. Alexander's Theory of Values.
- ROYAL SOCIETY OF ARTS, at 8.—F. F. Renwick: Modern Aspects of Photography (1) (Cobb Lectures).
- SOCIETY OF CHEMICAL INDUSTRY (at Chemical Society), at 8.
- ROYAL SOCIETY OF MEDICINE (Tropical Diseases and Parasitology Section), at 8.30.—Annual General Meeting.

TUESDAY, MAY 2.

- ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Sir Arthur Keith: Anthropological Problems of the British Empire. Series II: Racial Problems of Africa (2).
- ROYAL COLLEGE OF PHYSICIANS OF LONDON, at 5.—Prof. E. Mellanby: Some Common Defects of Diet and their Pathological Significance (Oliver Sharpey Lectures) (1).
- INSTITUTION OF CIVIL ENGINEERS (Extra Meeting), at 6.—Sir John A. F. Aspinall: Some Post-War Problems of Transport (James Forrest Lecture).
- ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.
- RÖNTGEN SOCIETY (at Institution of Electrical Engineers), at 8.15.