

of the appearance and structure of the silver bands, λ_{3330} and λ_{3358} .—F. Croze: The structure of the line spectra of ionised nitrogen and oxygen.—Jean Jacques Trillat: The molecular orientation of the fatty acids.—Herbert Brennen: Chemical studies on the isotopes of lead. A partial separation of the isotopes of lead by the action of the Grignard reagent on lead chloride has been recently described by Dillon, Clarke, and Hinchy. This work has been repeated, and no evidence of separation of isotopes was obtained.—Georges Fournier: The absorption of the β -rays by matter. If μ is the coefficient of absorption and ρ the density of the material, then experiments with six materials show that the relation $\mu/\rho = a + bN$ (where N is the atomic number) is valid.—A. Bigot: Clays, kaolins, etc.—L. Blanc and G. Chaudron: The magnetic study of the stable form of the sesquioxides of iron and chromium. The magnetic susceptibility of Fe_2O_3 and Cr_2O_3 as a function of the temperature is given in graphical form: the results are difficult to interpret.—André Graire: The reduction of the oxides of nitrogen in the presence of sulphuric and sulphurous acids.—Marcel Godchot and Pierre Bedos. The chlorination of para-methyl-cyclohexanone.—Ch. Courtot and P. Petitcolas: Syntheses of 9-fluorenylamines.—J. Barthoux: Description of a new mineral, dussertite. This mineral, found at Djebel Debar, is an arsenate of the composition $(\text{FeAl})_3(\text{CaMg})_3(\text{OH})_9(\text{AsO}_4)_2$. The full chemical analysis, physical and mineralogical description are given.—Pierre Bonnet: The problem of the Trias of the Avallonnais and Auxois.—Pierre Dangeard: Limits of the submerged plant growth of Lake Annecy at varying depths.—P. Mazé: The plurality of the products of photosynthesis, deduced from the study of the gaseous exchanges between the atmosphere and the whole plant.—Mlle. Sara Bache-Wüg: The vacuome of *Erysiphe graminis*.—P. E. Pinoy: Concerning the cancer of plants or crown gall. L. Ravaz and G. Verge: A disease of the vine, excoriosis.—Mme. Jean Francois-Perey: The influence of the culture medium on protozoa counts in soil. The influence of the culture medium is marked; an extract of the earth with gelose is recommended as giving the most trustworthy results.—C. F. Muttelet: Study of the development of the pea; from the point of view of conservation for food.—Vittorio Pettinari: The toxic action of *Amanita phalloides*.—Georges Bourguignon and J. B. S. Haldane: The evolution of chronaxy in the course of the crisis of experimental tetany by voluntary hyperpnea in man.—A. Malaquin: The segregation, in the course of ontogenesis, of two primordial sexual cells; origin of the germinal descent in *Salmacina Dysteri*.—Robert Weill: Foci of formation and ways of migration of the nematocysts of *Halychistis octoradiatus*. The existence, along their path, of selective reservoirs.—J. Chaine: Remarks on the penian bone.—Armand Dehorne: The petaloid expansions of the leucocytes of the Chetopoda. The case of *Leydenia Gemmipara*.—Ph. Joyet-Lavergne: The lipoids and fats of the Sporozoa.—Edouard Chatton and André Lwoff: The physiological determinism of the phases of the cycle of the infusorian *Spirophrya subparasitica*.—A. Berthelot and G. Ramon: The agents of transformation of the toxins into anatoxins. Toxins can be converted in various ways into substances deprived of toxic power, but retaining the power of flocculation (*in vitro*) and immunising power (*in vivo*). These products are described as anatoxins, and the action of a large number of chemical compounds on the diphtheria toxin has been studied from this point of view. The most effective reagents for the production of the diphtheria anatoxine proved to be acrolein, crotonaldehyde, acetaldehyde and hexamethylenetetramine.

NO. 2888, VOL. 115]

Official Publications Received.

- Department of the Interior: United States Geological Survey. Bulletin 751-E: The Scobey Lignite Field Valley, Daniels, and Sheridan Counties, Montana. By Arthur J. Collier. Pp. v + 157-230 + plates 21-23. (Washington: Government Printing Office.)
- Department of the Interior: United States Geological Survey. Professional Paper 132-F: Relations of the Wasatch and Green River Formations in North-Western Colorado and Southern Wyoming, with Notes on Oil Shale in the Green River Formation. By J. D. Sears and W. H. Bradley. Pp. ii+93-107+2 plates. Professional Paper 132-G: Discovery of a Balkan Fresh-water Fauna in the Idaho Formation of Snake River Valley, Idaho. By W. H. Dall. Pp. ii+109-115+1 plate. Professional Paper 132-H: The Resuscitation of the Terrestrial Mammal Gravel. By F. Bascom. Pp. 117-119. (Washington: Government Printing Office.)
- "The First Five Thousand": being the First Report of the First Birth Control Clinic in the British Empire, "The Mothers' Clinic" for Constructive Birth Control at 61 Marlborough Road, Holloway, London, N. 19. By Dr. Marie Carmichael Stopes. Pp. 67. (London: J. Bale, Sons and Danielsson, Ltd.) 2s. 6d. net.
- Department of Commerce: U.S. Coast and Geodetic Survey. Serial No. 260: Precise Triangulation, Traverse and Leveling in North Carolina. By Walter D. Sutcliffe and Henry G. Avers. (Special Publication No. 101.) Pp. iv+184. (Washington: Government Printing Office.) 25 cents.
- Annuaire de l'Observatoire Royal de Belgique. Par P. Stroobant. 93^{me} année, 1926. Pp. iii+154. (Bruxelles.)
- The Physical Society of London. Proceedings, Vol. 37, Part 2. February 15. Pp. 75-100+50 D. (London: Fleetway Press, Ltd.) 6s. net.
- Thirty-eighth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1916-17; with accompanying Paper, An Introductory Study of the Arts, Crafts and Customs of the Guiana Indians, by Walter Edmund Roth. Pp. vii+745+183 plates. (Washington: Government Printing Office.) 3 dollars.
- State of Illinois Department of Registration and Education: Division of the Natural History Survey. Bulletin, Vol. 15, Art. 3: Second Report on a Forest Survey of Illinois; The Economics of Forestry in the State. By Herman H. Chapman and Robert B. Miller. Pp. vii+46-172. (Urbana, Ill.)
- Iowa Geological Survey. Vol. 29: Annual Reports, 1919 and 1920, with Accompanying Papers. Pp. xlviii+568+54 plates. (Des Moines.)
- University of Iowa Studies in Natural History. Vol. 10, No. 5: Fiji-New Zealand Expedition. Narrative and Preliminary Report of a Scientific Expedition from the University of Iowa to the South Seas. By C. C. Nutting; with Chapters on Ornithology and Entomology by Dayton Stoner, on Botany by R. B. Wylie, and on Geology by A. O. Thomas. Pp. 369+58 plates. (Iowa City.) 3 dollars.
- Royal Botanic Gardens, Kew. Bulletin of Miscellaneous Information, 1924. Pp. iv+400+50. (London: H.M. Stationery Office.) 10s. 6d. net.
- Ministry of Agriculture, Egypt: Technical and Scientific Service. Bulletin No. 50: A Third Bioclimatic Study in the Egyptian Desert. By C. B. Williams. Pp. ii+32+7 plates. (Cairo: Government Publications Office.) 5 P.T.
- Memoirs of the Department of Agriculture in India. Chemical Series, Vol. 7, No. 6: Studies in the Chemistry of Sugarcane. 2: Some Factors that determine the Ripeness of Sugarcane. By D. Viswanath and S. Kasinatha Ayyar. Pp. 135-144. (Calcutta: Thacker, Spink and Co.; London: W. Thacker and Co.) 8 annas; 9d.
- Western Australia. Annual Progress Report of the Geological Survey for the Year 1923. Pp. 38+3 plates. (Perth: Fred. Wm. Simpson.)
- Department of the Interior: Bureau of Education. Bulletin, 1924, No. 19: Schools for Adults in Prisons, 1923. By A. C. Hill. Pp. iii+33. (Washington: Government Printing Office.) 5 cents.

Diary of Societies.

SATURDAY, MARCH 7.

- ROYAL SOCIETY OF MEDICINE (Otolaryngology Section), at 10.30.
- ASSOCIATION OF TECHNICAL INSTITUTIONS (Annual Meeting) (at Institution of Mechanical Engineers), at 11 A.M.—Lord Emmott and Ppl. W. M. Varley: The Local College and its Relation to Surrounding Education Authorities.—G. Mavor: Training and Education for Apprenticeship.—J. E. Montgomery: The Working of the Schemes for National Certificates and Diplomas in Engineering.
- INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS (Eastern and South Midland Districts) (at Town Hall, Ealing), at 2.35.—The Question of Regional Town Planning.
- ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Sir Ernest Rutherford: The Counting of the Atoms (II).
- IPSWICH AND DISTRICT NATURAL HISTORY SOCIETY (at Ipswich).—Dr. F. W. Crossley-Holland: Science and the Criminal.

MONDAY, MARCH 9.

- ROYAL SOCIETY OF EDINBURGH, at 4.30.—A. H. R. Goldie: Discontinuities in the Atmosphere.—Dr. A. P. Laurie: Stone Decay and the Preservation of Buildings (Address).—W. H. Watson: An Investigation of the Absorption of Superposed X-Radiations.—H. W. Turnbull and J. Williamson: The Minimum System of Two Quadratic Forms.—Prof. H. S. Allen: Note on Whittaker's Quantum Mechanism.—Marion C. Gray: The Equation of Conduction of Heat.
- VICTORIA INSTITUTE (at Central Buildings, Westminster), at 4.30.—Rev. C. Gardner: Nature and Supernature.
- BIOCHEMICAL SOCIETY (at Lister Institute), at 5.—F. W. Fox: The Cholesterol Content of Bile and its Bearing upon the Metabolism of Cholesterol and the Bile Acids.—J. R. Marrack: The Total Base Content of Plasma.—D. Hoffer and I. S. MacLean: The Action of Yeast on Lactic Acid.—E. H. Lepper and C. J. Martin: (a) The Influence