

by the apparatus are given, showing the curves of the tricuspid, mitral and aortic valves.—New observations of the planet EL (Coggia, March 31, 1899), made at the Observatory of Marseilles with the 26 cm. equatorial, by M. E. Stéphan.—Observations of the new Coggia planet (EL), made at the Observatory of Algiers with the 31.6 cm. equatorial, by M. Rambaud.—On the sterilisation of potable waters by ozone on the industrial scale, by MM. Marmier and Abraham. The apparatus was set up at Lille. After the water had passed through the ozonising column, all saprophytic and pathogenic organisms were destroyed with the exception of some spores of *Bacillus subtilis*; this organism also offering considerable resistance to all the usual methods of sterilisation.—On furfuryl alcohol, by M. G. André. Specimens of this alcohol prepared by different methods for calorimetric determinations differed considerably in purity, the method of Wissel and Tollens being the only one yielding a pure substance.—Osazones from oxycelluloses, by M. Léo Vignon. Cotton wool was oxidised in various ways to oxycelluloses, and these heated with phenylhydrazine in acetic acid solution. The osazones formed were not constant in composition.—On the sugar of maize stems, by MM. C. Istrati and G. Cöttinger. Measurements of the reducing power before and after inversion of the juice from the stems of sixteen varieties of maize.—Remarks on a preceding communication "On the pathogenic agent of hydrophobia," by M. E. Puscariu. The amylaceous formations observed in the central nervous system of animals who died from hydrophobia have been found in cases of general paralysis, abscess of the brain and in diphtheric paralysis. Hence the view previously put forward, that these formations are of parasitic origin and peculiar to hydrophobia, is erroneous.—On the reducing power of the tissues: the blood, by M. Henri Hélier.—On a ratio existing between intraorganic oxidations and the production of kinetic energy in the organism, by M. Alexandre Poehl.—The microbes of flowers, by M. Domingos Freire. Numerous species of organisms have been found in flowers, including the pathogenic *Bacillus pyocyaneus*.—On the wines obtained by the preliminary heating of the vintage, by M. A. Rosenstiehl. The preliminary sterilisation of the must by heating and the subsequent introduction of suitable yeasts, in all the instances tried, gave a wine superior to that obtained by the traditional methods.—The specific characters of the fungus of *Pityriasis versicolor*, by M. Paul Vuillemin.—Researches on the mineral elements, especially iron, in the human foetus, by M. L. Hugouneq.—The formation of the egg in *Myriothela* and *Tubularia*, by M. Alphonse Labbé.—Tangential increase of the pericycle, by M. Henri Devaux.—Discussion of barometric observations, by M. A. Poincaré.

DIARY OF SOCIETIES.

THURSDAY, MAY 4.

ROYAL SOCIETY, at 4.30.—On the Chemical Classification of the Stars: Sir Norman Lockyer, F.R.S.—Demonstration of Vermiform Nuclei in the Fertilised Embryo Sac of *Lilium martagon*: Miss E. Sargent.—*Oryzeta equina* (Willd.): a Horn-destroying Fungus: Prof. Marshall Ward, F.R.S.—Impact with a Liquid Surface studied by the Aid of Instantaneous Photography. Paper II.: Prof. Worthington, F.R.S., and R. C. Cole.—The External Features in the Development of *Lepidosiren paradoxa* (Fitz.): J. G. Kerr.—An Observation on Inheritance in Parthenogenesis: Dr. E. Warren.—The Thermal Expansion of Pure Nickel and Cobalt: A. E. Tutton.

LINNEAN SOCIETY, at 8.—The Position of Anomalurus as indicated by its Myology: F. G. Parsons.—On *Nothia anomala*, Harv. et Bail.: Miss Ethel S. Barton.—On Variation in the Desmidiæ: G. S. West.

CHEMICAL SOCIETY, at 8.—On the Combustion of Carbon Disulphide: H. B. Dixon and F. J. Russell.—The Action of Nitric Oxide on Nitrogen Peroxide: H. B. Dixon and J. D. Peterkin.—On the Mode of Burning of Carbon: H. B. Dixon.—Crystalline Glycollic Aldehyde: Henry J. Horstman Fenton and Henry Jackson.—On the Blue Salt of Fehling's Solution and other Cupro-tartrates: Orme Mason and B. D. Steele.—The Preparation of Acid Phenolic Salts of Dibasic Acids: Dr. S. B. Schryver.—The Maximum Pressure of Naphthalene Vapour: R. W. Allen.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Electric Locomotives in Practice and Tractive Resistance in Tunnels, with Notes on Electric Locomotive Design: G. V. McMahon.

FRIDAY, MAY 5.

ROYAL INSTITUTION, at 9.—Pictures produced on Photographic Plates in the Dark: Dr. W. J. Russell, F.R.S.

GEOLOGISTS' ASSOCIATION, at 8.—The Drainage of Cuestas: Prof. W. M. Davis.

SATURDAY, MAY 6.

GEOLOGISTS ASSOCIATION.—Excursion to the Thame District. Director: A. M. Davies. Leave Paddington at 9.50.

MONDAY, MAY 8.

SOCIETY OF ARTS, at 8.—Leather Manufacture: Prof. H. R. Proctor.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Explorations in the Bolivian Andes: Sir Martin Conway.

TUESDAY, MAY 9.

ROYAL INSTITUTION, at 3.—Electric Eddy-Currents: Prof. S. P. Thompson, F.R.S.

ANTHROPOLOGICAL INSTITUTE, at 8.30.—Ethnographical Notes on the Fang: Dr. Albert L. Bennett.

ROYAL PHOTOGRAPHIC SOCIETY, at 8.—The Photography of Colour: E. Sanger Shepherd.

WEDNESDAY, MAY 10.

SOCIETY OF ARTS, at 8.—Fruit-Growing in Kent: George Bunyard.

GEOLOGICAL SOCIETY, at 8.—The Geology of the Davos District: A. Vaughan Jennings.—Contributions to the Geological Study of County Waterford: the Lower Palæozoic Bedded Rocks of the Coast: F. R. Cowper Reed.

THURSDAY, MAY 11.

MATHEMATICAL SOCIETY, at 8.—The Zeros of a Spherical Harmonic $P_n(\mu)$ considered as a Function of n : H. M. Macdonald.

FRIDAY, MAY 12.

ROYAL INSTITUTION, at 9.—Magnetic Perturbations of the Spectral Lines: Prof. Thomas Preston, F.R.S.

ROYAL ASTRONOMICAL SOCIETY, at 8.

MALACOLOGICAL SOCIETY, at 8.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—City and Guilds of London Institute, Report to the Governors, March 1899 (London).—Engine-Room Practice: J. G. Liversidge (Griffin).—Manual of Library Cataloguing: J. H. Quinn (Library Supply Company).—The Philosophy of Memory: Dr. A. T. Smith (Louisville, Morton).—The Flora of Cheshire: Lord de Tabley (Longmans).—Outlines of Zoology: Prof. J. A. Thomson, 3rd edition (Pentland).—The Phenomena of Nature: J. Walker, Part 2 (Sonnenschein).—Essai Critique sur l'Hypothèse des Atoms: Prof. A. Hannequin, deux édition (Paris. Alcan).—Graduated Test Papers in Elementary Mathematics: W. J. Wood (Macmillan).—Annual Report of the Smithsonian Institution, 1897 (Washington).—Milk: Dr. C. M. Aikman, 2nd edition (Black).

PAMPHLETS.—Some Insects Injurious to Garden and Orchard Crops (Washington).—Geological Society of Washington, Presidential Address: A. Hague (Washington).—Return, Local Authorities (England, Wales, and Ireland), Technical Education (London).

SERIALS.—Indian Museum Notes, Vol. iv. No. 3 (Calcutta).—Transactions of the Institution of Engineers and Shipbuilders in Scotland, April (Glasgow).—American Naturalist, April (Boston).—Bulletin of the American Mathematical Society, April (New York).—Bulletin de la Société Impériale des Naturalistes de Moscou, 1898, Nos. 2 and 3 (Moscou).

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