

by MM. Alfred **Chatin** and S. **Nicolau**. The arc with iron has always a greater bactericidal power than the arc between ordinary carbon poles, the effect being most marked with the staphylococcus aureus and least with the anthrax bacillus, but even in the latter case the ratio of the times required for sterilisation was as 5:1 in favour of the poles containing iron.—Researches on the toxic power of *Ksopo* or *Tanghin de Menabe*, by M. Lucien **Camus**.—The origin of pearls in *Mytilus gallo-provincialis*, by M. Raphaël **Dubois**.

NEW SOUTH WALES.

Royal Society, November 5, 1902.—Prof. Warren, president, in the chair.—New South Wales Meteorites, by Prof. **Liversidge**, F.R.S. *Barratta Meteorites*, Nos. 2 and 3. The first meteorite from this locality was examined by the author in 1872; the later ones were received in 1889. No. 2 weighed $3\frac{1}{2}$ lb. and No. 3 48 lb.; they both very closely resemble the first one found in appearance, specific gravity, &c. No. 2 has, on analysis, been found to resemble No. 1 also in chemical composition; it is essentially a mixture of enstatite, olivine, &c., with about 6 per cent. of nickeliferous iron. No. 3 has not yet been analysed. *Gilgoin Meteorites*, Nos. 1 and 2. The weight of No. 1 was $67\frac{1}{2}$ lb. and its sp. gr. 3.857. They are both much fissured and weathered. No 2 weighed 74 lb. and has a sp. gr. of 3.757. No. 1 has been found on analysis to resemble the Barratta meteorites, but to contain more lime and alumina, and less iron and magnesia and about 14 per cent. of nickeliferous iron. No. 2 has not yet been analysed. *Boogaldi (Bugoldi) Meteorite*. An account of this meteorite was given by Mr. R. T. Baker about two years ago; it has since been analysed; the principal constituents are iron 91.135, nickel 8.636, cobalt 0.065 and phosphorus 0.17.—Forests considered in their relation to rainfall and the conservation of moisture, by Mr. J. H. **Maiden**. A descriptive statement of the relation between forests and water supply. Some uses of forests are, (a) to temper floods; (b) to conserve springs and to aid in the more even distribution of terrestrial waters; (c) to prevent evaporation of water; (d) to give shelter to stock, crops, &c.; (e) the leaves of forest trees, &c., afford manure and mulch.

DIARY OF SOCIETIES.

THURSDAY, JANUARY 29.

ROYAL SOCIETY, at 4.30.—The Relation between Solar Prominences and Terrestrial Magnetism: Sir Norman Lockyer, F.R.S., and Dr. W. J. S. Lockyer.—The Bending of Electric Waves round a Conducting Obstacle: H. M. Macdonald, F.R.S.—On Skew Refraction through a Lens; and on the Hollow Pencil given by an Annulus of a very Obliquely Placed Lens: Prof. J. D. Everett, F.R.S.—On the Decline of the Injury Current in Mammalian Nerve, and its Modification by Changes of Temperature: Miss S. C. M. Sowton and J. S. Macdonald.

ROYAL INSTITUTION, at 5.—Pre-Phoenician Writing in Crete and its Bearings on the History of the Alphabet: Dr. A. J. Evans.

FRIDAY, JANUARY 30.

ROYAL INSTITUTION, at 9.—Vibration Problems in Engineering Science: Prof. W. E. Dalby.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Design of the Electrical Equipment of a Light Railway: J. R. Macintosh.

SATURDAY, JANUARY 31.

ESSEX FIELD CLUB (Essex Museum of Natural History, Stratford), at 6.30.—Proposals for a Photographic and Pictorial Survey of Essex: A. E. Briscoe.

MONDAY, FEBRUARY 2.

SOCIETY OF ARTS, at 8.—Paper Manufacture: Julius Hübner. **VICTORIA INSTITUTE**, at 4.30.—On the Unseen Life of our World, and of Living Growth; Design, Human and Divine: Prof. Lionel S. Beale, F.R.S.

SOCIETY OF CHEMICAL INDUSTRY, at 8.—Statistics of British and German Chemical Trades for 1901, with Suggestions for Improving the Official Tables: F. Evershed.—The Standardisation of Analytical Methods: H. Droop Richmond.

TUESDAY, FEBRUARY 3.

ROYAL INSTITUTION, at 5.—The Physiology of Digestion: Prof. Allan Macfadyen.

SOCIETY OF ARTS, at 8.—Technical Education in Connection with the Book-Producing Trades: Douglas Cockerell.

MINERALOGICAL SOCIETY, at 8.—(1) On a Meteoric Stone seen to fall on August 22, 1902, at Caratash, Smyrna; (2) Note on the History of the Mass of Meteoric Iron found in the Neighbourhood of Caperr, Patagonia: L. Fletcher, F.R.S.—On the Crystalline Forms of Carbides and Silicides of Iron and Manganese: L. J. Spencer.—The Refractive Indices of Pyromorphite: H. L. Bowman.—Note on Quartz Crystals from De Aar: T. V. Barker.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Discussion of papers on The Nile Reservoir, Assuan: M. Fitzmaurice, C.M.G.—Sluices and Lock-Gates of the Nile Reservoir, Assuan: F. W. S. Stokes.

ZOOLOGICAL SOCIETY, at 8.30.—On the Hair-slope of four Typical Animals: Dr. W. Kidd.—A Prodromus of the Snakes hitherto recorded from China, Japan and the Loochoo Islands: Capt. F. Wall.—On the Variation of the

Elk: H. J. Elwes, F.R.S.—Note on the Wild Sheep of the Kopet Dagh: R. Lydekker, F.R.S.

WEDNESDAY, FEBRUARY 4.

SOCIETY OF ELECTRO-CHEMISTS AND METALLURGISTS (Faraday Club, St. Ermin's Hotel, Westminster), at 5.—General Meeting to inaugurate the work of the Society and elect a President and Council.

SOCIETY OF ARTS, at 8.—Methods of Mosaic Construction: W. L. H. Hamilton.

SOCIETY OF PUBLIC ANALYSTS, at 8.—Annual General Meeting.—At 8.30.—The Determination of Glycerine in crude Glycerines: Dr. Julius Lewkowsch.—(1) A Plea for the more Extended Consideration of Physics in Analytical Methods; (2) Note on the Determination of Casein precipitated by Rennet: H. Droop Richmond.

ENTOMOLOGICAL SOCIETY, at 8.—An Account of a Collection of Rhopalocera made on the Anambara Creek in Nigeria, West Africa: Percy I. Lathy; On the Hyspid Genus Deilemera, Hübner: Colonel C. Swinhoe.

GEOLOGICAL SOCIETY, at 8.—(1) The Granite and Greisen of Cligga Head (West Cornwall); (2) Notes on the Geology of Patagonia: J. B. Scrivenor.

THURSDAY, FEBRUARY 5.

ROYAL SOCIETY, at 4.30.—*Probable Papers*:—The Brain of the Archæoceti: Prof. Elliot Smith.—On the Negative Variation in the Nerves of Warm-Blooded Animals: Dr. N. H. Alcock.—Primitive Knot and Early Gastrulation Cavity coexisting with Independent Primitive Streak in Ornithorhynchus: Prof. J. T. Wilson and J. P. Hill.

ROYAL INSTITUTION, at 5.—Arctic and Antarctic Exploration: Sir Clements Markham, K.C.B.

CHEMICAL SOCIETY, at 8.—(1) A New Vapour-Density Apparatus; (2) A New Principle for the Construction of a Pyrometer: J. S. Lumsden.

LINEAN SOCIETY, at 8.—Stephanospermum, Bronngiart, a Genus of Fossil Gymnospermous Seeds: Prof. F. W. Oliver.

RÖNTGEN SOCIETY, at 8.30.—Discussion on Some Points suggested by the Presidential Address of November, 1902, opened by J. H. Gardiner.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Adjourned Discussion on the Metric System.

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