

from the peripheral cracking of Mt. Dore, by M. E. Bonjean. Eleven analyses are given of phonolites, trachytes, tephrites, and basalts.—On a crystallised double carbonate of cerium peroxide, by M. André Job. The salt has the composition $Ce_2O_3 \cdot (CO_3)_{2/3} \cdot 4K_2CO_3 \cdot 12H_2O$, and arises from the action of hydrogen peroxide upon cerium salts, and also by spontaneous oxidation.—On a fluorine compound supposed to be contained in certain mineral waters, by M. F. Parmentier. The effects produced upon glass, hitherto supposed to have been produced by fluorides in certain mineral waters, are shown to be due to a deposit of silica. No trace of fluorine has been detected in numerous analyses of mineral waters.—On the oxidising power of the alkaline periodates, by M. E. Péchard. The salt $NaIO_4$ behaves as an oxidising agent towards ferrous salts and potassium iodide.—Displacement of mercury by hydrogen, by M. Albert Colson. Mercuric oxide is slowly reduced by hydrogen at 100° , the amount of mercury formed being proportional to the weight of oxide actually present. The yellow and red oxides are reduced at different rates, the red being the slower of the two. Mercurous oxide is not attacked by hydrogen at 100° .—Luminous phenomena produced by the action of certain ammoniacal salts upon fused potassium nitrite, by M. D. Tommasi.—Morphine and its salts, by M. Emile Leroy. A study of the heats of combustion and formation of various salts of morphine.—On the production of the racemoid forms of camphor, by M. A. Debiegne.—On the unsymmetrical tetramethyl derivative of diamido-diphenylethane, by M. A. Trillat.—On the sugar from maize stems, by MM. C. Istrati and G. Oettinger.—On the absorption of iodine by the skin and its localisation in certain organs, by M. F. Gollard.—Detection and colorimetric estimation of minute quantities of iodine in organic substances, by M. Paul Bourcet.—The electrical treatment of gout, by M. Th. Guilloz.—On the structure of the anal glands in *Dysticus* and the supposed defensive rôle of these glands, by M. Fr. Dierckx.—Sporozoa in the digestive tube of the blind-worm, by M. Louis Léger.—On the quantitative variations of the plankton in the Lake of Geneva, by M. Emile Yung.—Fall of a meteorite recently observed in Finland, by M. Stanislas Meunier.—On a new mercury pump, by M. E. U. Chatelain.

DIARY OF SOCIETIES.

THURSDAY, MAY 11.

MATHEMATICAL SOCIETY, at 8.—The Zeros of a Spherical Harmonic $P_n^m(\mu)$ considered as a Function of n : H. M. Macdonald.—On the Statistical Rejection of Extreme Variations, Single or Correlated (Normal Variation and Normal Correlation): W. F. Sheppard.

FRIDAY, MAY 12.

ROYAL INSTITUTION, at 9.—Magnetic Perturbations of the Spectral Lines: Prof. Thomas Preston, F.R.S.
ROYAL ASTRONOMICAL SOCIETY, at 8.—Observations of Swift's Comet 1899, made at Grahamstown, South Africa: L. A. Eddie.—Observations of Mars made at Mr. Crossley's Observatory, Bernerside, Halifax, during the Opposition 1898-99: Joseph Gledhill.—Note on the Spectra of γ Cassiopeia and α Cent: Rev. W. Sidgreaves.—Longitude from Moon Culminations: D. A. Pio.—*Probable Papers*: Note on an Elbow Form of Reflecting Telescope: Dr. A. A. Common, F.R.S.—Observations of the Satellite of Neptune from Photographs taken with the 26-inch Refractor of the Thompson Equatorial: Royal Observatory, Greenwich.

PHYSICAL SOCIETY, at 5.—Note on the Vapour Pressure of Solutions of Volatile Substances: Dr. R. A. Lehfeldt.—Note on the Discussion of their Paper on the Criterion for an Oscillatory Discharge of a Condenser: Prof. W. B. Morton and Dr. Barton.—Exhibition of a Quadrant Electrometer: G. L. Addenbrooke.

MALACOLOGICAL SOCIETY, at 8.—On *Planispira (Cristigibba) buruensis* and *Omphalotropis hercules*, New Species from Buru: J. H. Ponsonby and E. R. Sykes.—Note on the Nervous System of *Ampullaria urceus*: R. H. Burne.—Notes on some Marine Shells from North-West Australia, with Description of New Species: E. A. Smith.—Descriptions of *Sigaretus Drevi*, n.sp. (Fossil) and *Cirsonella neozelandica*, n.sp. from New Zealand: R. Murdoch.—Notes on some New Zealand Land Mollusca: R. Murdoch.

SATURDAY, MAY 13.

GEOLOGISTS' ASSOCIATION (Liverpool Street, G.E.R.), at 2.—Excursion to Ilford.

MONDAY, MAY 15.

VICTORIA INSTITUTE, at 4.30.—The Physical and Mental Attributes of the Sexes: Dr. A. T. Schofield.

TUESDAY, MAY 16.

ROYAL INSTITUTION, at 3.—Recent Advances in Geology: Prof. W. J. Sollas, F.R.S.
ZOOLOGICAL SOCIETY, at 8.30.
ROYAL STATISTICAL SOCIETY, at 5.—Life Tables: their Construction and Practical Uses: T. E. Hayward.
ROYAL PHOTOGRAPHIC SOCIETY, at 8.—Specimen of Work with Irregular Grained Screens, &c.

WEDNESDAY, MAY 17.

ROYAL METEOROLOGICAL SOCIETY, at 4.30.—The Mean Temperature of the Surface Waters of the Sea round the British Isles, and its Relation to that of the Air: H. N. Dickson.—Some Phenomena connected with the Vertical Circulation of the Atmosphere: Major-General H. Schaw, C.B.
ROYAL MICROSCOPICAL SOCIETY, at 7.30.—Exhibition of Pond Life.

THURSDAY, MAY 18.

ROYAL SOCIETY, at 4.30.—Bakerian Lecture: The Crystalline Structure of Metals: Prof. Ewing, F.R.S., and W. Rosenhain.—*Probable Papers*: The Yellow Coloring Matters accompanying Chlorophyll and their Spectroscopic Relations: C. A. Schunck, F.R.S.—The Diffusion of Ions into Gases: J. S. Townsend.—The Diurnal Range of Rain at the Seven Observatories in connection with the Meteorological Office, 1871-1890: Dr. R. H. Scott, F.R.S.

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

CHEMICAL SOCIETY, at 8.—Corydaine, Part VI.: Dr. J. J. Dobbie and A. Lauder.—Oxidation of Furfural by Hydrogen Peroxide: C. F. Cross, E. J. Bevan, and T. Freiberg.

FRIDAY, MAY 19.

ROYAL INSTITUTION, at 9.—Runic and Ogam Characters and Inscriptions in the British Isles: The Lord Bishop of Bristol.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—Zur Anthropologie der Badener: O. Ammon (Jena, Fischer).—A Class-Book of (Elementary) Practical Physiology: Dr. de B. Birch (Churchill).—Geometrical Drawing: E. C. Plant, Vol. 1, Practical Plane Geometry (Macmillan).—Medical Missions in their Relation to Oxford: Sir H. W. Acland, 2nd edition (Frowde).—The Hygiene of the Mouth: R. D. Pedley (Segg).—Die Physikalischen Erscheinungen und Kräfte ihre Erkenntnis und Verwertung im Praktischen Leben: Prof. L. Grunmach (Leipzig, Spamer).—Outlines of Physical Chemistry: Prof. A. Reychler, translated by Dr. J. McCrae (Whittaker).—L'Éclairage à Incandescence par le Gaz et les Liquides Gazéifiés: P. Truchot (Paris, Carré).—Transactions of the American Pediatric Society, Vol. x. (New York).—Elements of Quaternions: Sir W. R. Hamilton, 2nd edition, Vol. 1 (Longmans).—Mechanics applied to Engineering: Prof. J. Goodman (Longmans).—Text-Book of Practical Solid Geometry: Captain E. H. de V. Atkinson (Spon).—Steinbruchindustrie und Steinbruchgeologie: Dr. O. Hermann (Berlin, Borntraeger).—The Naval Pioneers of Australia: L. Becke and W. Jeffery (Murray).—Applied Geology: J. V. Elsdon, Part 2 ("Quarry" Publishing Company).—A Guide to Recent Large Scale Maps (London).

PAMPHLETS.—Mines and Quarries, General Report, &c., for 1898, Part 1 (London).—The Geology of the Country around Carlisle: T. V. Holmes (London).

SERIALS.—Travaux de la Société Impériale des Naturalistes de St. Pétersbourg, Vol. xxvii, livr. 5 (St. Pétersbourg).—Sunday Magazine, May (Isbister).—Good Words, May (Isbister).—Chambers's Journal, May (Chambers).—National Review, May (Arnold).—Contemporary Review, May (Isbister).—Pearson's Magazine, May (Pearson).—Century Magazine, May (Macmillan).—Proceedings of the American Philosophical Society, December (Philadelphia).—Humanitarian, May (Duckworth).

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