

and mixtures of neutral sulphates of zinc and copper with sulphate of hydrogen.—M. Elie de Beaumont made some remarks upon the Mont Cenis tunnel, and read a letter from Father Secchi on the pendulum experiments which it is proposed to make in the tunnel.—M. J. Bourget presented a paper on the velocity of sound in sonorous tubes.—M. Jamin communicated a note by M. E. Gripon on the transverse vibrations of wires and thin plates, and also a note by M. Alvergniat on a new phenomenon of phosphorescence produced by frictional electricity. According to the latter a small quantity of chloride or bromide of silicium hermetically sealed in a vacuum tube gives a bright luminosity when the tube is rubbed with a piece of silk. The chloride gives a rose colour, the bromide a greenish yellow.—M. Le Verrier presented a note on the history of the observations on the action of ecliptic conjunctions upon the elements of terrestrial magnetism, by M. Moise Lion.—M. Le Verrier also presented a note by M. Tarry, giving an account of an aurora borealis observed at Brest on the 9th November, in which the author noticed particularly the perturbations manifested by the apparatus employed in telegraphy.—M. Le Verrier also remarked that auroras had been observed in Piedmont on the nights of the 2nd, 9th, 10th, and 15th November, and referred to the coincidence between the occurrence of these phenomena and the November flight of meteors, which M. C. Sainte-Claire Deville supposed to exist.—M. Berthelot read the conclusion of his paper on the formation of precipitates. In this he discussed the changes which take place in the state of aggregation of precipitates, illustrating his views by the facts observed in the cases of the carbonates of strontia, baryta, lead, and silver, and of the oxalates.—M. Wurtz presented a note by M. E. Ritter on the transformation of albuminoid matters into urea by permanganate of potash. This note contained an experimental confirmation of M. Béchamp's statement.—M. de Quatrefages communicated an extract from a letter by M. E. S. Delidon, on the butts of Saint-Michel-en-l'Herm, and on the means by which their elevation above the sea, and other local elevations, may have been effected. He considers that local elevations may be due to infiltration of fresh and salt water.—Mr. E. Blanchard presented a note by M. S. Jourdain on the anatomy of the sunfish (*Orthogoriscus mola*).—An extract of a letter from M. A. Poëy to M. Elie de Beaumont, on the influence of violet light upon the growth of the vine, pigs, and cattle, was read.—M. de Quatrefages presented a note by M. F. Garrigou on lacustrine habitations in the Pyrenean region of the South of France. In this note the author describes the results obtained by him in the investigation of the deposits of ancient lakes at the foot of the Pyrenees.

BOOKS RECEIVED

ENGLISH.—Becton's Medical Dictionary (Ward, Lock, and Tyler).
 FOREIGN.—Anales del Museo publico de Buenos Aires; Entrega octava: por Gerinan Burmeister (Paris, Savv). (Through Williams and Norgate.)—Beiträge zur Parthenogenesis der Arthropoden: von Siebold.—Lehrbuch der chemischen u. physikalischen Geologie: G. Bischof.—Untersuchung des Weges eines Lichtstrahls durch eine beliebige Anzahl von brechenden sphärischen Oberflächen: P. A. Hansen.—Die Arachniden Australiens nach der Natur beschrieben und abgebildet: Dr. L. Koch.

PAMPHLETS RECEIVED

ENGLISH.—On the Formation of the Cirques of Brittany: Rev. T. G. Bonney.—Law of Husband and Wife: Philofamilias.—The Obstacles to Science Teaching in Schools: Rev. W. Tuckwell.—Educational Hospital Reform: T. J. Boyd.—Report of Science and Art Department of the Committee of Council on Education, South Kensington.—Directory, with Regulations for Establishing and Conducting Science Schools.—Flints, Fancies, and Facts; a Review: W. Robinson.—Cases of Diarrhoea: Dr. Chapman.—Apprenticeship to the Sea Service; a Circular of the Board of Trade.—Proceedings of the Bristol Naturalists' Society, Vol. iv., part 1.—Glaciation of the North-west of England: C. E. De Rance.—Cholera and Disinfection; Asiatic Cholera in Bristol in 1866: Dr. Budd.—Primary Schools and the Difficulty of Spelling: E. Jones.—On the Eff. et of Small Variations of Temperature on Steel Magnets: Gordon and Newall.—Prize Medals of the Royal Geographical Society.—General Representation on a Complete Readjustment and Modification of Mr. Har's Scheme: A. E. Dobbs.—Reply to John Hampden's Charges against Mr. Wallace.—The Variations at Different Seasons of a *Hieracium*: Prof. Balfour.—Quarterly Journal of Education, October.—Fifteenth Annual Report of the Medical Officer of Health of St. James's.—On the Pre-glacial Geography of Northern Cheshire: C. E. De Rance.—Man contemplated Physically, Morally, Intellectually, and Spiritually: J. W. Jackson.—Introductory Lecture on Experimental Physics: J. Clerk Maxwell.—On Ocean Currents: J. K. Laughton.

AMERICAN AND COLONIAL.—On the Constitution of the Solid Crust of the Earth: Archdeacon Pratt.—On the Direction and Force of the Wind: F. C. Loomis.—Influence of Temperature: F. C. Loomis.—Thoughts on the Higher Education of Women: Principal Dawson.—Papers and Proceedings of the Royal Society of Tasmania, 1871.—Monthly Notices of the Royal Society of Tasmania, 1871.—Reports of the Mining Surveyors and Registrars, Victoria,

June 30, 1871.—Victoria; Patents and Patentees, Vol. iv.: W. H. Archer.—Victoria; Seventh Report of the Board of Visitors to the Observatory.—Lessons on Population, suggested by Grecian and Roman History: Dr. N. Allen.—An Address delivered at the Annual Exhibition of the Farmers' Club, Princeton: Dr. N. Allen.—On the Inter-marriage of Relations: Dr. N. Allen.—Remarks on the Relations of Anomia: E. S. Morse.—Correspondence on the subject of Atmospheric Electricity: Seth Boyden.—Spectroscopic Notes: Prof. C. A. Young.

FOREIGN.—Medizinische Jahrbücher, 1870: S. Stricker.—On the Diurnal Variation of the Inclination of the Magnet at Batavia: P. A. Bergmann.—On the Lunar Atmospheric Tide at Batavia: P. A. Bergmann.—Bulletin de la Société d'Anthropologie de France, Tome v.—Studi sopra un lignaggio anemofilo delle composte ossia sopra il gruppo delle Artemisiacce: Delpino.—Zeitschrift des oesterreichischen Gesellschaft für Meteorologie, Band vi., Nos. 14-22.

DIARY

THURSDAY, NOVEMBER 30.

ROYAL SOCIETY, at 4.—Anniversary Meeting.
 SOCIETY OF ANTIQUARIES, at 8.30.—Notes on an Example of Alamannic Phalare: W. M. Wylie, F.S.A.—On an Early French Deed (A.D. 1397) Relating to the Knights of Saint John of Jerusalem: C. K. Watson, M.A.

FRIDAY, DECEMBER 1.

GEOLOGISTS' ASSOCIATION, at 8.—On the Glacial Drifts of North London: H. Walker.
 ARCHÆOLOGICAL INSTITUTE, at 4.

SUNDAY, DECEMBER 3.

SUNDAY LECTURE SOCIETY, at 4.—The Coast Line and its Teachings: Dr. T. Spencer Cobbold, F.R.S.

MONDAY, DECEMBER 4.

ENTOMOLOGICAL SOCIETY, at 7.
 ANTHROPOLOGICAL INSTITUTE, at 8.—Anthropological Collections from the Holy Land. No. 11.: Captain Richard F. Burton, F.R.G.S.—On a Collection of Flint Implements from the Cape of Good Hope: Prof. Busk, F.R.S., and Rev. Mr. Dale.
 VICTORIA INSTITUTE, at 8.—The Serpent Myths of Ancient Egypt: W. R. Cooper.
 LONDON INSTITUTION, at 4.—The Physiology of Bodily Motion and Consciousness (VI.): Prof. Huxley, F.R.S.
 ROYAL INSTITUTION at 2.—General Monthly Meeting.

TUESDAY, DECEMBER 5.

ZOOLOGICAL SOCIETY, at 9.—On the Freshwater Siluroids of India and Burmah: Surgeon Francis Day, F.Z.S.—On a Small Collection of Butterflies from Angola: A. G. Butler.—Description of a New Genus of Lepidoptera, allied to *Apature*: A. G. Butler.
 SOCIETY OF BIBLICAL ARCHÆOLOGY, at 8.30.

WEDNESDAY, DECEMBER 6.

GEOLOGICAL SOCIETY, at 8.
 SOCIETY OF ARTS, at 8.—On Sewage as a Fertiliser of Land and Land as a Purifier of Sewage; J. Bailey Denton.
 MICROSCOPICAL SOCIETY, at 8.—On Microscopic Uredines: M. C. Cooke, M.A.

THURSDAY, DECEMBER 7.

ROYAL SOCIETY, at 8.30.
 SOCIETY OF ANTIQUARIES, at 8.30.
 CHEMICAL SOCIETY, at 8.
 LINNEAN SOCIETY, at 8.—Botany of the Grant and Speke Expedition: Lieut.-Col. Grant, C.B., C.S.I.—On a hybrid *Vaccinium* between the Bilberry and Crowberry: R. Garner, F.L.S.—On the Formation of British Pearls, and their possible improvement: R. Garner, F.L.S.

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ERRATUM.—P. 63, col. 1, lines 19, 18, 16 from bottom, for "linean" read "lineal."