

development of the group through its intermediate forms. Another interesting fact in connection with these fresh water deposits is, that whilst the fossil fauna of Eastern Oregon abounds in species identical or analogous with those of Nebraska and Dakota, yet extensive fresh water deposits were met with in Wyoming and the centre of the continent in which the fossil fauna was of an entirely distinct character, although belonging to the same geological epoch, the Miocene.

PARIS

Academy of Sciences, May 13.—M. Chasles presented a further series of theorems relating to the theory of the obliques of a curve.—M. L. Cailliet communicated a note on the influence of pressure upon the bands of the spectrum, in which he describes the increased resistance offered by compressed gases to the passage of the electric spark and its influence on the luminous phenomena produced, and stated that whilst the luminous intensity of the bands of the spectrum is increased by pressure, when the latter is extreme they disappear entirely, the spectrum becoming continuous.—M. Melsens forwarded a memoir on lightning conductors with multiple conductors; and M. Decharme a note on the spontaneous ascensional movement of liquids in capillary tubes, compared with the flow of the same liquids in the same tubes under a constant artificial pressure.—A note was read by M. Arnaud Thenard on the decomposition of carbonic acid under the influence of electricity.—M. Balard presented a note by M. Amagat on the dilatation of moist gases.—M. Lamy commented on a recent note by M. Personne on the presence of selenium in sulphuric acid of French manufacture, and indicated that its existence had been known for the last ten years.—M. Wurtz also presented a note by M. Scheurer-Kestner upon the same subject.—A note was read by M. J. Boussingault on the determination of carbon combined with meteoric iron.—M. C. Robin communicated a note by M. H. Byasson on the hydrosulphate of chloral (sulphuretted chloral).—M. Bouchut presented some investigations on the action of the bases and alkaloids obtained from opium.—M. Robin presented a note by M. J. P. Megnin, on the development of the unarmed cestoid worms, in which he described his observations on an undetermined species allied to *Tænia perforiata* (Goeze), *T. plicata* (Rud.), and *T. manillaria* (Mehlis), discovered by M. Baillet and himself in the horse and mule. He seems to think that all the stages of development of this parasite are passed in the same animal.—M. Clos presented a note upon a portion of the leaf in certain plants, to which he gives the name of *prelimb*.—The Minister of Foreign Affairs communicated a report received from the French Consul-General at San Francisco, relating to an earthquake which occurred in the county of Inyo on March 30.—A note on the silicified plants of Autun, with observations on the structure of *Dictyoxydon*, by M. B. Rénauld, was presented by M. Brongniart.—A letter from M. Palmieri on the late eruption of Mount Vesuvius, dated May 5, was read.

VIENNA

Academy of Sciences, January 4.—Prof. L. Gegenbauer, of Krems, forwarded a second memoir on the evaluation of definite integrals.—Dr. F. C. Schneider noticed the production of a detonating iodine-compound by treating oxyiodide of mercury with solution of iodide of potassium containing iodine. The detonating compound was formed as a crust over the residue of oxyiodide and upon the sides of the glass in which the mixture had remained for a fortnight; its violently explosive qualities were discovered on an attempt being made to remove it by means of a glass rod.—M. J. Schlesinger deposited a sealed note on the formula for the rapidity of outflow of water from tubes.—Prof. von Oppolzer announced the re-discovery on December 20, 1871, of the lost planet *Ægina* (91).—Dr. Sigmund Exner presented a memoir entitled "Further Investigations on the Structure of the Olfactory Mucous Membrane in the Vertebrata," in which he showed that the branches of the olfactory nerve in birds, mammals, and in man, terminate in the same way as was previously described by him in the frog. The author regarded the glands of the olfactory region as tubular, and not acinose.—Dr. A. Boué communicated a reply to M. Blak's remarks on his catalogue of northern and southern lights, and M. H. Fritz forwarded a note relating to the same subject.

January 11.—Dr. L. J. Fitzinger communicated a memoir on the natural family of the Pangolins (*Manes*), and M. S. Adler some mathematical demonstrations connected with the game of dominoes.

January 18.—A memoir by D. A. Seydler on the path of Dione (106) was read.—Dr. F. O. Sofka communicated six short papers on various mathematical and physical subjects.

BOOKS RECEIVED

ENGLISH.—Introduction to the Study of Palæontological Botany: J. H. Balfour (A. and C. Black).—Fruit Trees, 2nd edition: W. Wardle (Lockwoods).—Nature: A. Walker (Longmans).—The Fallacies of Darwinism: C. R. Bree, M.D. (Longmans.)

AMERICAN.—Annual Record of Science and Industry for 1871, edited by S. F. Baird.—The Lens, edited by S. A. Briggs, vol. 1, No. 2.

DIARY

THURSDAY, MAY 30.

ROYAL SOCIETY, at 8.30.—The Bakerian Lecture: On the Structure and Development of the Skull of the Salmon: W. K. Parker, F.R.S.—On Ammonia in the Urine in Health and Disease: Dr. Tidy and Dr. Woodman.—The Structure and Functions of the Rods of the Cochlea: Dr. Pritchard.—Examination of the Gases occluded in Meteoric Iron from Virginia: Dr. J. W. Mallet.

SOCIETY OF ANTIQUARIES, at 8.30.—Ballot for the Election of Fellows.

FRIDAY, MAY 31.

ROYAL INSTITUTION, at 3.—Old and New Art: E. J. Poyner.

SATURDAY, JUNE 1.

ROYAL INSTITUTION, at 3.—On the Chemical Action of Light: Prof. Roscoe, F.R.S.

GOVERNMENT SCHOOL OF MINES, at 8.—On Geology: Dr. Cobbold, F.R.S.

MONDAY, JUNE 3.

ROYAL INSTITUTION, at 2.

ENTOMOLOGICAL SOCIETY, at 7.

ANTHROPOLOGICAL SOCIETY, at 8.—On the Artificial Enlargement of the Earlobe in the East: J. Park Harrison, M.A.—On the Westerly Drifting of Nomads—the Fins: H. H. Howorth, M.A.—On Tumuli at Sapolla, Russia: Baron de Bogushefoky.

VICTORIA INSTITUTE, at 8, Anniversary Meeting.

TUESDAY, JUNE 4.

ROYAL INSTITUTION, at 3.—On Development of Belief and Custom: E. B. Tylor, F.R.S.

ZOOLOGICAL SOCIETY, at 9.—On *Dinornis* (Part XIX.) containing a description of a Femur, indicative of a new genus of large wingless bird (*Dromornis australis*, Owen) from a post-tertiary deposit in Queensland, Australia: Prof. Owen, F.R.S.—On the Anatomy of the Two-spotted Paradoxura (*Nandinia binotata*): Prof. Flower.

SOCIETY OF BIBLICAL ARCHAEOLOGY, at 8.30.—On the Political Condition of Egypt before the Reign of Rameses III.: Dr. August Eisenlohr.—Some Mathematical Observations on the Dimensions of the Base of the Great Pyramid, and the Royal Coffin: Solomon M. Drach.—The XXXVII. Aamu in the Tomb of Chnum-Hotep, at Beni Hassan, identified with the Family of Israel: Daniel H. Haigh.

WEDNESDAY, JUNE 5.

GEOLOGICAL SOCIETY, at 8.—Notes on Sand-pits, Mud Volcanoes, and Brine-pits, met with during the Yarkand Expedition of 1870: Dr. G. Henderson.—On the Cervidæ of the Forest-bed of Norfolk and Suffolk: W. Boyd Dawkins, F.R.S.—The Classification of the Pleistocene Strata of Britain and the Continent by means of the Mammalia: W. Boyd Dawkins, F.R.S.

MICROSCOPICAL SOCIETY, at 8.—Remarks on the Homological Position of the members constituting the Thecated Section of the Rotatoria: Chas. Cubitt.—On a Micro-pantograph: Isaac Roberts.

THURSDAY, JUNE 6.

ROYAL INSTITUTION, at 3.—On Heat and Light: Prof. Tyndall, F.R.S.

SOCIETY OF ANTIQUARIES, at 8.30.

LINNEAN SOCIETY, at 8.

CHEMICAL SOCIETY, at 8.

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