January 7.—Dr. Ruschenberger, president, in the chair—E. Goldsmith described what he considers a new mineral which he names *Trautwincite*, after its first observer, Mr. J. C. Trautwine. The mineral has a green colour; the hardness is between 1 and 2, and it is micro-crystalline. The regular forms, which he saw, were short hexagonal pyramids, the infinite pyramid (prism), and triangular slender prisms, which may be one-sixth sections of the hexagonal prism. Under ordinary circumstances the mineral is dull, but when observed under power it appears vitreous. The streak is light green. The qualitative chemical examination indicated the oxides of chromium, iron, and magnesium.—Prof. Cope remarked, that, through the kindness of Prof. B. F. Mudge, he had an opportunity of examining additional specimens of the turtle from the cretaceous of Kansas, described by him in the Proceedings of the Academy, 1872, p. 129. The phalanges indicated a large flipper of the type of marine turtles. They are more flattened than in the *Propluridæ* so far as the latter are known, and are proportionally larger. The genus and species were named *Toxochelys latiremis*.

PARIS

Academy of Sciences, April 21.—M. de Quatrefages president, in the chair.—The following papers were read.—A final answer to M. Secchi, by M. Faye. M. Faye called attention to the fact that Father Secchi has accused him of insinuating that his drawings of the spots are not authentic, which insinuation also applies to the drawings of Carrington and Father Tacchini. This he showed was not the case, his statement that photographs, and not drawings, were required, being perfectly obvious as regards its signification. He then proceeded to answer Secchi's statements as to eruptions projecting the erupted matter towards a common centre, and asked how it was that these masses cooled during a passage which lasted often but a day or two, or even a few hours, could produce spots which lasted for months. He then answered several other objections, and called attention to Respighi's observations of the chromosphere, the earliest, as they are the best yet executed, as fully bearing out his theory.—On the condensation of Carbonic Oxide and Hydrogen, and of Nitrogen and Hydrogen, by the silent electric discharge, by MM. P. and A. Thenard. The authors had noticed that the protocarbide of hydrogen and carbonic anhydride, which, under the silent discharge condensed to a liquid, were doubled in volume and converted into carbonic oxide and hydrogen by the spark, they therefore sought to recombine the two latter gases by the discharge; in this they succeeded, and the action was more rapid than with the first. They also succeeded in producing ammonia from three volumes of hydrogen and one of nitrogen when treated in the same way; the action was most rapid when an acid was present to absorb the NH_3 as fast as it was formed.—On the physical and political history of Chili, by M. Gay, was a sketch of a work by the author in Spanish consisting of thirty volumes.—On the qualities necessary to the springs required for the supply of water to Paris by M. Belgrand.—M. Leymerie was then elected correspondent of the Mineralogical section in place of the late M. Haidinger, and M. Didion correspondent of the Mechanical section in place of the late Canon Moseley.—On a spectral illuminator, by M. F. P. Le Roux, described a new method of obtaining monochromatic illumination.—On the action of electricity on flames by M. Neyreneuf.—On the application of the curves *des debits* to the study of the laws of rivers and to the effects produced by a multiple system of reservoirs by M. de Graeff.—Observations on *Phylloxera vastatrix*, by M. Maxime Cornu.—A decree from the President of the Republic was received authorising the Academy to receive a legacy of 40,000 francs, left to it by the late Marshal Vaillant.—On the interference fringes observed in the case of Sirius and several other stars when large telescopes are employed; a consequence of the relative angular diameter of the stars in question, by M. Stephan. The author hopes, by means of certain observations, to obtain an approximate measurement of the diameter of Sirius.—On the comparison of electrical machines, by M. Mascart.—Remarks on the resistance of galvanometers, by M. J. Reynaud.—On the condensed discharge of the induction spark, by M. Th. du Moncel.—Researches on the chloride bromide and iodide of trichloracetyl, by M. H. Gal.—On the action of sodic sulphide on glycerin, by M. F. Schlagdenhauffen.—On a volumetric method of estimating oxygen in hydric peroxide and other liquids, by M. F. Hamel; this is an application of the disengagement of oxygen from the above body, by means of potassic permanganate. The gas liberated and the permanganate used form the data necessary for the preparation of standard permanganate solution, where the oxygen liberated per c.c. of reagent used is known. On the properties and composition of a cellular tissue which extends throughout the organism of the vertebrata, by M. A. Müntz.—Discovery of a new human skeleton of the paleolithic period in the caverns of Baoussé Roussé, by M. E. Rivière.—On the influence of various coloured rays on the spectrum of chlorophyll, by M. J. Chautard.—A note on the habits of "Lombrics," by M. E. Robert.

DIARY

THURSDAY, MAY 1.

ROYAL SOCIETY, at 8.30.—On the Effect of Pressure on the Character of the Spectra of Gases: C. H. Stearn and G. H. Lee.—On the Condensation of a Mixture of Air and Steam upon Cold Surfaces: Prof. Osborne Reynolds.—Further Observations on the Temperature at which Bacteria Vibriones and their supposed Germs are killed when exposed to Heat, &c.—Dr. Bastian.

SOCIETY OF ANTIQUARIES, at 8.30.—Flint Implements from Japan: W. L. Lawrence.—On Religious Guilds, and particularly the Privileged Guild at Walsoken, Norfolk: J. G. Nichols.

LINNEAN SOCIETY, at 8.—On Cinchonas: J. E. Howard.

CHEMICAL SOCIETY, at 8.—On Zirconia: J. B. Hannay.—On a new class of Explosives: Dr. Sprengel.

ROYAL INSTITUTION, at 2.—Annual Meeting.

FRIDAY, MAY 2.

GEOLOGISTS' ASSOCIATION, at 8.—On the Valley of the Vézère (Dordogne), its Limestones, Caves, and Pre-historic Remains: T. Rupert Jones.

ROYAL INSTITUTION, at 9.—Alcohols from Flints: Prof. Reynolds.

ARCHÆOLOGICAL INSTITUTION, at 4.

HORTICULTURAL SOCIETY, at 3.—Lecture.

SATURDAY, MAY 3.

ROYAL INSTITUTION, at 3.—Ozone: Prof. Odling.

SUNDAY, MAY 4.

SUNDAY LECTURE SOCIETY, at 4.—The Relations between Science and some Modern Poetry: Prof. Clifford.

MONDAY, MAY 5.

ROYAL INSTITUTION, at 2.—General Monthly Meeting.

GEOLOGISTS' ASSOCIATION.—Excursion to Aylesbury, from Euston Square at 10.15 A.M.

ENTOMOLOGICAL SOCIETY, at 7.

ASIATIC SOCIETY, at 3.

LONDON INSTITUTION, at 4.—Elementary Botany: Prof. Bentley.

TUESDAY, MAY 6.

ANTHROPOLOGICAL INSTITUTE, at 8.—Eastern Coolie Labour: W. L. Distant. The Westerly Drifting of Nomades from the Fifth to the Nineteenth Century. Part X. The Alans or Lesghs: H. H. Howorth.

SOCIETY OF BIBLICAL ARCHÆOLOGY, at 8.30.—On the Signification and Etymology of the Hebrew Noun הִרְשָׁתָא Tirshatha: R. Cull.—On the Chronology of the Olympiads in Connection with the Golden Age of Greece: W. R. A. Boyle.—On the Sites of Ophir and Taprobane, from Greek and Hindu Authorities: A. M. Cameron.—On the Character of the Preposition in the Egyptian Language: P. Le Page Renouf.—Translation of an Egyptian Hymn to Ammon: C. W. Goodwin.

ZOOLOGICAL SOCIETY, at 8.30.—On some new Species of *Araneidea*: O. P. Cambridge.—On African Buffaloes: Sir Victor Brooke.

ROYAL INSTITUTION, at 3.—Music of the Drama: Mr. Dannreuther.

WEDNESDAY, MAY 7.

SOCIETY OF ARTS, at 8.—Improvements in the Manufacture of Gun Cotton. S. J. Mackie.

HORTICULTURAL SOCIETY.—Exhibition of Roses, Azaleas, &c.

MICROSCOPICAL SOCIETY, at 8.—On the Development of the Sturgeon's Facial Arches: W. K. Parker.

LONDON INSTITUTION, at 7.—Conversazione and Lecture by Prof. Clifford.

THURSDAY, MAY 8.

ROYAL INSTITUTION, at 3.—Light: Prof. Tyndall.

MATHEMATICAL SOCIETY, at 8.—On an application of the Theory of Unicursal Curves; Plan of a Curve-tracing Apparatus: M. Hermite.—On Bicursal Curves: Prof. Cayley.

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