

by W. L. Buller, F.L.S.—“On the Ornamental Cultivation of Native Shrubs,” by T. H. Potts and William Gray, Canterbury.—“Notes on New Zealand Birds,” continued, by T. H. Potts.—“On the Nomenclature of New Zealand Rocks” and “Notice of some New Mineral Forms in the Museum,” by E. H. Davis, F.L.S.—“On the Absorption of Sulphur by Gold,” by W. Skey, Government analyst. The author of this paper, while recently investigating the causes of the reported loss of gold at the Thames gold fields during its extraction from the ore, found the gold is acted on by sulphuretted hydrogen, and thus a sulphide is formed which tarnishes the surface. Also that gold combines with free sulphur at a temperature of 212° Fahr. Gold thus sulphurised on the surface will not amalgamate with mercury. The loss of gold is not altogether due to the condition of the mercury, as has hitherto been supposed, as he has found this sulphide on the surface of native gold of every degree of purity.

VIENNA.

I. R. Geological Institution, Sept. 30.—During the summer season the geologists of the Institution were partly occupied with the survey of Northern Tyrol from the environs of Kufstein, along the valley of the Inn westwards as far as Innsbruck, and partly on the military frontier between Barziasch on the Danube, and Brod in Slavonia. Messrs. Foetterle and Fr. v. Hauer, invited for this purpose by the Roumanian Government, investigated also parts of the Wallachian territory, and studied more particularly some sections between Bucharest and Kronstadt in Transylvania. Very interesting results were obtained here. The large portion of Southern Wallachia seems mostly covered with loess; but a boring at Bucharest, for an artesian well, perforated up to the depth of 250 metres beyond the loess nothing but strata of clay and sand, belonging to the Congeria-beds, a freshwater deposit which, in the Vienna basin, forms the highest member of the Miocene formation. Farther up towards the north the same strata constitute a broad zone of mountains of lower elevation, which board the plain, and form a passage to the high mountain which separates Wallachia from Transylvania. Large masses of petroleum are here imbedded in the lower parts of the congeria deposits. Whilst, therefore, the Galician petroleum belongs to the Eocene Carpathian sandstones, the Wallachian petroleum is of the upper Miocene age, and the strata which contain it abound in characteristic fossils of our congeria beds. Immediately below these beds follows the salt formation, consisting of salt clay, with large masses of rock salt, which is worked in the mines of Telega, Sylatina, Okna, &c. The higher mountains are formed chiefly of Eocene strata, partly sandstones, partly coarse conglomerates, with enormous boulders of jurassic limestone. These Eocene strata underlie immediately the salt formation in the Bucsecs mountain; they are upheaved to the height of more than 8,000 feet above the level of the sea. The crystalline rocks which form the nucleus of the Fogarasch mountains in Transylvania finish eastward in the neighbourhood of Ruckur, in the Dibmovizza-valley. On the passage between Kronstadt and the Sibnaja they are no longer to be observed.—Dr. T. Schmidt, director of the Observatory at Athens, gave notice of the violent earthquakes of July 31, August 1 and 5, in Greece, and mentioned that the volcanic eruptions in Santorin, which began five years ago, continue up to the present day with undiminished force.—M. Herbech discovered in Eastern Transylvania, on the Nagy-Hagymas mountain, some red limestone, with the characteristic fossils of the famous upper triassic Hallstatt marble, among them the magnificent Ammonites Metternichii.—Count H. Wilcejk and Count G. Wurmbrand discovered last summer an old pile building (Pfahlbau) in the Atter Lake in Upper Austria, near Kammer. Stone implements, fragments of rough pottery, &c., were found in abundance at the bottom of the lake.

Imperial Academy of Sciences, October 6.—Professor Barth transmitted some communications from the Chemical Laboratory of the University of Innsbruck. These notices included the results of an investigation made by Prof. Barth on the reaction of fusing potash upon phenole, of an investigation of the bromophenolic acids, by M. Carl Tenhofer, and on some derivatives of gallic acid, by Professor Reynold.—Dr. S. von Basch presented a memoir on the first chyle-ducts and the absorption of fat. The results of the observations made at the Central Observatory for meteorology and terrestrial magnetism during the months of July and August were laid before the meeting.

October 13.—M. Julius Peterin communicated a memoir on the formation of electrical annular figures by the current of the

influence machine.—Dr. L. J. Fitzinger presented the fifth section of his critical revision of the bat family, relating to the genera *Nycticejus*, *Lasiurus*, *Amblyotis*, *Murina*, *Harpyrocephalus*, *Nyctipterus*, *Leorester*, and *Natalus*.—Dr. von Zepharovich, of Prague, communicated a notice of the crystals of cerussite lately found in the Galena mines at Kilibaba. His paper contained accurate measurements of the crystals.—Dr. E. Brücke communicated a paper by M. A. Schapring on the contraction of the *tensor tympani*.—A memoir was read by Professor Loschmidt, containing an account of experimental investigations on the diffusion of gaseous mixtures, by M. A. Wretschke.—And Dr. J. Peyritsch communicated some further observations on pelorism in the Labiata.

DIARY

THURSDAY, DECEMBER 8.

ROYAL SOCIETY, at 8.30.—Report on Deep-Sea Researches carried on during the months July-September, 1870, in H.M. Surveying Ship *Porcupine*: Dr. Carpenter, F.R.S., and J. Gwyn Jeffreys, F.R.S.
SOCIETY OF ANTIQUARIES, at 8.30.—Autographs of Eminent Italian Princes: Dr. O'Callaghan, F.S.A.—On a Deed appointing Sir John Fastolf Governor of the Bastille, 3 Hen. V.: Mr. J. G. Nichols, F.S.A.
LONDON MATHEMATICAL SOCIETY, at 8.—Further Remarks on Quartic Surfaces: Prof. Cayley.—On the Polar Correlation of two Planes, and its Connection with their Quadric Correspondence: Dr. Hirst, F.R.S.—On Systems of Tangents to Plane Cubic and Quartic Curves: Mr. J. J. Walker.—On the Order and Singularities of the Parallel of an Algebraical Curve: Mr. S. Roberts
LONDON INSTITUTION, at 7.30.—On Count Rumford and his Philosophical Work: Mr. W. Mattieu Williams.

FRIDAY, DECEMBER 9.

LIVERPOOL NATURALISTS' FIELD CLUB.—Lecture by Prof. W. C. Williamson, F.R.S.

SUNDAY, DECEMBER 11.

SUNDAY LECTURE SOCIETY, at 3.30.—On the Telescope and its Discoveries: Mr. R. A. Proctor.

MONDAY, DECEMBER 12.

LONDON INSTITUTION, at 4.—On Chemical Action (Educational Course): Professor Odling, F.R.S.

TUESDAY, DECEMBER 13.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.
ETHNOLOGICAL SOCIETY, at 8.—On Stone Implements from Africa: Sir John Lubbock, Bart., M.P.—On Stone Implements from the Cape of Good Hope: Mr. Edgar Layard—Second Report on the Prehistoric Monuments of Dartmoor: Mr. C. Spence Bate.
PHOTOGRAPHIC SOCIETY, at 8.
MANCHESTER LITERARY AND PHILOSOPHICAL SOCIETY, at 7.

WEDNESDAY, DECEMBER 14.

SOCIETY OF ARTS, at 8.—On a new Method of producing Durable Mural Paintings by Fictile Vitrification: Mr. Alan S. Cole.
ROYAL MICROSCOPICAL SOCIETY, at 8.—On the Anatomy of *Ascarus lumbricoides*: Mr. B. T. Lowe, M.R.C.S.—Observations on the Aeroscope, or Air-dust Collector: Dr. Maddox.

THURSDAY, DECEMBER 15.

ROYAL, at 8.30.
CHEMICAL SOCIETY, at 8.—On some New Derivatives of Coumarin: Mr. W. H. Perkin.
LINNEAN SOCIETY, at 8.
LONDON INSTITUTION, at 7.30.—On Count Rumford and his Philosophical Work: Mr. W. Mattieu Williams.

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ERRATA.—Page 76, first column, line 29 from bottom, for “high” read “low”; second column, line 8, insert after “winter,” “—there atmospheric pressure is low;” page 92, second column, sixth note, for “Mr. Mathew Williams” read “Mr. William Mathews,” and for “Mr. Williams” read “Mr. Mathews.”