

some new views respecting the mutual relations of biological and chemical research, by D. W. Hentschel.—On Prof. Lindemann's proof that  $\pi$  is not an algebraic quantity, by Dr. Harnack.—On the preparation and application of perspective models in relief, by Dr. Burmester.—On the general theory of the so-called P.E. system, by Prof. Voss.—On the supposed coprolite deposits of Helmstadt, Büddenstedt, and Schleweke, near Harzburg, by Dr. H. B. Geinitz.—Memoir on the diluvial glaciers of North Europe, with special reference to Saxony, by Dr. H. B. Geinitz.—A Gaanlish double grave at La George-Maillet, Marne, by D. von Biedermann.—Monograph on the climate of the Glacial epoch, by Heinrich Vater.—The diamond fields of the Cape, by Thaddeus Schrader.

**SOCIETIES AND ACADEMIES**  
**LONDON**

**Mineralogical Society, October 22.**—Anniversary Meeting.—W. H. Hudleston, F.G.S., president, in the chair.—The following were elected officers and Council for the coming session:—President, Rev. Prof. Bonney, F.R.S. Vice-Presidents: Rev. S. Haughton, M.D., F.R.S.; W. H. Hudleston, M.A., F.G.S. Council: G. S. Boulger, F.G.S.; C. O. Trechmann, Ph.D., F.G.S.; Mr. J. Stuart Thomson, Rev. Prof. Wiltshire, F.G.S. (in place of Messrs. Church, Danby, Merry, and Walker). Treasurer, R. P. Greg, F.G.S. General Secretary, R. H. Scott, M.A., F.R.S. Foreign Secretary, C. Le Neve Foster, D.Sc., F.G.S. The Secretary read the Report, which was adopted. The outgoing President delivered a short address, and the chair was taken by Prof. Bonney, when the following papers were read:—J. Stuart Thomson, on crystals of calamine from Wanlockhead.—A. S. Woodward, on the occurrence of Evansite in East Cheshire.—Mr. S. Henson exhibited a magnificent group of crystals of stibnite from Japan.—A vote of thanks to the outgoing president, Mr. Hudleston, concluded the proceedings.

**SYDNEY**

**Royal Society of New South Wales, September 5.**—C. Moore, F.L.S., vice-president, in the chair.—Five new members were elected, and eighty-nine donations received. The following papers were read:—Notes on the genus *Macrozamia*, with descriptions of some new species, by C. Moore, F.L.S.—A list of double stars, by H. C. Russell, B.A., F.R.A.S.—Some facts connected with irrigation, by H. C. Russell, B.A., F.M.S., &c.—On models for showing crystallographic axes, by Prof. Liversidge, F.R.S.—On the discolouration of white bricks made from certain clays in the neighbourhood of Sydney, by E. H. Rennie, M.A., D.Sc.—Mr. J. K. Hume exhibited a collection of Carboniferous fossils from Cataract Creek near Mount Wellington, Hobart, Tasmania, which were described by C. S. Wilkinson, F.G.S.—Prof. Liversidge exhibited a fossil specimen of an extinct Chelonian reptile (*Notochelys costata*, Owen) from the Flinders River, Queensland, being the first Chelonian found in Australia.

**PARIS**

**Academy of Sciences, October 22.**—M. Blanchard, president, in the chair.—River navigation; endless chain towing, by M. Dupuy de Lome. The author describes the recent experiment made on the Rhone of a new system of towage, which appears satisfactorily to solve the problem of the economic transport of goods on this most difficult of navigable rivers, and, *a fortiori*, on all streams with a moderate current. The success of the experiments is due to the employment of two endless lateral chains, worked with independent machinery by a single hand, and serving at the same time to steer the vessel.—Note on a formula of Hansen applicable to the celestial mechanism (continued), by M. F. Tisserand.—Disinfection of ornamental plants intended for exportation, by M. Laugier. The successful experiments made in concert with Dr. Koenig of Asti at the Agronomic Station of Nice in December, 1882, were renewed during the month of September last with most satisfactory results.—Note on some arithmetical theorems, by M. Stieltjes.—On surfaces whose curve is constant, by M. G. Darboux.—On the law regulating the distribution of tension in an elastic plate of arbitrary primitive form encircling a cylinder of any right section, in cases where the friction is uniform, by M. H. Léauté.—On the movement of a rolling weight along an elastic horizontal rod fixed at both ends in cases where the mass of the rod is much smaller than that of the weight, by M. J. Boussinesq. A wider application is here shown of the problem of rolling masses

solved by Willis and Stokes, as described in the paper inserted by Stokes in the *Cambridge Phil. Trans.*, vol. viii. 1849.—Observations on a reply of M. Faye touching diverse phenomena of solar spectroscopy (*Comptes Rendus*, October 8, p. 779), by M. L. Thollon.—On the inductive force due to the variation of intensity in the electric current of a flat spiral multiplication, and on the comparison of this force with that exercised at great distances by a spherical solenoid or a solenoidal fictitious sun, by M. Quet.—Note on the determination of the equivalents of copper and zinc by means of their sulphates, by M. H. Baubigny.—On the transformation of hydrocarbons into corresponding aldehydes by means of chlorochromic acid, by M. A. Etard.—Note on the state of the sensitive nerves during the excitement produced by strychnine, by M. Couty.—On two cases of peripheral nervo tabes (ataxy of the lower members, combined with absolute integrity of the posterior roots, of the spinal ganglia and spinal marrow), by M. J. Dejerine.—On the secreting epithelium of the kidney of Batrachians (triton and axolotl), by M. J. Bouillot.—On the extent and age of the dioritic formations of Corsica, by M. Dieulaufait. Instead of occupying a deep continuous vertical range, as hitherto supposed, the author shows that the Corsican diorites belong to three distinct systems—granites at San Luccia di Tollano and Ajaccio, ophiolitic or serpentine rocks of the Triassic and Permian formations at Bastia and elsewhere. With these last are exclusively associated the numerous sulphuretted metalliferous ores occurring in the island.—A discussion of the causes to which is due the movement of glaciers, by Mr. Walter R. Browne. This movement is here attributed rather to atmospheric causes (pressure and temperature) than to gravitation.—Observations on an earthquake felt at Ghadames (Algeria) towards the end of last August, by M. Duveyrier.

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