

The paper is illustrated by five plates. Three new British species of *Hieracium* are described by Mr. E. F. Linton and Mr. W. H. Beeby.

SOCIETIES AND ACADEMIES.

SYDNEY.

Royal Society of New South Wales, August 5.—H. C. Russell, F.R.S., President, in the chair.—On the microscopic structure of Australian rocks, by Rev. J. Milne Curran.—The Chairman presented the Society's bronze medal and a money prize of £25, which had been awarded to Father Curran for this paper.—Prof. Anderson Stuart exhibited his new instrument for demonstrating the nature of such waves as those of light.

August 10.—H. O. Walker, in the chair.—Notes on slicing rocks for microscopic study, by Rev. J. Milne Curran, illustrated by rock sections in various stages of preparation for mounting.

August 12.—C. W. Darley, in the chair.—Methods of determining the stresses in braced structures, by J. I. Haycroft.

PARIS.

Academy of Sciences, September 28.—M. Duchartre in the chair.—Notice of the works of M. P. P. Boileau, by M. Maurice Lévy.—Remarks on the international prototype of the metre, by M. Foerster.—Observations of four asteroids, discovered at Nice Observatory on August 28 and September 1, 8, and 11, by M. Charlois. The positions on the dates of discovery are given.—Verification of the law of refraction of equipotential surfaces, and measurement of the dielectric constant, by M. A. Perot.—Relation between the index of refraction of a body, its density, molecular weight, and diathermancy, by M. Aymonnet.—On the cyclone of August 18, at Martinique, by M. G. Tissandier.

BRUSSELS.

Academy of Sciences, August 1.—M. Plateau in the chair.—On the predominance and extension of Upper Eocene deposits in the region between the Senne and the Dyle, by M. Michel Mourlon.—Direct synthesis of primary alcohols, by Dr. P. Henry.—On circular sections in surfaces of the second degree, by Prof. Cl. Servais.—On the curvature of lines of the order p possessing a multiple point of the order $p - 1$, by M. A. Demoulin.—Preliminary notes on the organization and development of different forms of Anthozoaires, by M. Paul Cerfontaine. The author describes a new *Cerianthus* from the Red Sea, and names it *Cerianthus brachysoma*. He has also studied in detail the tentacles of *Cerianthus membranaceus*, and the variations of these organs during successive stages of individual evolution, and relates an interesting case of regeneration observed in *Astrodes calycularis*.—Researches on the lower organisms, by M. Jean Massart.

GÖTTINGEN.

Royal Scientific Society.—The *Nachrichten* from June to August 1891 contain the following papers of scientific interest:—

June.—Karl Heun, Berlin, mathematical note on the integration of the equation for the motion of Gauss's bifilar pendulum.

July.—Fr. Schilling, note on an interpretation of the formulæ of spherical trigonometry when complex values are assigned to the sides and angles of a spherical triangle.

August.—Eduard Riecke, on the molecular theory of piezoelectricity and pyroelectricity.—Tammann and W. Nernst, on the maximum vapour tension of hydrogen liberated from solutions by metals.—Tammann, the permeability of precipitate-films.—Eduard Riecke, on a surface connected with the electrical peculiarities of tourmaline.—David Hilbert, the theory of algebraic invariants of forms with any number of variables.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

The Universal Atlas, Part 7 (Cassell).—Food, Physiology, &c.: W. Durham (Black).—British Edible Fungi: Dr. M. C. Cooke (Paul).—South Africa, from Arab Domination to British Rule: edited by R. W. Murray (Stanford).—An Elementary Hand-book on Potable Water: F. Davis (Gay and Bird).—The Birds of the Sandwich Islands, Part 2: Wilson and Evans (Porter).—Differential and Integral Calculus: T. H. Miller (Percival).—Physiography: J. Spencer (Percival).—Geodesy: J. H. Gore (Heinemann).

—Electricity and Magnetism: A. Guillemin; translated by Prof. S. P. Thompson (Macmillan).—Annuaire de l'Observatoire Municipal de Montsouris, 1891 (Paris, Gauthier-Villars).—Stones for Building and Decoration: G. P. Merrill (New York, Wiley).—Taxidermy and Zoological Collecting: W. T. Hornaday (Paul).—Dynamics of the Sun: J. W. Davis (New York).—The Man of Genius: Prof. C. Lombroso (Scott).—Ninth Annual Report of the Fishery Board for Scotland, Three Parts (Edinburgh).—Recherche Spérimentale Intorno a Certe Scintille Elettriche costituite da Masse Luminose im Moto: Prof. A. Righi (Bologna).—Proceedings of the Liverpool Geological Society, Part 3, vol. vi. (Liverpool).—Mind, No. 64 (Williams and Norgate).—Journal of the Royal Statistical Society, September (Stanford).—Journal of the Royal Agricultural Society, 3rd series, vol. ii., Part 3 (Murray).

DIARY OF SOCIETIES.

LONDON.

THURSDAY, OCTOBER 8.

CAMERA CLUB, at 8.30.—Paper by Captain Abney.

MONDAY, OCTOBER 12.

CAMERA CLUB, at 8.30.—Lantern Evening.

THURSDAY, OCTOBER 15.

CAMERA CLUB, at 8.30.—Bacteria Photographed: Andrew Pringle.

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