

short paper on the Parasitic character of *Pyrola rotundifolia*—Wintergreen—and stated his belief, founded on minute personal investigation, that it is Parasitic on the root of the dwarf willow, *Salix repens*. He never found *Pyrola* where the willow was absent and in some cases he detected the fibrous roots of the *Pyrola* apparently growing on those of the willow.

BRIGHTON

Brighton and Sussex Natural History Society, January 13.—The president, Mr. T. H. Hennab, in the chair. The receipt of a copy of a paper by Mr. C. Roper, on the Decapod Crustacea found at Eastbourne, was announced.—Mr. J. E. Mayall communicated a note on what he believed to be a new fact in connection with coal gas. While engaged in the spectrum analysis of organic bodies, he had found his results interfered with by the presence of copper. Examining the solutions and no trace of copper being found, it occurred to him that it might be present in the common coal gas used in the Bunsen lamp, in which the incandescence of the organic matter was produced. Having candles with wicks dipped in the chlorides of various metals always at hand as standard spectra, on comparing the flame of a copper candle with that of the gas under examination, their spectra were found to be identical. From this he inferred the copper was generated from pyrites contained in the coal. Mr. J. E. Mayall then read a paper on Volcanic Theories.

PARIS

Academy of Sciences, January 24.—M. Lecoq de Boisbandeau communicated a note on the continuity of luminous spectra, in which he developed his theory of the production of spectra by inequalities in the luminous molecules, and referred especially to the phenomena presented by rubidium, cesium, and potassium.—At this meeting there were no other papers on subjects of any special importance.

January 31.—M. Vêrard de Sainte-Anne read a Memoir on a project for establishing a communication between France and England. The author proposes the establishment of a railway bridge, either open or tubular, across the Straits of Dover. A continuation of M. J. Boussineq's memoir on the theory of the flow of a liquid through an orifice in a thin partition was presented by M. de Saint-Venant.—M. Gaiffe communicated a letter containing remarks on the process employed by Mr. Adams to produce deposits of nickel by electrolytic action, in which he maintained that the neutral chloride and sulphide of nickel and ammonia with no trace of free fixed alkali can alone furnish workable baths.—M. M. Becquerel maintained that the presence of soda and potash does not hinder the deposition of the nickel.—M. A. Lallemand stated that when a solution of sulphur in sulphide of carbon is exposed to solar light concentrated by a lens, insoluble sulphur is produced: the spectrum of the emergent light is deficient in all the rays between G and H and the ultra-violet spectrum has entirely disappeared. A solution of phosphorus in sulphide of carbon is similarly acted upon.—M. Cahours presented a note by M. L. Daniel, giving an account of some interesting experiments with vacuum-tubes under the influence of magnetism.—A note on the heat of combination of boron with chlorine and with oxygen, by MM. L. Troost and P. Hauteville, was presented by Mr. H. Sainte-Claire Deville, who also communicated a paper by Mr. Landrin on the division of a limited quantity of acid between two bases employed in excess. From his experiments it appears that the oxides are dissolved in simple equivalent proportions, *i.e.*, 1 to 2, 3, 4, 5, &c.—A note by M. E. Bourgoïn on the cause of the unequal loss of oxalic acid at the positive and negative poles and on the nature of oxalic acid when dissolved in water, was presented by M. Bussy. The loss by decomposition is three times as great at the positive as at the negative pole; the gas disengaged at the former is pure carbonic acid, at the latter hydrogen. The author concludes that the composition of oxalic acid in solution in water, is $C^4 H^2 O^8$, $2 H^2$, O^2 .—M. C. Dareste read a paper on the convolutions of the brain.—M. P. Gervais presented a reply to the observations of M. Balbiani on the ova of the *Saccalina*, by M. E. Van Beneden and M. A. L. Donnadieu noticed a case of monstrosity (hemiterism) in a carp.—M. A. Chatin communicated a note on the cause of the dehiscence of the anthers of plants, in which he denies that this phenomenon is due exclusively to the fibrous cells of the endothecium as supposed by Purkinje and shows that in some cases certainly and in many others probably, the exothecium or epidermic layer plays an important part in it.

DIARY

THURSDAY, FEBRUARY 10.

- ROYAL SOCIETY, at 8.30.—On some remarkable Spectra of Compounds of Zirconia and the Oxides of Uranium; H. C. Sorby, F.R.S.—On the Mathematical Theory of Stream Lines, especially those with four foci and upwards: Professor Rankine.—On Linear Differential Equations: W. H. L. Russell, F.R.S.
- MATHEMATICAL SOCIETY, at 8.—Quartic Surfaces: Prof. Cayley.
- ZOOLOGICAL SOCIETY, at 8.30.—On a new Cervine Animal from the Yang-tze-Kiang: R. Swinhoe.—On the Size of the Red Corpuscles of the Blood of *Moschus*, *Tragulus*, *Orycteropus*, *Aithya* and some other mammalia, with historical notices: G. Gulliver.
- ANTIQUARIES, at 8.30.
- LONDON INSTITUTION, at 7.30.

FRIDAY, FEBRUARY 11.

- QUEKETT MICROSCOPICAL CLUB, at 8.—For exhibition of objects and microscopic gossip.
- ROYAL INSTITUTION, at 9.—The Deep Sea: Dr. Carpenter.
- ASTRONOMICAL SOCIETY, at 3.—Anniversary Meeting.

SATURDAY, FEBRUARY 12.

- ROYAL BOTANIC, at 3.30.

MONDAY, FEBRUARY 14.

- MEDICAL SOCIETY, at 8.
- ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 8.

TUESDAY, FEBRUARY 15.

- ANTHROPOLOGICAL SOCIETY, at 8.—On the Aborigines of the Chatham Islands: Dr. Barnard Davis and A. Welch.—Polygamy: Dr. John Campbell.—Inscribed Stone from Venezuela: R. Tate.
- PATHOLOGICAL SOCIETY, at 8.
- STATISTICAL SOCIETY, at 8.—On International Coinage and the Variations of Foreign Exchanges during recent years: E. Seyd.
- INSTITUTION OF CIVIL ENGINEERS, at 8.
- ROYAL INSTITUTION, at 3.—On the Architecture of the Human Body: Prof. Humphry.

WEDNESDAY, FEBRUARY 16.

- SOCIETY OF ARTS, at 8.—On Emigration: T. Plummer.
- METEOROLOGICAL SOCIETY, at 7.

THURSDAY, FEBRUARY 17.

- ROYAL INSTITUTION, at 3.—Chemistry: Prof. Odling.
- LINNEAN SOCIETY, at 8.—On the Tree Ferns of British Sikkim: Mr. Scott.
- CHEMICAL SOCIETY, at 8.
- ZOOLOGICAL SOCIETY, at 4.
- ANTIQUARIES, at 8.30.
- ROYAL SOCIETY, at 8.30.

BOOKS RECEIVED

- ENGLISH.—Transactions and Proceedings of the New Zealand Institute, 1868: Edited by J. Hector, M.D. (Trübner).—The Year Book of Facts: J. Timbs (Lockwood and Co.).
- FOREIGN.—Bericht über die Fortschritte der Eisenhütten-Technik im Jahre, 1867, nebst einem Anhang enthaltend die Fortschritte der anderen Metallurgischen Gewerbe: A. K. Kerzely.—Studien aus dem Institute für experimentelle Pathologie in Wien aus dem Jahre, 1869: S. Stricker.—Zeitschrift für Parasitenkunde: Dr. E. Haller and Dr. F. Zivna.—Handbuch der theoretischen und klinischen Percussion und Auscultation vom historischen und kritischen Standpunkte bearbeitet: Dr. P. Niemeyer.—Beiträge zur Naturkunde Preussens herausgegeben von der königlichen physikalisch-ökonomischen Gesellschaft zur Königsberg: miocene baltische Flora: O. Heer.—Landwirthschaftliche Zoologie: Dr. C. E. Giebel (Williams and Norgate).

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