

tended to show that the position of *Micropteryx* was nearer the Trichoptera than had been supposed.—The President announced that the new Library Catalogue, which had been edited by Mr. Champion, with the assistance of Mr. McLachlan and Dr. Sharp, F.R.S., was now ready.

PARIS.

Academy of Sciences, May 15.—M. Loewy in the chair.—On the quantitative determination of boron, by M. Henri Moissan. The determination is based upon Gooch's methyl alcohol method, in which several improvements were introduced. The boron is first obtained in the state of boracic acid by treating with nitric acid in a sealed tube. The boracic acid is separated by means of pure methyl alcohol. The reaction takes place in a bulb tube provided with a funnel which reaches down into the bulb and can be closed by a cock. Four distillations with alcohol are carried out, the vapours passing through a coil of glass tubing into a Bohemian glass flask. Any uncondensed vapour is absorbed by ammonia solution. The liquid collected is poured upon a known weight of pure slaked lime, forming calcium borate. The latter is calcined and weighed, and the increase of weight gives the amount of boric anhydride absorbed. To test whether the boron has all distilled over, a drop of the distilling liquid is caught on a strip of paper and placed in a flame, when a green colour will indicate any trace of boron. The slaked lime is kept, when not in use, in the form of a stable basic nitrate, which is made ready for use by a strong calcination. The quantity of lime should be 16 to 20 times the probable quantity of boracic acid. The process, though still somewhat laborious, has given very consistent results.—The working of the soil and nitrification, by M. P. P. Dehérain.—Re-appearance of certain latent affections (etiology and pathogeny), by M. P. Verneuil.—Results obtained with mixtures of butters and diverse fatty materials by means of the new method for the recognition of adulteration of butter, by M. Auguste Houzeau.—On the terms of the second order resulting from the combination of aberration and refraction, by M. Folic.—On the observation of the total eclipse of the sun of 16th April, made at Fundium (Senegal), by M. H. Deslandres.—The solar eclipse of 16th April, 1893, at the Vatican observatory, by P. F. Denza.—On a class of systems of ordinary differential equations, by M. Vessiot.—On the generalisation of the analytical functions, by M. G. Scheffers.—On the cases of integrability of the motion of a point in a plane, by M. Elliott.—On the general law and the formulæ of the flow of saturated water vapour, by M. H. Parenty.—On the dimensions of absolute temperature, by M. H. Abraham.—On a new kind of manometer, by M. Villard.—On the inversion of Peltier's phenomenon between two electrolytes beyond the neutral point, by M. Henri Bagard.—Study of the cadmium and sal-ammoniac cell, by M. A. Ditte.—Influence of the temperature of tempering upon the mechanical properties and the structure of brass, by M. G. Charpy.—On malic acid substitutions, by M. Ph. A. Guye.—Action of chloride of zinc upon chloroamphor, by M. A. Etard.—On a certain number of organo-metallic combinations belonging to the aromatic series, by M. G. Perrier.—Inulasis and indirect alcoholic fermentation of inuline, by M. Em. Bourquelot.—Chemical phenomena of assimilation of carbonic acid by chlorophyll bearing plants, by M. A. Bach.—On the meteoric iron of Augustinowka (Russia), by M. Stanislas Meunier.—Influence of the medium on respiration in the frog, by M. A. Dissard.—Action of oxygen and compressed air upon warm-blooded animals, by M. G. Phillippon.—On the ophthalmic nerves of *Spondylus Gæderopus*, by M. Joannes Chatin.—On the pathogenetic fragmentation of the ovules of mammals during atresia of the Graafian follicles, by M. L. F. Henneguy.

AMSTERDAM.

Royal Academy of Sciences, April 28.—Prof. van de Sande Bakhuyzen in the chair.—Mr. Kamerlingh Onnes exhibited isogonic charts for 1540, 1580, 1610, 1640, 1665, and 1680, drawn by Dr. van Bemmelen according to observations discovered by him in old, especially Dutch books, in the manuscripts of van Swinden and in old Dutch ship-journals.—Mr. Franchimont treated of hydrocyanic acid in plants. A short time ago Mr. van Romburgh found hydrocyanic acid, probably as an unstable compound with acetone (and perhaps with glycose), in the caoutchouc-yielding plants *Manihot glaziovii*, Müll. Arg., *Hevea brasiliensis*, Müll. Arg., and *Hevea*

spruceana. Now Mr. van Romburgh has examined *Indigofera*'s, and found that the leaves of the *Indigofera galeoides* D.C. (*Tarzem octan*), which do not produce indigo, and have no particular smell, yield a considerable quantity of hydrocyanic acid and of benzaldehyde by being weakened in water for two hours. By new researches Mr. van Romburgh will try to find out if this *Indigofera* contains amygdaline or laurocerasine, and whether the enzyme, to which the decomposition is due, is identical or not with emulsine. This seems to be the first time that hydrocyanic acid has been found in a plant belonging to the family of the Papilionaceæ.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—Catalogue of the Library of the Entomological Society of London, edited by G. C. Champion (London).—Evolution and Religion: A. J. Dadson (Sonnenschein).—Zoology of the Invertebrata: A. E. Shipley (Black).—Archæological Survey of Egypt: Beni Hasan, Part 1: P. E. Newberry (K. Paul).—Some Further Recollections of a Happy Life (Macmillan).—Helps to the Study of the Bible (Oxford University Press).—A History of Crustacea: Rev. T. R. R. Stebbing (K. Paul).

PAMPHLETS.—Manchester Museum, Owens College Museum Handbooks, Outline Classification of the Animal Kingdom, 2nd edition (Manchester, Cornish).—Outline Classification of the Vegetable Kingdom (Manchester, Cornish).—Catalogue of the Type Fossils: H. Bolton (Manchester, Cornish).—The Romanes Lecture, 1893—Evolution and Ethics: T. H. Huxley (Macmillan).—Syllabus of Elementary Course of Botany: J. B. Philip (Aberdeen, Bisset).

SERIALS.—Dictionary of Political Economy, Part 5 (Macmillan).—Astronomy and Astro-Physics, May (Northfield).—Journal of the College of Science, Imperial University, Japan, vol. 6, Part 1 (Tōkyō).—American Journal of Mathematics, vol. xv, No. 2 (Baltimore).—Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie, Sieb-zehnter Band. 1. u. 2 Heft (Williams and Norgate).

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