

Coleoptera compiled some years ago by Mr. Crotch, which appears to have been lost sight of.—Mr. McLachlan alluded to the damage done by insects to orange-trees in Malta, and stated that the Rev. G. Henslow had lately been studying the question; one of the chief depredators was the widely-spread “fly,” *Ceratitidis citriperda*, well known as devastating the orange. He found, however, that another and more serious enemy was the larva of a large Longicorn beetle (*Cerambyx miles*, Bon.), which bores into the lower part of the stem and down into the roots, making large galleries; in all probability the larva, or that of an allied species, is the true *Cossus* of the ancients. Lord Walsingham stated that a species of *Prays* allied to *P. olcellus* and our common *P. curtisellus* was known to feed in the buds of the orange and lemon in Southern Europe.—The following papers were communicated, and were read by the Secretary:—Notes on the species of the families *Lycidæ* and *Lambyridæ* contained in the Imperial Museum of Calcutta, with descriptions of new species, and a list of the species at present described from India, by the Rev. H. S. Gorham.—A catalogue of the Rhopalocerous Lepidoptera collected in the Shan States, with notes on the country and climate, by Dr. N. Manders, Surgeon, Medical Staff. The latter paper contained a very interesting description of the chief physical features of the Shan States and neighbouring parts of Burmah.

Mathematical Society, June 12.—J. J. Walker, F.R.S., President, in the chair.—The President announced that the Council had unanimously awarded the De Morgan Memorial Medal to Lord Rayleigh, Sec.R.S., for his writings on mathematical physics.—The following papers were read:—On simplicissima in space of *n* dimensions (third paper), by W. J. C. Sharp.—Rotatory polarization, by Dr. J. Larmor.—Parabolic note, by R. Tucker.—Prof. Greenhill, F.R.S., communicated a paper by Prof. Mathews on the expression of the square root of a quartic as a continued fraction, and one by R. Russell on modular equations.—The President gave a brief sketch of a paper by A. R. Johnson, on certain concomitants of a system of conics and quadrics, and on the calculation of the covariant *S* of the ternary quartic.

PARIS.

Academy of Sciences, June 9.—M. Hermite in the chair.—On the movement of a prism, resting on two supports, submitted to the action of a variable normal force following a particular law, applied at a determined point of the axis, by M. H. Resal.—Theory of the state produced near to the wide opening of a fine tube where the threads of a liquid which flows there have not acquired the normal inequalities of velocity, by M. J. Boussinesq.—Action of the alkalies and alkaline earths, alkaline silicates, and some saline solutions on mica: production of nepheline, sodalite, amphigene, orthoclase, and anorthite, by MM. Charles and Georges Friedel.—On the fauna of deep parts of the Mediterranean around Monaco, by the Prince of Monaco. Some dredging operations carried on at various depths up to 1650 metres show that, at certain parts at least of these regions, the Mediterranean Sea is by no means devoid of inhabitants as has been previously asserted.—Observations of Brooks’s comet (*a* 1890), made with the *coudé* equatorial of Algiers Observatory, by MM. Rambaud and Renaux. The observations of position extend from May 10 to 31.—Photographic observation of Brooks’s comet made at Algiers Observatory, by M. Ch. Trépiéd (see “Our Astronomical Column”).—On a particular case of the movement of a point in a resisting medium, by M. A. de Saint-Germain.—Propagation of light in gold-leaf, by MM. Hurion and Mermeret.—On the amplitude of the diurnal variation of the temperature, by M. Alfred Angot. The author shows how the diurnal temperature variation in any station on the earth may be expressed by the formula—

$$a = \frac{K}{r^2} (A + B \sin l + C \cos 2l),$$

in which *K* is a function of cloudiness, and = 1 when the sky is clear, *A*, *B*, and *C* are coefficients depending only upon the geographical position of the station and its climatological characters, *l* the sun’s longitude, and *r* the distance of the earth from the sun.—Electrolysis of fused aluminium fluoride, by M. Adolphe Minet. The author finds a mixture of 40 parts of the double fluoride of aluminium and sodium with 60 parts of sodium chloride to give him the best results yet obtained.—On the isomeric states of chromium sesquibromide: the blue sesquibromide, by M. A. Recoura. A method of pre-

paring the solid hydrated bromide, $Cr_2Br_6 \cdot 12H_2O$, corresponding to the violet solutions is given. It is shown that the grey-blue solid obtained is less stable than the green crystals formerly described, whereas the violet solutions corresponding to the blue solid salt are more stable than the green solutions; thermochemical data are given in confirmation.—On the estimation of zinc in the presence of iron and manganese, and its separation from those metals, by M. J. Riban. The zinc is separated as sulphide from a solution to which has been added an excess of sodium thiosulphate.—On the composition of clays and kaolins, by M. Georges Vogt.—On the synthesis of the fluorides of carbon, by M. C. Chabrié.—On the products of saccharification of amylaceous matters by acids, by M. G. Florens.—On the decomposition of organic manures in the soil, by M. A. Muntz.—On the anatomy of horny sponges of the genus *Hircinia*, and on a new genus, by M. H. Fol.—On the circulatory system in the carapace of decapodous Crustacea, by M. E. L. Bouvier.—On two new species of Coccidia, parasitic on the stickleback and sardine, by M. P. Thélohan.—Interesting nuclear modifications of the nucleolus which may ultimately throw some light on its signification, by M. E. Bataillon.—On a hymenopterous insect injurious to the vine, by M. E. Olivier.—On the diversities and similarities in some dentary systems of mammals, by M. Heudes.—Researches on the development of the seminal integuments of Angiosperms, by M. Marcel Brandza.—On the nature of the phosphate beds of Dekma (département de Constantine), by M. Bleicher.—On the existence of marine deposits of the Pliocene age in the Vendée, by M. G. Vasseur.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

Japan and the Pacific: M. Inagaki (Unwin).—The Mineral Resources of Ontario (Toronto).—A Treatise on Practical Chemistry and Qualitative Analysis, 5th edition: Dr. F. Clowes (Churchill).—Primo Resoconto dei Risultati della Inchiesta Ornitologica in Italia; Parte Seconda. Avifauna Locali: E. H. Giglioli (Firenze).—The Species of Ficus of the Indo-Malayan and Chinese Countries, Appendix: Dr. G. King (Calcutta).—Sammlung von Vorträgen und Abhandlungen, Dritte Folge: W. Foerster (Berlin, Dümmler).—Lehrbuch der Verg. Entwicklungsgeschichte der Wirbellosen Thiere, Specieller Theil, Erstes Heft: Dr. E. Korschelt and Dr. K. Heider (Jena, Fischer).—The Life and Letters of the Rev. Wm. Sedgwick, 2 vols.: J. W. Clark and T. McK. Hughes (Cambridge University Press).—The Forest Flora of South Australia, Part 9: J. E. Brown (Adelaide).—Les Bactéries, 2 vols.: A. V. Cornil and V. Babes (Paris, Alcan).—Physiological Botany: Dr. G. L. Goodale (Macmillan).—An Elementary Treatise upon the Method of Least Squares: G. C. Comstock (Arnold).—The Lepidopterous Fauna of Lancashire and Cheshire: J. W. Ellis Leeds (McCorquodale).—La Révolution Chimique Lavoisier: M. Berthelot (Paris, Alcan).—Beiträge zur Geologie Syriens, Die Entwicklung des Kreidesystems in Mittel- und Nord-Syrien; eine Geognostisch-Paläontologische Monographie: Dr. Max Blanckenhorn (Berlin, Friedländer).—Zur Kenntniss der Fauna der “Grauen Kalke” der Sud-Alpen: Dr. L. Tausch v. Gloeckelsturn (Wien, Hölder).—The Law and Practice of Letters Patent for Inventions: L. Edmunds and A. W. Renton (Stevens).

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