

*voluhi*, L. This is a dusk-loving hawk-moth, which also visits the honeysuckle. The daisy is visited by nine hymenoptera, thirteen diptera, three coleoptera, and two lepidoptera, viz., the least meadow brown and the common blue butterflies. Many flowers, like *Lychnis vespertina*, remain open without exhaling their perfume, and I think Mr. Gardner will find that most of the subduedly-coloured flowers which are open at night give off most perfume, and are visited and fertilised by moths rather at dusk than in the dark, whilst the white ones remain fragrant still later. The clearly-cut discs of white of *Lychnis vespertina* are the last objects our eyes can often discern on a midsummer night's ramble. Of course variegation on the moths themselves would be as useless, from the point of view of sexual selection, as on the flowers from that of insect-fertilisation. Though it is to a certain extent true that like causes produce like effects, in investigations into phenomena so complex in their etiology as those of biology we must, I think, be more mindful that the converse that like effects are the result of like causes by no means necessarily follows. G. S. BOULGER  
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### SCIENTIFIC SERIALS

*Rendiconto delle Sessioni dell' Accademia delle Scienze dell' Istituto di Bologna.*—The more important papers read at the Academy during the academical year 1877-8 were the following:—On the metamorphosis of plants, by Prof. G. B. Ercolani. The author specially refers to the transformation of a cryptogamous plant of the genus *Uromyces* into a phanerogamous dicotyledon, *Cuscuta europæa* L., and the return to the primitive cryptogamous form apparent in the seeds and branches of the *Cuscuta*.—On the velocity of light in transparent magnetised bodies, by Prof. A. Righi.—On the concentration of a magnetic solution near the pole of a magnet, by the same.—On the curves with equal normal principals, by Prof. A. Fais.—On some researches to ascertain whether from cadaverous matter, from albumen, or yolk of egg, volatile phosphoretted products are evolved, and on an excellent means of discovering free phosphorus in minute quantities, by Prof. Francesco Selmi.—Crystallographical researches, by Prof. Carlo Maragoni. The author describes some theoretical and experimental researches, and their application to the natural history of crystallised minerals.—Contributions to the flora of the Bolognese province, by Prof. Girolamo Cocconi.—Researches on the varying nature of the calorific emitted by various bodies heated to 100° C., by Prof. E. Villari.—On four species of noxious insects, inhabiting pines and birches, by G. Bertoloni.—On the calcareo-siliceous conglomerates of Sasso Cardo and of the Rio Fonti, and on the origin of pyrites, by Prof. Domenico Santagata.—Critical observations regarding some recent Italian crystallographical publications, by Prof. Luigi Bombicci.—On comparative psychogeny and the attempts to establish a zoopsychological classification, by Prof. Siciliani.—Note on a theorem in the theory of binary forms, by Prof. Francesco d'Arcais.—Observations regarding the existence of rudiments of upper canine teeth and incisors in the embryos of oxen and sheep, by Dr. G. P. Piana.—Anatomy and physiology of *Surilla Neapolitana*, by Prof. Salvatore Trinchese.—On a problem in undetermined analysis occurring in the geometrical theory of the transformation of plane figures, by Prof. F. P. Ruffini.—Geometrical studies on the molecular equilibrium, by S. Canevazzi.—On some gigantic bird-remains, probably belonging to *Aepyornis* or *Ruck*, by Prof. G. Bianconi.—On the internal texture of the eye of *Sphinx*, by Prof. G. V. Ciaccio.—On the origin and structure of the humor-vitreous, particularly in the embryos of the two first classes of vertebrates, by the same.—On the whale of Taranto and the *Maclearius* of the Paris Museum, by Prof. G. Cappellini.—On the emery from S. Lucca and Paderno, and its fossils, by Dr. Lodovico Foresti.—On the reticular structure of the red corpuscles in the blood of *Torpedo*, and of the nerve substance of frogs, by Prof. Salvatore Trinchese.—Researches on the central nervous system of *Squilla Mentis*, by Dr. G. Bellonci.—Results of experiments made at the Royal Botanical Gardens of Bologna upon some species of *Eucalyptus*, and upon a new grass recently introduced in Italy, by A. Bertoloni.—On the nerve ends in the skin of bat's wings, by Dr. Agostino Rossi.—On the formation of protoxide of iron in the metallic state in the wet way, by Prof. Francesco Selmi.

### SOCIETIES AND ACADEMIES

#### MANCHESTER

Literary and Philosophical Society, April 2.—E. W. Binney, F.R.S., F.G.S., president, in the chair.—On aurin, by R. S. Dale, B.A., and C. Schorlemmer, F.R.S.—The origin of some ores of copper. Part II., by Charles A. Burghardt, Ph.D.

April 16.—Note on the occurrence of diopside on Chryso-colla, from Peru, by Charles A. Burghardt, Ph.D.—On the internal cohesion of liquids and the suspension of a column of mercury to a height more than double that of the barometer, by Prof. Osborne Reynolds, F.R.S. The object of this communication is in the first place to show that certain facts already fully established afford grounds for believing that almost all liquids, and particularly mercury and water, are capable of offering resistance to rupture commensurate with the resistance offered by solid materials; in the second place to describe certain experimental results which, as far as they go, completely verify these conclusions and subvert the general ideas previously mentioned as to the limits to the height to which mercury can be suspended in a tube or water raised by suction; and, in conclusion to explain the nature of the circumstances which have resulted in the practical limits to these phenomena.—On the estimation of hyposulphites and sulphites, by J. Grossmann, Ph.D.—Note on the action of iodine trichloride upon carbon bisulphide, by J. B. Hannay, F.R.S.E., F.C.S.

#### PARIS

Academy of Sciences, August 5.—M. Peligot in the chair.—Probable new observation of the planet Vulcan by Prof. Watson, by M. E. Mouchez.—On the orbito-ocular phenomena produced in mammals by excitement of the central end of the sciatic nerve, after excision of the superior cervical ganglion and the superior thoracic ganglion, by M. A. Vulpian.—New note on the progress of phylloxera in the two departments of Charente, in connection with the last communication of M. de la Vergne, by M. Bouillaud.—Rate of propagation of excitations in the motor nerves of the red muscles, abstracted from the power of the will, by M. A. Chauveau.—On the fundamental covariants of a cubo-quadratic binary system, by Prof. Sylvester.—On the baking of plaster, and on the manufacture of plasters by slow coagulation, by M. Ed. Landrin.—No mycelium intervenes in the formation and in the normal destruction of swellings developed under the influence of phylloxera, by M. Maxime Cornu.—On the abnormal solubility of certain bodies in soaps and alkaline resins, by M. Ach. Livache.—On the vibratory forms of solid bodies and of liquids, by M. C. Decharme.—Note on the intra-Mercurial planet, by M. Gaillot.—Results of solar observations during the second quarter of 1878, by M. Tacchini.—Action of chloride of zinc on methylic alcohol; hexamethylbenzene, by MM. Le Bel and Greene.—Researches on the connections which exist between the weight of various bones of the Biscayan whale (*Balæna biscayensis*), by M. S. de Luca.—On *Prosopistoma fuentifrons*, Latr., by MM. E. Joly and A. Vayssièrè.—On the influence of atmospheric electricity on vegetation, by M. L. Grandaueu.—Age of the Mont-Dol bed; constitution and formation of the low plain called Marais de Dol, by M. Sirodot.

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