

entire or sparsely serrulated. The third and subsequent pairs of leaves partook of the form of the first pair, though seldom so large. It was worthy of remark, that in plants with alternate leaves, the leaves with their axial buds were generally about the same size. In some few instances there were variations in the size, especially in the $\frac{1}{2}$ arrangement of the leaves on the stem. In opposite leaved plants the rule was the other way; one bud or one leaf, either in the blade or petiole, being larger or longer than the other. In the maples this was especially the case. At times the petioles in some cases would be not more than half the length of the opposite. He had found this especial peculiarity, however, in no other species but *A. Pennsylvanicum* that he had been able to examine, which included most in common cultivation. It might be in *A. spicatum*, Lam., which he had not been able to examine this season, and which he supposed to be but a variety of *A. Pennsylvanicum*.

Aug. 25.—Dr. Ruschenberger, president, in the chair.—Prof. Leidy exhibited a living specimen of the freshwater ciliated polyp, formerly described by him under the name of *Pectinatella magnifica*. *Pectinatella* is by far the largest of all the known freshwater ciliated polyps, and, indeed, is not surpassed by any of the marine forms known to us. It has not been determined whether the huge *Pectinatella* colonies start each from a single individual, or are the result of the confluence of a number of small colonies. On the approach of winter the colonies die and undergo decomposition, in which process the remarkable winter eggs or statoblasts are liberated. These are provided with anchor-like spines, by which, as in the case of the eggs of skates and sharks, they become attached to various fixed bodies. In examining various common animals of our household, Prof. Leidy had found a thread-worm infesting the common house-fly. The worm is from a line to the tenth of an inch long, and lives in the proboscis of the fly. It was found in numbers from one to three in about one fly in five. The parasite was first discovered in the house-fly of India, by the English naturalist, Mr. H. J. Carter, who described it under the name of *Filaria musca*, and suggested the opinion that it might be the source of the Guinea worm, *Filara medinensis*, in man. Mr. Carter states that he found from two to twenty of the worms in one fly of three. Dr. Diesing referred the parasite to a new genus with the name of *Habronema musca*. The singular position in which the worm lives suggests the many unsuspected places we have to search to find the parents or offspring of our own parasites.

PARIS

Academy of Sciences, Nov. 16.—M. Bertrand in the chair.—The following papers were read:—On a new class of organic compounds, the carbonyls, and on the true function of ordinary camphor, by M. Berthelot. The author classes as carbonyls the three bodies, ordinary camphor, oxide of allylene, and diphenylacetone.—Action of heat on ordinary aldehyde, by M. Berthelot.—On the capillary theory according to the Liliaceae and the Melanthaceae, by M. A. Trécul.—On wounds from trepanning and their dressing, by M. C. Sédillot.—Observations on the November shooting stars, by M. Leverrier.—On the age of the Pyrenean red sandstone and relationship to the Saint-Béat statuary marble, by M. A. Leymerie.—On electric induction, by M. P. Volpicelli.—Action exercised by an electro-magnet on the spectra of rarefied gases traversed by the electric discharge, by M. J. Chautard. The author has hitherto examined only the spectra of metalloids. The magnet appears to influence the number, position, fineness, &c., of the spectral lines in a special manner for each element.—Note on magnetism and on a new exploding fuse, by M. Tréve.—On the circulatory system of the Echinidae, by M. Edm. Perrier.—Note on the manufacture of paper from *gombo* (*Hibiscus esculentus*), and on the industrial uses of this plant, by M. Ed. Landrin.—On the relationship existing between the chemical composition of the air in the swim-bladder and the depth at which the fish are taken, by M. A. Moreau.—Unwholesomeness of the Seine in August, September, and October, 1874, by M. Boudet.—Method pursued in searching for the most efficacious substance for resisting Phylloxera at the viticultural station of Cognac, by M. Max Cornu.—Effects produced by the first frosts on the phylloxerised vines in the vicinity of Cognac, by M. Maurice Girard.—A despatch was read from the French Minister at Peking, and a letter from M. Fleuriat, announcing the safe arrival and installation of the Transit of Venus Expedition in that city.—On two points in the theory of substitutions, by M. C. Jordan.—On fluorene, by M. Ph. Barbier. The formula

for this hydrocarbon is $C_{26}H_{10}$. The author has examined many of its derivatives.—On the marsupium of the eye of birds, by MM. J. André and Beauregard.—New method for the antiseptic occlusion of wounds, by M. Sarazin.—On the mutability of microscopic germs and on the passive function of the organisms classed as *ferments*, by M. J. Duval.—The carboniferous limestone soil of the Pyrenees, by M. Henri Magnan.—The shooting stars of November 1874, by M. Chapelas.

Nov. 23.—M. Cl. Bernard in the chair.—The following papers were read:—Meridional observations of the minor planets made at Greenwich Observatory (forwarded by Sir G. B. Airy, Astronomer Royal) and at the Observatory of Paris during the third quarter of the year 1874, communicated by M. Leverrier.—M. H. A. Weddell communicated a botanical note on the algolichenic theory.—Note on the gum-bearing *Acacia* of Tunis, by M. Doumet-Adanson.—On new improvements in magneto-electric machines, by M. Z. T. Gramme.—On the saccharine matter contained in mushrooms, by M. A. Miintz.—Effects of potassium sulphocarbonate on Phylloxera, by M. Mouillefert.—M. Max Cornu presented a paper containing the continuation of his researches for the most efficacious substance for the destruction of Phylloxera.—Experiments made on branches of vine immersed in water containing various substances in solution, by M. A. Baudrimont.—Facts relating to Phylloxera and to the submersion of vines and cereals; application of M. Naudin's process to vines that cannot be submerged, by M. G. Grimaud.—On the stability of the equilibrium of a heavy body resting on a curved support, by M. C. Jordan.—Influence of temperature on the coefficient of capillary flowing of liquids, by M. A. Gueront.—On the product formed by the addition of hypochlorous acid to propylene, by M. L. Henry.—On the Actiniae of the oceanic coasts of France, by M. P. Fischer.—New researches on the organogenesis of *Lophospermum erubens*, by M. Frémineau.—M. E. Duchemin communicated a note concerning the invention of the circular compass.—During the meeting the perpetual secretary announced to the Academy the safe arrival at Sydney of MM. André and Angot, the members of the Transit of Venus Expedition who are to observe this phenomenon from Noumea.

BOOKS AND PAMPHLETS RECEIVED

BRITISH.—Report of Newcastle-on-Tyne Chemical Society.—The Aerial World: G. Hartwig (Longmans).—Transits of Venus: R. A. Proctor, B.A. (Longmans).—Descent of Man (New Edition): Charles Darwin, M.A., F.R.S. (J. Murray).—Transactions of the Institute of Engineers and Ship-builders in Scotland. Report on Safety Valves.—Chambers's Information for the People (W. and R. Chambers).—The Origin of Civilisation and the Primitive Condition of Man: Sir John Lubbock, Bart., M.P., F.R.S. (Longmans).—Elements of Embryology: M. Foster, M.A., M.D., F.R.S., and F. M. Balfour, B.A. (Macmillan and Co.)

AMERICAN.—Relation between the Barometric Gradient and the Velocity of the Wind: Wm. Ferrel, A.M. (Washington, U.S.).—Complete Works of Count Rumford, vol. iii. (Boston, U.S.).—Proceedings of the American Society of Arts and Science (John Wilson, Boston).—Proceedings of the American Philosophical Society (Philadelphia).—Annotated List of Birds of Utah: H. W. Henshaw (Salem, U.S.).—Report of Explorations of 1873 of the Colorado of the West: Prof. J. W. Powell (Washington).—Synopsis of the Flora of Colorado: T. C. Porter (Washington).

FOREIGN.—Correspondenzblatt des Naturforscher-Vereins zu Riga.—Observaciones magneticas y Meteorologicas (Havana, Cuba).

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