

The present paper, which was illustrated by diagrams, has reference, *inter alia*, to the Ash, Hop, and two species of Pea (*Lathyrus grandiflora* and *L. pratensis*). Mr. W. Carruthers, F.R.S., in commenting upon this paper, expressed the satisfaction which he was sure would be felt by botanists at the way in which the author was carefully working out details in the life-history of British plants, and in that respect conforming to the spirit of the charter of the Society which expressly defined the object of its formation to be "the cultivation of the science of natural history in all its branches, and more especially of the natural history of Great Britain and Ireland."—Prof. Conway Macmillan, of the University of Minnesota, communicated the principal points of a paper on minor tension-lines between plant-formations.

PARIS.

Academy of Sciences, June 28.—M. A. Chatin in the chair.—The President announced to the Academy the loss it had sustained by the death of M. Schützenberger, Member of the Chemical Section.—On the integration of the equation $\Delta u = F(u, x, y)$, by M. Émile Picard.—On uniform quadruply periodic functions of two variables, by M. Émile Picard.—On the rotatory parts of the transversal components of the velocity in a permanent flow gradually varied, by M. J. Boussinesq.—M. de Lapparent was nominated as Member in the Section of Mineralogy, in the place of the late M. Des Cloizeaux.—On psoriasis and its relations with syphilis, by M. F. Bouffé. The injection of orchitin appears to be specific as a cure for psoriasis. The latter frequently masks the symptoms of syphilis. In the cases cited, if the treatment had been sufficiently prolonged, there was no return of the disease.—On the treatment of cancer, and of several infectious diseases by ozone, by M. Charles Chardin.—On the causes of differences of quality in harmonic chords, by M. Bourcoud.—Observations on the sun, made at the Observatory of Lyons with the Brunner equatorial, during the first quarter of 1897, by M. J. Guillaume. A tabulated statement of observations on sun-spots and faculæ.—On the geodesic lines of oppositely curved surfaces, by M. Hadamard.—On the enumeration of primitive groups of which the degree is below 17, by M. J. A. Miller.—On the determination of the integrals of certain non-linear partial differential equations by their values on a closed surface, by M. E. Le Roy.—On the permanent deformations of metals, by M. G. A. Faurie.—Influence of the intensity upon the pitch of a sound, by M. André Broca. If the intensity of a sound decreases, the note goes up, even though the period of vibration remains the same. The effects are small, and in the experiments described amount to about $\frac{1}{3}$ of a tone.—Researches on nickel-steels. Magnetic properties and permanent deformations, by M. C. E. Guillaume. The effect of temperature upon the magnetic properties of the nickel-steels was first studied, and it was found that these alloys could be divided into two classes, those containing from 0 to 25 per cent of nickel, for which the effects produced by heat were irreversible, whilst in the second class, containing higher percentages of nickel, the effects were reversible. The permanent changes of length set up in these alloys are of the same order as those in the hard glass used in thermometers.—The sulpho-antimonites of silver, by M. Pouget. The salts KAg_2SbS_3 and Ag_3SbS_3 are described. K_2AgSbS_3 could not be prepared.—On the function of manganese in certain oxidations, by M. Ach. Livache. A discussion of the action of manganese salts in quick-drying oils.—The colour of the phosphorescence of strontium sulphide, by M. José Rodriguez Mourelo. The phosphorescence depends largely upon the nature of the impurities present, and hence upon the method of preparation. The sulphide produced by the action of sulphur upon strontianite at a red heat gives the finest green colour.—Observations on the molecular volumes of several crystallised carbohydrates at 0°, by M. Pionchon. An extension of an observation of Joule and Playfair to the effect that the molecular volumes of cane-sugar and milk-sugar were exactly equal to the volume occupied in the state of ice, of the water of which this mass contains the elements. The same relations hold approximately for xylose, glucose, levulose, mellitose and raffinose.—Trioxymethylene and paraformaldehyde, by M. Delépine. The heats of formation of trioxymethylene and paraformaldehyde from its elements were determined, and also the heat of solution of the former in water.—On some combinations of phenylhydrazine with metallic iodides, by M. J. Moitessier. The compounds $ZnI_2 \cdot 2(C_6H_5 \cdot N_2H_3)$, $ZnI_2 \cdot 5(C_6H_5 \cdot N_2H_3)$, $CdI_2 \cdot 2(C_6H_5 \cdot N_2H_3)$, $MnI_2 \cdot 2(C_6H_5 \cdot N_2H_3)$, and $NiI_2 \cdot 6(C_6H_5 \cdot N_2H_3)$ are described.—On the combination of metallic salts with organic bases homologous with aniline and their isomers, by M. D. Tombeck.—On the action of acetylene on silver nitrate, by M. G. Arth.—On the tetrameric regeneration of the tarsus of the Phasmodia, by M. Edmond Bordage.—The *N'djembo* the caoutchouc plant of Fernan-Vaz, by M. Henri Jumelle. The plant is described and named *Landolphia Foreti*. It is distinguished from *Landolphia ovariensis*, among other points, by the superior quality of the caoutchouc produced from it.—A new remedy against mildew and black rot, by M. Gaston Lavergne. The mixture proposed consists of copper sulphate (500 gr.), black soap (1000 gr.), and water (100 litres).—Observation on a French meteorite, the fall of which (at Clohars in 1822) was unnoticed, by M. Stanislas Meunier.—The nerves of the heart and thyroid gland, by M. E. de Cyon.—Researches on the ostioles of the mucous membranes, by M. J. J. Andeer.—Effects of a hailstorm, by M. A. Forel. This hailstorm of June 2, at Morges, was remarkable for the duration of the fall of hail, more than ten minutes; the great electrical disturbances, the lightning being almost continuous; the magnitude of the hailstones, 5 to 6 cm. in length; and the peculiar structure of some of the pieces of ice.

BOOK, PAMPHLETS, and SERIALS RECEIVED.

BOOK.—The Chlorination Process: E. B. Wilson (Chapman).

PAMPHLETS.—Hints to Meteorological Observers: W. Marriott, 4th edition (Stanford).—The Fallacy of Marx's Theory of Surplus Value: H. Seymour (Murdoch).

SERIALS.—Den Norske Nordhavs-Expedition, 1876-1878, xxiv. (Christiania).—Synoptical Flora of North America, Vol. 1, Part 1, Fasc. 2 (New York, American Book Company).—Bulletin de l'Académie Royale des Sciences, &c., de Belgique, 1897, No. 5 (Bruxelles).—Journal of the Royal Agricultural Society of England, June (Murray).—Zeitschrift für Physikalische Chemie, xxiii. Band, 2 Heft (Leipzig, Engelmann).—National Review, July (Arnold).—Economic Journal, June (Macmillan).—Scribner's Magazine, July (Low).—Fortnightly Review, July (Chapman).—Geographical Journal, July (Stanford).

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