

displacement of the image measured by a micrometer eyepiece. Densities can be indirectly determined by this refractometer to the fifth decimal figure with great rapidity.—L. **Abonnenc**: The laws of flow of liquids by drops in cylindrical tubes. Vaillant has shown that when a liquid falls in drops from the orifice of a cylindrical tube the weight of a drop is a parabolic function of the frequency of fall. An extension of these experiments to tubes of less than 2 mm. external diameter is given.—P. **Gaubert**: The rotatory power of liquid crystals.—A. **Guilliermond**: Vital observations of the chondriome of the flower of the tulip.—C. **Vincent**: The forms of phosphorus in Breton granitic soils. The amount of phosphorus found in these soils will be underestimated if the method of extraction by strong mineral acids is used in the analysis. The organic phosphorus present in the humus may amount to 50 per cent. of the total phosphorus, and this explains the effects of liming these soils. From these results a rational method of manuring is deduced.—M. **Herlant**: The variations of the volume of the nucleus of the egg rendered active by butyric acid.—J. **Eiffrent**: Achroedextrinase. Certain species of *B. mesentericus*, cultivated in a nitrogenous medium, secrete a diastase liquefying starch. The hydrolysis of starch by this ferment was studied in comparative experiments with malt extract, ptyalin, and pancreatic amylase. The behaviour of the mesenteric amylase was distinctive, and the name achroedextrinase is proposed for it. Some practical applications in the textile industry and in the laundry are suggested.—M. **Marage**: Arterial pressure in cases of deafness caused by shell shock. Eighty-two per cent. of the cases examined showed arterial pressure above the normal, and insomnia generally accompanied the hypertension. The pains in the head, usual in these cases, do not appear to be connected with the arterial pressure. The best treatment is d'Arsonvalisation.—M. **Lautier**: The treatment of cases of war-deafness. The Marage method is easy to apply, generally useful, and never harmful. Its general employment in these cases is strongly recommended.—M. **Rappin**: Antituberculous vaccination.

BOOKS RECEIVED.

British Wild Flowers: Their Haunts and Associations. By W. Graveson. Pp. xv+320+plates 1. (London: Headley Bros.) 7s. 6d. net.

The Tutorial Chemistry. By Prof. G. H. Bailey. Part ii., Metals and Physical Chemistry. Third edition. Pp. viii+460. (London: University Tutorial Press, Ltd.) 4s. 6d.

Météorologie du Brésil. By C. M. Delgado de Carvalho. Pp. xix+525. (London: John Bale, Ltd.) 25s. net.

Chemistry for Beginners. By C. T. Kingzett. Pp. vi+106. (London: Baillière, Tindall, and Cox.) 2s. 6d. net.

Contributions to Embryology. Vol. iv. Nos. 10, 11, 12, 13. Pp. 106+plates iv. (Washington: Carnegie Institution.)

Carnegie Institution of Washington. Year book, No. 15. Pp. xii+404. (Washington: Carnegie Institution.)

Studies on the Variation, Distribution, and Evolution of the Genus *Partula*. The Species inhabiting Tahiti. By Prof. H. E. Crampton. Pp. 311+34 plates. (Washington: Carnegie Institution.)

X Rays. By Dr G. W. C. Kaye. Second edition, with illustrations. Pp. xxi+285. (London: Longmans and Co.) 9s. net.

Electrical Laboratory Course. By Dr. M. Maclean. Pp. 120. (London: Blackie and Son, Ltd.) 2s. net.

A Short System of Qualitative Analysis. By Dr. R. M. Caven. Pp. viii+162. (London: Blackie and Son, Ltd.) 2s.

The Chemists' Year Book. Edited by F. W. Atack, assisted by L. Whinyates. 2 vols. Pp. 1030 (London and Manchester: Sherratt and Hughes.)

Studies in Insect Life, and other Essays. By Dr. A. E. Shipley. Pp. ix+338. (London: T. Fisher Unwin, Ltd.) 10s. 6d. net.

An Introduction to a Biology, and other Papers. By A. D. Darbishire. Pp. xviii+291. (London: Cassell and Co., Ltd.) 7s. 6d. net.

The Manufacture of Sulphuric Acid and Alkali, with the Collateral Branches. By Prof. G. Lunge. Fourth edition. Supplement to Vol. i., Sulphuric and Nitric Acid. Pp. xii+347. (London: Gurney and Jackson.) 15s. net.

Bill's School and Mine: a Collection of Essays on Education. By W. S. Franklin. Second edition. Pp. vii+102. (South Bethlehem, Pa.: Franklin, McNutt, and Charles.) 1 dollar.

Geology: Physical and Historical. By Prof. H. F. Cleland. Pp. 718. (New York: American Book Co.) 3.50 dollars.

DIARY OF SOCIETIES.

THURSDAY, APRIL 12.

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—Wayleaves: C. Vernier. OPTICAL SOCIETY, at 8.—Light Filters for Eye Protection: L. C. Martin.—Accuracy of Observation and Precision in Measurement: Dr. G. A. Carse.—Some Methods of Analysing Lens Systems: S. D. Chalmers.—A Simple Proof of the Expression for the Focal Power of a Thick Lens. C. Cochrane.

FRIDAY, APRIL 13.

ROYAL ASTRONOMICAL SOCIETY, at 5.

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