

is apparently measured in volts. If these and several other carelessly worded statements were eliminated the book would be considerably improved.

*London on the Thames: a Study of the Natural Conditions that Influenced the Birth and Growth of a Great City.* By H. Ormsby. (Studies in Economics and Political Science: Geographical Studies, No. 3.) Pp. xiv+189. (London: Sifton, Praed and Co., Ltd., 1923.) 7s. 6d. net.

MRS. ORMSBY'S analysis of the geographical conditions which have determined the siting and growth of London virtually ends with Tudor times and does not touch upon the complex problems of modern London. The salient feature of her treatment of the subject, indeed her most valuable contribution to its study, is a skilful use of the indications afforded by the contour lines she has worked out, in conjunction with the system of streams, to interpret such facts as have been handed down from the past or may be observed to-day. Mrs. Ormsby does not agree with the view which holds that London was a pre-Roman settlement. Accepting Mr. Reginald Smith's conclusion that Watling Street originally crossed the Thames at Westminster, she holds that London, except possibly for a few scattered settlers along the river bank, is entirely of post-Roman growth, and originated from the necessity of finding a port for Verulamium, the line of least resistance being the Lea with its broad estuary on the Thames. The purely geographical argument is strong, while, as Mrs. Ormsby points out, the archaeological evidence, derived principally from the Moorgate area, is not. The origin of the name, if it could be determined, would probably weigh against a Roman date.

*Perfumes and Cosmetics: with Especial Reference to Synthetics.* By W. A. Poucher. Pp. xi+462+47 plates. (London: Chapman and Hall, Ltd., 1923.) 21s. net.

THE distillation of essential oils and the manufacture of synthetic, odoriferous products are nowadays important branches of the fine chemical industry, and chemists engaged in such work may be interested in finding out from Mr. Poucher's pages how their comparatively crude products are converted into the highly decorated articles which fill the windows of perfumers, hairdressers, and drug stores. They may not be surprised to learn that the odour of "para methyl acetophenone" is similar to that of "para methyl tolyl ketone" (p. 83), but it may strike them as calling for some explanation that "Methyl Para Tolyl Ketone" has "an almondy odour resembling Coumarin, but two or three times as powerful, and also recalling methyl acetophenone" (p. 86). Such curious "facts" as these must have an important bearing on the construction of the psychic perfumes referred to in one of the advertisement pages of this book.

Possessing a copy of this work, it would apparently be possible to make anything from lavender water to blush creams, whatever they may be, and the book will no doubt be most useful to the practical perfumer, for whose benefit it has been compiled. It will also afford much pleasant entertainment to any ordinary human being of a philosophical disposition who may meet with it in his leisure time. T. A. H.

*Successful Spraying and How to Achieve it.* By P. J. Fryer. Pp. 154. (London: Ernest Benn, Ltd., 1923.) 7s. 6d. net.

THIS unpretentious little text-book is intended to appeal to the practical fruit-grower. Its author starts from the proposition that the production of fruit is a business operation, and that if it is to succeed it must be run on strictly up-to-date business lines. Insurance against obvious risks is essentially a good commercial proposition. To the grower of fruit there is no sounder insurance policy than adequate spraying against the pests and diseases that prey incessantly upon his produce. The commercial fruit-grower has, however, neither the time nor the opportunity to gain a deep insight into the why and wherefore of the complicated strategy that is being gradually evolved by modern scientific workers who specialise in this field, and their terminology is often beyond him. The author therefore presents in the simplest language most of the things that the grower needs to know to meet with some real prospect of success the enemies that lie in wait for his crops in orchard and garden. Many plant pests and diseases and the methods of coping with them are briefly described. The times of the year when spraying will be effective and when it will not are indicated, and outlines of the conditions, both chemical and physical, that spraying practice must fulfil in order to be successful are given. There are good illustrations.

*Everyday Biology.* By Prof. J. Arthur Thomson. (People's Library.) Pp. 189. (London and Toronto: Hodder and Stoughton, Ltd., n.d.) 2s. 6d. net.

PROF. THOMSON'S aim here is to provide "an unconventional introduction to a biological way of thinking." Writing thus for the layman rather than the specialist he very properly keeps constantly in touch with matters of everyday experience, but nevertheless goes deep into scientific concepts, though deliberately avoiding the possible tedium of comprehensive treatment. There is scarcely any important region of biological thought which is not here handled in an attractive and stimulating fashion. Several chapters are concerned with animal physiology under such titles as "The Emergence of Life," "Life in Motion," "Food-getting and Food-using," "Blood," and others; but heredity, habits and environment, individuality, infection and disease, old age, and kindred subjects receive their measure of attention. We heartily recommend the book to the layman who would know something of the content of present-day biology, and are sure no specialist will regret the few hours required for its perusal.

*A Course of Experimental Mechanics.* By H. J. E. Bailey. Pp. xv+223. (London: Chapman and Hall, Ltd., 1924.) 7s. 6d. net.

TEACHERS searching for hints in arranging effective experiments in mechanics will find in this book a good deal to interest them. A large part of the volume is taken up with experiments on kinetics, and this section is of special value. Most teachers have experienced the difficulty of illustrating this branch of the subject by experiment, and the methods explained in the book will be of service to both teachers and students.