

text-books are discussed in a satisfactory and convincing way: (1) the impossibility of trisecting an angle, and (2) the construction of a regular polygon of seventeen sides, by the methods of Euclidean geometry. Prof. Dickson's book possesses all the merits of an excellent text-book, and it is to be hoped that its circulation will be a wide one.

*Department of Scientific and Industrial Research: Fuel Research Board. A Handbook on the Winning and the Utilisation of Peat.* By A. Hausding. Translated from the Third German Edition by Prof. Hugh Ryan. Pp. xxiii + 506. (London: H.M. Stationery Office, 1921.) 30s. net.

AN account of some processes for the utilisation of peat, particularly as a fuel, with references to German patents is given in the volume under notice. The mechanical details are better dealt with than the chemistry, which is often ludicrously inaccurate. The translator, indeed, often remarks on the latter point, and on the inaccuracy of the calculations, but makes no attempt to put things right. Some of the illustrations (e.g. Figs. 16, 46—which seem to be repeated in 54, 68, 69, 71, etc.) are very poorly reproduced. In spite of obvious defects the book contains a large amount of practical information not otherwise available in English, and will be of value to those interested in peat utilisation. An appendix, giving a reasoned account of the complete failure of some recent schemes, would have been instructive. The statistical information should be compared with that contained in the Final Report of the Nitrogen Products Committee, which is probably more accurate.

*The Petroleum Industry: A Brief Survey of the Technology of Petroleum based upon a Course of Lectures given by Members of the Institution of Petroleum Technologists on the occasion of the Petroleum Exhibition, Crystal Palace, 1920.* Edited by A. E. Dunstan. Pp. vi + 346. (London: The Institution of Petroleum Technologists, 5 John Street, Adelphi, n.d.) 14s. 6d.

THE petroleum industry is of peculiar interest and importance to the British Empire, and all readers of NATURE will welcome the appearance of the present volume. The series of lectures by experts have been carefully co-ordinated, and the result is very readable. All phases of the industry, from the prospecting for oil to the various uses of the finished products, are treated in a way which is a model of lucidity combined with accuracy of detail, and the book cannot fail to be of interest both to the specialist and to the general reader. The illustrations are particularly good. In the opinion of Sir Frederick Black "oil is not likely to supplant coal, but should supplement it"—a wise counsel.

*Town Gas Manufacture: A Practical Introductory Treatment of the Equipment and Processes of an Average Gas Works, for Students, Junior Gas Engineers, and others connected with Gas Works.* By Ralph Staley. Pp. xii + 108. (London: Sir I. Pitman and Sons, Ltd., 1922.) 2s. 6d. net.

THE scope of this book is sufficiently indicated by its title and sub-title. The accounts of the manufac-

ture of gas coal and water gas, including purification, are brief but clear, and the illustrations are good. There is mention of "great pressure setting up heat" in stacks of coal (p. 6), and "high heats" (pp. 81-82), meaning high temperatures. The account of the reaction in the gas producer is out-of-date, while washing with anthracene oil might have been mentioned as a method of removing "naphthalene, that mysterious bugbear." The fact that carbon monoxide is dangerously poisonous is also worthy of mention to junior gas engineers. The book should be very interesting to students of chemistry as well as to those intending to enter gas works.

*A First Book of Chemistry for Students in Junior Technical Schools.* By Dr. A. Coulthard. Pp. viii + 156. (London: Sir I. Pitman and Sons, Ltd., 1922.) 4s. 6d. net.

DR. COULTHARD'S book has some features which distinguish it from the scores of "elementary" or "junior" text-books which have appeared in recent years. It is quite up-to-date in its information; the scope is limited but is still sufficient to give a good view of the fundamental laws of chemistry, although the atomic theory is not included, the book finishing with equivalents. In connection with class work and practical work (over a hundred good experiments are described) the book should be found useful, and it may be recommended for use in junior classes. Ten years ago a book of this size would have sold for two shillings at the outside, but the price is probably reasonable nowadays.

*Manuel de parfumerie.* Par I. Lazennec. (Bibliothèque Professionnelle.) Pp. 281. (Paris: J.-B. Baillière et Fils, 1922.) 8 francs.

M. RENÉ DHOMMÉE is editing an encyclopedia of 150 volumes on "travail national," which is intended for French artisans. The idea is good, and corresponds in many ways with that of the "Life and Work" Series now being published by Messrs. Macmillan. The scope of the book is similar to that of Parry's "Perfumes," recently noticed in NATURE; but is not quite so full on the scientific side. The technical processes are described in detail, with illustrations, and there are numerous recipes (which are not given by Parry). The book should fulfil its object, and we wish the editor success in his enterprise.

*Oils, Fats, and Fuels.* By T. Hull. Pp. viii + 143. (London: Blackie and Son, Ltd., 1921.) 3s. 6d. net.

A VERY elementary account of the subject suitable for students in technical schools and classes will be found in this book. The chemistry of the materials and processes are not dealt with, formulæ and equations being purposely omitted. There is no index. On p. 128 the composition of "modern coal gas" is given as containing only 8 per cent. of carbon monoxide and 3.5 of "oxygen, nitrogen, etc." This must refer to genuine coal gas and not to the "modern" variety. No mention of fat hardening is made.