Patents for Inventions. By J. Ewart Walker and R. Bruce Foster. Pp. xiii+377. (London: Sir I. Pitman and Sons, Ltd., 1922.) 21*s.* net.

THE authors of this book depart somewhat from the usual manner of treating the subject of patent law. After a brief introductory survey, they first deal with the manner of obtaining a patent, detailing the procedure in the Patent Office and in possible opposition proceedings. Their next concern is the establishment in the courts of the validity of the patent, consideration being given both to the general rules governing the interpretation of patents and to the grounds upon which the patent may be held invalid. Finally, the privileges and responsibilities associated with the possession of a valid patent are discussed, the chapters relating to this covering very fully the rights of the patentee in respect of infringements, royalties, licences, etc., and his liabilities as regards revocation and compulsory licences.

By presenting the subject in this sequence, the principles underlying patent law are linked up in a manner which can easily be followed. As, in addition, the treatment throughout is clear and concise and avoids undue stress upon legal technicalities, the book should commend itself not only to legal practitioners but also to business men, directors of industrial research, and others who are interested in the protection and commercial exploitation of inventions.

An appendix, which extends to a little over half the book, contains as its most valuable features the Patents and Designs Acts in a consolidated form, and a list of the leading cases to which reference has been made in the text. Of lesser value relatively are the reprints of the patents forms, the Patents Rules, and the war legislation, the inclusion of which accounts for the abnormal size of the appendix. These reprints, we think, might very reasonably have been dispensed with as adding unnecessarily to the cost of a very useful book. E. J.

Technische Träume. Von Hanns Günther (W. de Haas). Pp. 83. (Zurich: Rascher & Cie, 1922.) 50 marks.

THIS illustrated pamphlet issued free to subscribers to the journal *Natur und Technik* contains short accounts of the most important of the proposals which have been made from time to time either to use coal more efficiently in view of its complete exhaustion 1500 years hence, or to substitute for it some other source of power. Of schemes falling within the former category the author thinks Ramsay's plan for converting coal into water-gas *in situ* not likely to prove successful, and attaches more importance to the proposals to generate electric current thermo-electrically or by means of carbon cells. Apart from coal and petroleum, natural power has been derived from sunlight, from the wind, from steam in volcanic regions, from the tides, and from the waves of the sea. Sunlight power plants in tropical regions can, he considers, compete with coal at 10*s.* a ton, while at Landerello in Tuscany all domestic and power heating is supplied by steam from underground heat. The waves have not proved an economical source of power, but the tides are more promising where the necessary structural work is not too costly. The estimated costs of the Severn Scheme the author thinks too low.

Filtration: An Elementary Treatise on Industrial Methods and Equipment for the Filtration of Liquids and Gases for those Concerned with Water Supply, Ventilation, and Public Health; Chemists, Mechanical Engineers, and Others. By T. Roland Wollaston. (Pitman's Technical Primers.) Pp. x+102. (London: Sir I. Pitman and Sons, Ltd., 1922.) 2*s.* 6*d.* net.

THE very ambitious title of this small volume would naturally lead one to expect more than is contained in the book. The author has wasted a good deal of the space at his disposal by a rambling style and by irrelevant discussions. Thus, on p. 4 no less than thirteen lines are sacrificed to a reference to a paper in connexion with two very simple chemical equations which are to be found in every text-book. Much of the text deals with very elementary matters, which should be assumed to be known by the readers. In consequence, the remaining space is insufficient to render possible a clear description, in sufficient detail, of apparatus for technical filtration.

The Tutorial Chemistry. Part 2, *Metals and Physical Chemistry.* By Dr. G. H. Bailey. Edited by Dr. W. Briggs. 12th impression (4th edition). Pp. viii+494. (London: University Tutorial Press, Ltd., 1922.) 6*s.* 6*d.*

DR. BAILEY'S text-book, in its revised form, will continue to be useful to students. It gives a clear introductory course of physical chemistry and of the chemistry of the metals. A good feature is the inclusion of brief accounts of the so-called "rare metals," many of which are now technically important. Specific heats at low temperatures might have been mentioned, and we also miss any allusion to Werner's theory and the cyanide process for silver extraction. There are some criticisms which might be made. The definitions in connexion with the phase rule (§ 45) are not sufficiently precise. Stas's silver was not so pure as is implied (§ 281); the existence of MnO_3 is doubtful; stannous oxide is olive coloured, not black; and the atomic weight of nitrogen is not a whole number within the limits of experimental error (§ 508).

Mentally Deficient Children: Their Treatment and Training. By Dr. G. E. Shuttleworth and Dr. W. A. Potts. Fifth edition. Pp. xviii+320. (London: H. K. Lewis and Co., Ltd., 1922.) 10*s.* 6*d.* net.

THE fact that a fifth edition of this book has been required is sufficient evidence of its value. It gives in a very comprehensive form a quantity of useful information, legal and medical, concerning the mentally defective child. At the beginning of the book there is an interesting account of the early efforts of Séguin and other pioneers in this field. This is followed by chapters on the regulations in England and other countries, the types of mental defect, the treatment available, educational, industrial, and moral training. The appendices supply a list of institutions, both in England and America, where treatment is given, as well as the medical certificate forms under the Mental Deficiency Act, and a list of the Binet-Simon tests. There is also an excellent bibliography.