

of all tables and explanatory matter in the sections on metallurgy and engineering. New sections are also added to deal with photography, with wireless telegraphy and related subjects, and with geophysics. The latter in particular is quite a long section and, like the one on biological measurements, will present in convenient form a mass of data which the non-specialist would find difficult to discover without some such help as is afforded by these tables.

Several of the sections have also been issued separately.  
J. H. A.

*The Book of Remarkable Machinery.* By Ellison Hawks. Pp. 296+40 plates. (London, Bombay and Sydney: George G. Harrap and Co., Ltd., 1928.) 7s. 6d. net.

THE writing of books on modern machinery suitable for boys of a mechanical turn of mind, or for others wishing to know something of the marvels effected by invention, is a difficult problem. Descriptions of new machinery contained in the technical journals often run to considerable length and are accompanied by complicated drawings, absolutely necessary, but requiring the closest attention of an experienced engineer. To attempt to compress into one book descriptions of many machines, ranging from steam engines to printing machines, from machine tools to toffee-wrapping machines, is to undertake a task which is bound to lead to criticism.

Mr. Hawks, however, has been fairly successful in initiating us into some of the mysteries of the forge and factory, and with a fine set of illustrations he has given some explanations which can be readily followed. In other cases the matter is too brief to be of much value, and such statements as that on p. 58, where we are told that the steam from a triple expansion engine exhausts into the condenser at 8 lb. per sq. in., and that on p. 131, that a steel rod 1 in. square will withstand a stretching strain of 150 tons, while a cast-iron bar of similar dimensions will withstand a strain of only 20-30 tons, are examples of the errors one unfortunately finds only too often in popular books on engineering. In such books the matter should be accurate, the explanation clear, and the treatment full enough for its purpose.

*Through the Apennines and the Lands of the Abruzzi: Landscape and Peasant Life.* Described and drawn by Estella Canziani. Pp. xiv+339+24 plates. (Cambridge: W. Heffer and Sons, Ltd.; London: Simpkin Marshall, Ltd., 1928.) 25s. net.

In the last resort it would be difficult to decide whether the award of merit should go to Miss Canziani's paintings or her letterpress in this delightful account of a visit to the Abruzzi just before the War. Both alike are a spirited and detailed record of a primitive culture which no longer survives intact in post-War conditions. When Miss Canziani visited the country she was warned that it was not safe owing to brigandage. Though she did not encounter that peril, the attitude of the peasants at times seems alarming,

to the reader at least, even if Miss Canziani takes it calmly enough.

This, however, and the discomforts, even hardships, of her journey are not matters upon which the author dwells. Her interest lies in the customs and beliefs of the people of this most primitive area of Italy. If it were not for the names of the saints and the prominent position held by the parish priest, it would be difficult to believe this a Christian country. Virtually, indeed, it is as pagan as any part of Africa over which Christianity has done no more than spread a veneer. Take, for example, the festival of Domenico, when the Serpari, descendants of Circe, who handle snakes with impunity, cast serpents in hundreds on the image of the saint as it is carried through Cocullo. This, perhaps, is extreme, but it is not atypical. The strength and at the same time the rational character of the belief in the were wolf is indicated by the statement that those who are about to become were wolves shut up their own sheep for protection before the change to the wolf form takes place. Witches of course abound, and charms against the evil eye are everywhere. Miss Canziani's work is a valuable contribution to European folklore, which will need prolonged study before its interest is exhausted.

*Elements of Geophysics: as applied to Explorations for Minerals, Oil, and Gas.* By Dr. Richard Ambronn. Translated by Dr. Margaret C. Cobb. Pp. xi+372. (New York: McGraw-Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1928.) 25s. net.

PROBABLY at the present time there is no one competent to write a really good text-book on applied geophysics, but the strong demand for information on the subject has stimulated the production of many books, which fall short of the ideal in very different degrees. Dr. Ambronn's work is perhaps nearer perfection than most, though still very far off. Extreme sketchiness of treatment is inevitable when the attempt is made to deal with the historical, theoretical, and instrumental sides of so wide a subject in 284 pages of text. The author has clearly endeavoured, however, to master his subject and to present it from a scientific point of view, without any axe to grind or any special methods to advocate. The extent of his reading is indicated by the fact that more than sixty pages of the book are occupied by a list of references to authors; judging from the section of this literature known to the reviewer, half of these references might have been omitted with advantage.

It will be long before this great material is properly digested and presented in the form best suited for practical purposes, and the author has not made any very marked step in this direction, though his work may facilitate the process when undertaken in the future by himself or others. The book, however, is likely to have a wide sale among commercial geologists, and justifiably, for there can be few who will fail to glean some useful information from its pages.