

FIELD TESTING FOR GOLD AND SILVER. A Practical Manual for Prospectors and Miners. BY W. HAMILTON MERRITT. London: Crosby & Lockwood; New York: D. Van Nostrand Co. 16mo. x + 144 pp. Illustrated. Price, \$1.50.

This is a book for the prospector and contains full directions for such rough tests as can readily be used in the field. Part I (72 pp.) is devoted to assaying, Part II to practical mineralogy and geology, and Part III contains a glossary of useful mining terms and a list of common rock-forming minerals and rocks. The booklet is bound in flexible leather, and is of a size suitable for pocket use.

E. H.

THE MANUFACTURE OF VARNISHES: OIL CRUSHING, REFINING AND BOILING. From the French of Ach. Livache, extended and adapted to English practice by John Geddes McIntosh. London: Scott, Greenwood & Co. 1899.

This book contains some information about raw materials which may interest the novice, nearly half the space being devoted to this, the greater part of which is reasonably correct. The author has collected a good deal of somewhat antiquated chemical literature on resins, the value of which is well indicated by the luminous observation on p. 18 that "The data are of no value, except in regard to the variety of copal which is referred to; and this is exactly the point which the investigators have almost invariably omitted to supply;" and "of little or no value to the practical varnish maker." The book is equally remarkable for what it contains and what it leaves out. For example, no reference is made to the almost universal practice of hardening rosin with lime; and it would be hard to compress more ignorance of the facts and of modern literature on asphaltums into a sentence than the following: "In its composition this mineral (Manjak) is similar to the pitch of Trinidad, to the gilsonite of Utah and the Canadian albertite." Nothing is said about oil-soluble aniline colors, but the incorrect statement is made that indigo-carmine is soluble in oil (p. 86). The present reviewer is not competent to criticize the chapter on spirit varnishes, except on one or two points. Shellac varnish is said to be made by dissolving one part of shellac in 5 to 12 parts of alcohol; such a solution can not be sold in this country, and probably not in England; regular shellac varnish is made with