

pondence, giving rates of postage, parcel post, mails, cable regulations, etc.; **Financial Information**, showing money exchange and transmission, banking information, and similar data; **Credit Reports and Regulations**; **Transportation**; **Customs Information**, a very full section comprising the Customs Act, Official Tariff, and much cognate material; **Description of Towns and Local Opportunities**; **General Information**, taking up each industry, profession, and important vocation, and including facts about climate, topography, sport, education, and so on; and a series of mercantile and financial tables.

The volume is carefully indexed.

The most remarkable feature of the Annual is its conciseness. That it has been competently edited is evident. It is given a semi-official standing from the fact that the editor has the co-operation of government officials, of the large corporations, and of many boards of trade.

American Civil Engineers' Pocket Book—Editor-in-Chief, Mansfield Merriman—First Edition, Fifth Thousand—1380 Pages—Soft Cover—Illustrated—Price \$5—Published by John Wiley & Sons, New York, and the Renouf Publishing Co., Montreal—1911.

It argues a good deal of moral courage for a compiler to attempt to cover ground that has already been trodden many times. Mr. Merriman has approached his task confidently. With the aid of twelve associate editors he has produced a volume that will at least be useful, and may possibly do more than supplement the older standards. All of the usual engineering data, such as mathematical tables, are given in compact form. Twelve other sections, dealing with the main divisions of engineering, are written by specialists.

The mining engineer must often perform the work of his civil brother. The two professions overlap. In such cases he needs pocket books, reliable pocket books. The American Civil Engineers' Pocket Book is not, however, confined strictly to civil engineering. Certain phases of mining engineering are discussed. Shaft-sinking, core drilling, explosions, etc., are given a fair share of attention.

The aim of the editors has been to compile a volume "better and fuller than any heretofore published in the English language." Time will tell whether they have or have not accomplished that object. In any case they have made a laudable effort. The volume will prove a good investment for any engineer.

Stamp Milling—A Treatise on Practical Stamp Milling and Stamp Mill Construction, by Algernon Del Mar, A.R.S.M., M.A.I.M.E.—129 Pages—Illustrated—Stiff Cover—Price \$2 Net—McGraw-Hill Book Company, 239 West 39th Street, New York—1912.

This is a book written by a practical mill man. It is not trite to say that it has long been needed.

A modest introduction sets forth the author's intent, which is to give in print his own experience and the experience of others. "The sooner," he writes, "the millman recognizes that there is something to attain beyond his mere wages the sooner will the amalgamating of the precious metals be classed among the fine arts." This is something more than true.

A brief historical sketch occupies the first few pages. Then follow concise outlines of the principles of the stamp mill, of the practical working of the mill, of the limitations of the single unit and five-stamp unit batteries, and of amalgamation. The last chapter, which includes nearly half the book, takes up stamp mill construction. Frames, foundations, mortars, cams, shoes, dies, boss-heads, tappets, tables, feeders, bins, in fact, all the integral and incidental parts of the stamp mill are described and their functions outlined.

The merits of the book are that it is modern, readable, practical, concise, and quite devoid of the padding so frequently used in similar volumes. The author has been up against the real thing.

Speaking advisedly, the real literature of stamp milling, apart from the fugitive magazine article, is still to be written. Mr. Del Mar has given us a book that will form a good nucleus for future writers.

Incidentally, we notice that the Nissen stamp, a Canadian invention, is given honourable mention.

With the revival of gold mining in Canada this kind of book should be in demand. The benefit to be derived from thoroughly digesting the principles and practice of any department of mining engineering or metallurgy is not always appreciated. Stamp milling, for instance, simple as it seems in principle, is woefully misunderstood in practice. The deliberate balance that must be maintained, the fine adjustment, and the close control of all the factors, take long to learn. In fact there are but few operators who can "make music in the mill." Mechanical efficiency is only a means to an end. That end is commercial profit.

A Manual of Fire Assaying—By Charles Herman Fulton, E.M., D.Sc.—Second Edition Entirely Re-written and Enlarged—219 Pages—Illustrated—Stiff Cover—Price \$2 Net—McGraw-Hill Book Company—239 West 39th Street, New York—1911.

It is the rare text-book that runs through more than one edition. We may take it, therefore, as a sign of grace that a manual enters a second edition.

Mr. Fulton's "Manual" is well known to most of our mining readers. The first edition was published in 1907. Four years have seen much change and progress in the art of assaying. The design and character of assay furnaces have been improved, as have also the routine details and the mechanical incidentals. Of these changes and improvements the author has taken full cognizance in this second edition. As with all good text-books the arrangement of the subject-matter is logical. For the benefit of those who may not be familiar with the book, it may be explained that the following subjects are treated:—Assay furnaces and tools; reagents; the assay of reagents; sampling; weighing; reduction and oxidation reactions; the crucible assay and assay slags; cupellation; parting; assay of ores containing impurities; special methods; errors in the assay for gold and silver; assay of bullion; assay of ores and alloys containing platinum, iridium, gold, silver, etc.; assay of tin, mercury, lead, bismuth and antimony; and an appendix of suitable tables.

The illustrations are better and more numerous than in the first edition.

In size and make-up the book is practically identical with Del Mar's "Stamp Milling" and makes a suitable companion volume with the latter.