

BOOK REVIEWED

The Copper Handbook, 1904.—A Manual of the Copper Industry of the World. Vol. IV, for the year 1903. Compiled and published by Horace J. Stevens, Houghton, Michigan, U.S.A. Pages, 774. Price, in buckram binding with gilt top, \$5; in full library morocco, \$7.50.

This valuable book contains a very large amount of information, that must have entailed much labour in its collection and arrangement, and which supplies to a considerable extent what was long a real want, viz., a generally full review of copper mining and matters directly connected therewith. Its wide scope is evident when the subjects of its sixteen chapters are noted. These are, successively: History, Geology, Chemistry and Mineralogy, Metallurgy, and Uses of Copper; Glossary of Mining Terms; Copper Deposits of the United States, Canada, Newfoundland, Mexico, Central America, the Antilles, South America, Europe, Africa, Asia, and Australia and Oceania; Copper Mines of the World; and Copper Statistics. Between the self-indexing style followed where practicable and the index at the end of the book, the arrangement is convenient for ready reference. The book has been prepared along systematic lines, and, in addition to its particular information relative to individual copper mines of the world, contains useful features of general value.

The author states that the present annual edition of the *Copper Handbook* "will be found more complete than its predecessors, in a variety of ways. The statistical tables have been revised and brought to the close of 1903 in most cases, and as near thereto as the data available has allowed in all other instances. The longest chapter of the book, which is devoted to detailed descriptions of the large number of 3,311 copper mines and copper mining companies, in all parts of the world, has been rewritten throughout, with great care, and the revision has been so thorough that it is doubtful if there are a half dozen descriptions remaining unchanged from the preceding edition. Not only has the number of the mines and mining companies been increased by exactly half, but the descriptions of all of the producing mines of importance have been greatly amplified, all of the old matter of importance being retained, and incorporated with the new material in logical order. The work of revising the statistical and descriptive chapters has proven so arduous, however, that it has been found impossible to revise the technological chapters, unless the issue of the work were delayed several months past the customary time for its appearance, which was deemed unwise." It is promised that the work of revising the preliminary chapters of the *Handbook* will be taken in hand at once, for the 1905 edition, a very large amount of material having already been collected for this purpose.

It is not intended in this notice, of what is freely acknowledged to be a work reflecting great credit upon its painstaking author, to do more than briefly comment upon the information given relative to copper mines in British Columbia, and make a passing reference to that concerning copper production in Canada. The latter will be disposed of in few words. It is to be regretted that an injustice is done the Dominion by making it appear (as first table on page 741) that Canada's production of copper was 1,315 long tons less in 1902 than in 1901 when, as a matter of fact, it was 436 tons more—a difference of 1,751 tons—the official figures appearing in the report of the Section of Mines of the Geological Survey of Canada being 37,827,019 lb. in 1901, and 38,804,259 in 1902. It may here be added, as germane to this point that the total production in 1903 was 42,684,454 lb. and in 1904 (estimated) 42,970,594 lb.

The reason the earlier chapters of the book were not revised and brought up to a later date has already been quoted, nevertheless it is poor consolation to those who are endeavouring to give this province full credit for the increase in its mineral production that has taken place from year to year to find such a recognized authority failing to bring his figures showing the total copper production of the province nearer than three years before the time of publication of

the book under review. The production for 1901 (as page 124) is given as 27,693,716 lb. of copper, which is correct, but it is not too much to expect that that of 1902 (29,636,057 lb.) and 1903 (34,359,921 lb.) would have been shown, even if it were not practicable to include that for 1904 (35,710,128 lb.).

As to individual copper-producing mines of British Columbia, it is manifest that an earnest endeavour has been made to do them justice. Prominence is given to several of them, but the space devoted to them, respectively, seems to have been determined by the replies they made to applications for information. A revision of the matter before publication, by some one well informed as to these mines, would have led to the excision of several errors, but on the whole there is little to find fault with on the score of attention given to the copper-producing mines of the province. With such fully detailed published reports of the larger Rossland mines, though, it was to have been expected that the notices of them would have been more extended and complete. Next year smaller mines of merit, such as the Jumbo and Spitzee, in Rossland district, and the Emma, in the Boundary, will probably also have notice.

The foregoing criticism is not prompted by a carping spirit, but rather to point out positive faults with a view to their being avoided in future issues. The *Handbook*, despite some shortcomings, is a decidedly useful work and one that should meet with practical appreciation, especially in English-speaking mining communities, the world over. It is worthy of the liberal support of all interested in copper production, and the hearty co-operation, to make it increasingly reliable, of all in a position to supply information relevant to the important subject with which it so exhaustively deals.

BOOKS, ETC., RECEIVED.

United States Geological Survey.—

Report of Progress of Stream Measurements for 1904. Parts VI, VIII, and XI.

Second Conference of Engineers of the Reclamation Service. By F. H. Newell, Chief Engineer; with accompanying papers. Pages 267.

The Copper Deposits of Missouri. By H. Foster Bain and E. O. Ulrich. Pages, 52; illustrated by half-tones and maps.

The Lead, Zinc and Fluorspar Deposits of Western Kentucky. By E. O. Ulrich and W. S. Tangier Smith. Pages, 217; illustrated by half-tones and maps.

The Normal Distribution of Chlorine in the Natural Waters of New York and New England. By Daniel D. Jackson. Pages, 31; with maps.

The Delavan Lobe of the Lake Michigan Glacier of the Wisconsin Stage of Glaciation and Associated Phenomena. By William C. Alden. Pages, 106; illustrated by half-tones and maps.

Bureau of Provincial Information of British Columbia.—*Game of British Columbia.* Bulletin No. 17. Pages, 68; with numerous well-finished half-tones.

The Timber and Pulp Wood Industries of British Columbia. Bulletin No. 21. Pages, 36; illustrated by half-tones.

Michigan College of Mines, Houghton, Michigan.—Year Book for 1905. Pages 137. Accompanied by booklet of half-tone college views.

Radium, Radioactive Substances and Aluminum, with Experimental Research of the Same. A pamphlet by Myron Matzenbaum, B.S., M.D., Cleveland, Ohio, U.S.A. Pages, 24; illustrated.

Capt. Harry Johns, for years manager of the Sunset mine, Boundary district, is now in charge of development work the British Columbia Copper Co. is having done on the Grant group, near Chesaw, across the International boundary line from Rock creek, Boundary district.