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CHEMICAL ANALYSIS OF IRON

Reviewed by Prof. L. J. Rogers University of Toronto

By A. A. Blair. Published by the J. B. Lippincott Co., Philadelphia. 318 pages, 100 illustrations, 6¼ x 9 ins., cloth. Price, \$5.00 net.

The last edition of Blair covers the field in the same comprehensive manner as the previous editions. There are several points, however, where the author has apparently not kept abreast of the improvements made in the past few years. The chapter on carbon determinations gives no elaboration of the electric furnace now universal in application. All cuts show gas furnaces. There is no mention made of the rapid type of absorption tower after the Fleming model, although these have in many instances supplanted the color carbon in practice in making the snap test.

The chapter giving methods for chronium has ignored Tusker's persulfate method as well as Low's bismuthate procedure, and no mention is made whatever of the barium carbonate precipitate method for small quantities, as given in A.S.T.M.

The chapters on alloy steels give some excellent methods, but unfortunately, do not deal in a manner to classify such, and the type of steel where they best apply.

The book on the whole, while giving much that is standard and valuable, cannot be said to be up-to-date on these points wherein advances have been made during the past decade.

MINING ENGINEERS' POCKET BOOK

Edited by Robert Peele, Professor of Mining Engineering, School of Mines, Columbia University, New York City, assisted by forty-three associate editors. Published by John Wiley & Sons, Inc., New York, and Chapman & Hall, Limited, London; Canadian selling agents, Renouf Publishing Co., Montreal. 2,385 pages, 4¼ x 7, nearly 2,000 illustrations, flexible imitation leather binding. Price, \$5.00 net.

The first edition of this monumental hand-book will undoubtedly be hailed with considerable pleasure by the engineers concerned with the development and management of mines, and also by those who have to do with construction detail involved in the installation of plant. It is also a valuable text book on mining subjects.

The size of the work, nearly 3,000 pages, is caused by the great variety of subjects that must be treated The editors claim that the two other mining engineers' hand-books which are already in existence either omit or treat too briefly many subjects which constitute important parts of the professional equipment of the present-day mining engineer. A hand-book on mining must include a greater variety of subject-matter than hand-books on other branches of engineering, and the publishers felt that the field was too wide to be covered satisfactorily by a single writer, so they followed the precedent set in their American Civil Engineers' Pocket-Book and invited a large number of authorities to contribute to Prof. Peele sections on their respective specialties. Besides sections dealing with mineralogy, ore deposits, methods of prospecting, exploration in mining and mining plant of all kinds, there are others on certain branches of civil, electrical and mechanical engineering. It may be thought by some that this collateral material occupies too much space in a book on mining, but in view of the important part played by the allied branches of engineering in equipping and operating modern mines, we believe the allotment of space is reasonable. The book includes such data on machinery, power plant, electrical transmission and structural design as the mining engineer may need when in the field and out of reach of his personal notes and technical library. For office use there is at the end of each section a bibliography of the more important books and papers on the subjects dealt with.

No serious attempt is made in the hand-book to exhaust metallurgical subjects, as it is recognized that a companion hand-book on metallurgy must soon be supplied. Condensed summaries are included, however, of those processes of treatment which are frequently carried on by mining companies themselves. Relatively small space is allotted to coal mining, due somewhat to the fact that a coal mining pocket-book is already in existence.

It was planned to publish this book in 1916, but the outbreak of war about one year after the work was begun was responsible in a large measure for the delay.

The list of associate editors is a formidable one, including some of the leading consulting mining engineers and professors in the United States.

HANDBOOK ON PIPING*

Reviewed by George A. Orrok Consulting Engineer, New York City

By Carl L. Svensen, B.S., Assistant Professor of Engineering Drawing in the Ohio State University. New York: D. Van Nostrand Co. Cloth; 6 x 9 ins.; 352 pages; illustrated. Price, \$3.00 net.

Professor Svensen has produced a text-book on piping which both in range of contents and in size greatly exceeds the three books on the subject previously available. Although the present volume appears to be a combination of lecture notes and material from manufacturers' catalogues and seems to show lack of knowledge of actual practice, yet within such limitations the work of preparation seems to have been well done, and as a text-book it will doubtless prove useful though, of course, not as useful and as safe a guide for students as is desirable.

The first three chapters relate to the history of pipe and pipe threads and contain data as to the sizes and use of pipe. The next four chapters deal with fittings, joints

*From Engineering News-Record, of New York.