

NEW BOOKS, ETC.

A HAND BOOK OF GENERAL INSTRUCTIONS FOR MECHANICS. Containing Useful Rules and Memorandum for Practical Men. New York: D. Van Nostrand Company, 1909. 12mo.; 328 pp. Price, \$1.50.

The primary object of the author in writing this book is to give the mechanic, who has not had educational advantages, a text-book explaining established rules for calculating in a clear, simple, and concise way, making him familiar with the various technical terms and their meaning, and to be in general such a course of instruction as to impart in a simple manner the required knowledge to enable him to read understandingly more advanced works. The plan of the book is excellent, and the illustrations and examples are particularly clear. There is hardly anyone who has much occasion to use figures who would not be benefited by a perusal of parts of this book.

PRECIOUS METALS. Comprising Gold, Silver, and Platinum. By T. Kirke Rose, A.R.S.M., D.Sc. New York: D. Van Nostrand Company, 1909. 12mo.; 295 pp. Price, \$2.

This is one of the volumes of the "Westminster Series," which has proved such an excellent collection of technical literature. The present volume deals with the methods of treating gold by the wet and dry process. The extraction of silver, the refining and assaying of gold and silver ores, the assay of gold and silver bullion, minting, the manufacture of gold and silver wires, and a valuable chapter on platinum, together with tables on the production of precious metals. There has been room for a good book on gold and silver for some little time. This book seems to fill the niche admirably.

MOTORMAN'S PRACTICAL AIR BRAKE INSTRUCTOR. By George R. Denehie. Chicago: Frederick J. Drake & Co., 1909. 18mo.; 280 pp., leather back.

This is a concise up-to-date treatise on the construction and operation of the different air-brake equipments used in modern electric transportation. The author has been at considerable pains, therefore, to collect, condense, and compile all the latest available information bearing upon this most important subject of handling an electric car or a train of cars safely and at the same time economically. The diagrams and illustrations are particularly clear. Some of them are reproduced in colors. The get-up of the book, however, is not equal to another book on the same subject which we reviewed a short time since.

LIFE OF SIR CHARLES TILSTON BRIGHT, Civil Engineer. By Charles Bright, F.R.S.E. London: Archibald Constable & Co., Ltd. New York: D. Van Nostrand Company, 1908. 8vo.; 478 pp. Price, \$4.50.

In this book is incorporated the story of the Atlantic cable and the first telegraph to India and the colonies. In response to a number of suggestions in view of the fiftieth anniversary of the Atlantic cable, Mr. Bright has brought out an abridged edition of the biography of his father, the original work having been written by Sir Charles Bright's brother and by his son. There is probably no branch of engineering which lends itself so readily to a full sight of the world as that of telegraphy. Therefore, the present volume will appeal to the general reader only in a lesser degree than to the engineer, the student, and the historian. Sir Charles Bright was as much a traveler as a scientist, and even when engaged on the most trying cable venture in unhealthy climates, he invariably kept a neatly written record of the day's performance—of what he had seen and learnt—never retiring to bed without attending to his task. The detail to be drawn upon is very large, and the author has certainly made an excellent selection. The story of the Atlantic cable is one of the most romantic in the history of science, and it is gratifying that the biography of the pioneer should be written by his son.

THE LEAD AND ZINC PIGMENTS. By Clifford Dyer Holley, M.S., Ph.D. New York: John Wiley & Sons, 1909. 12mo.; 340 pp.; 85 figures. Price, \$3 net.

New pigments have come into use during the last ten years, new processes have been developed for the manufacture of the older pigments, new combinations of pigments have been worked out that have secured results hitherto unattainable. Yet up to the time mentioned above, except for short articles in some of the trade papers, these improvements and innovations remained practically unnoticed. Since public attention has been directed to the paint industry by the enactment of the various State laws regarding the sale of paint materials, several excellent American works have been written on this subject, but the majority of them have been directed more particularly toward the compiling of analytical methods and data than to the manufacture and uses of the various pigments. In this work the author has attempted to record the progress made in the United States in the manufacture of the more important pigments, and hence but little space has been given to European methods and processes except for comparison, as they have been discussed in detail in various English and European works.

MANUAL OF STEAM ENGINEERING. By W. H. Wakeman. New York and Chicago: New York Belting and Packing Company.

Mr. Wakeman's name is familiar to readers of the SCIENTIFIC AMERICAN SUPPLEMENT, as well as to readers of technical journals in general, as the author of many articles on engineering subjects. In this little book he has presented instructions, suggestions, and illustrations for steam engineers concerning the application to modern daily practice of the approved theory of steam engineering. Although the work is issued no doubt as an advertising pamphlet, it is essentially an engineering reference book containing data that are required in everyday practice, arranged in convenient form and with sufficient explanation to render the matter both interesting and instructive.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were issued for the Week Ending November 16, 1909,

AND EACH BEARING THAT DATE [See note at end of list about copies of these patents.]

Table listing inventions with names and dates, including Acetates, making H. O. Chute, Acetylene generating apparatus, A. Davis, Acid from nickel-chloride solution, recovering hydrochloric acid, H. L. Wells, etc.

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Two Good Books for Steel Workers

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By JOSEPH V. WOODWORTH. Size 6 1/2 x 9 1/2 inches. 288 pages. 201 illustrations. Price \$2.50 postpaid.

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By E. R. MARKHAM. Size 5 1/2 x 8 inches. 367 pages. 163 illustrations. Price \$2.50 postpaid.

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Table listing various mechanical inventions and their prices, including Cans and the like, machine for washing, J. L. Ranney, Canceling machine, ticket, Fisk & Seely, Cant hook, J. B. Snyder, Car brake, W. J. Stahr, Car construction, Dumber & Berg, etc.