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CYCLOPEDIA OF APPLIED ELECTRICITY. Five volumes. Prepared by the American School of Correspondence at Armour Institute of Technology. Chicago, 1905. Large 8vo; 2,500 pages; 3,000 illustrations. Price, \$30.

This is a very comprehensive work on electricity, dealing particularly with its practical applications and avoiding all unnecessary digressions into theory. Well-known specialists in the different branches covered have aided in the collaboration of this work, contributing specially-prepared articles, and all the standard works on electrical subjects have been consulted and freely drawn upon. Primarily, this cyclopedia is intended for the use of students, the matter being arranged in the progressive order in which it is usually taught, instead of being alphabetically arranged. Examples are used throughout, in order to give a practical understanding of the various subjects, and at the end of each volume are a series of review questions, which permit the reader to examine himself and test the knowledge he has acquired. But though the work is thus particularly adapted for students, it is none the less of value to electricians, engineers, telephone and telegraph operators, and all who are interested in the practical side of electricity. Higher mathematics is avoided, and only the simplest equations are used. All the explanations and descriptions are extremely simple and clear, and at the same time they are very thorough and complete. A common fault with most general works on electricity is the free use of technical terms without explicit definitions of their meanings. In the present work the simplest language is used, and technical terms, while not avoided, are fully explained before being introduced.

The first volume deals with the elements of electricity, electrical measurements, electric wiring, insulators for transmission lines, and telegraphy, including a comprehensive chapter on wireless telegraphy, and one on the teleautograph. Electric welding is also described in this volume. The second volume describes direct-current dynamos and motors, with a valuable chapter on electric motors in machine-shop practice, and another on storage batteries. Volume III covers the subjects of electric lighting and electric railways, dealing also with power stations and management of dynamo-electric machinery. The volume contains in addition a chapter on boiler trials. The fourth volume takes up alternating-current machinery and power transmission, describing all the principal types of alternators, synchronous motors, induction motors, etc., also converters, including a chapter on the mercury-vapor converter. In the fifth volume telephones and telephone practice are dealt with. This is a complete and very practical book on the subject, written by William C. Boyer, who is a telephone engineer of wide experience. The volume ends with a chapter on wireless telephony and a complete index of the entire cyclopedia.

MODERN INDUSTRIAL PROGRESS. By C. H. Cochrane. Philadelphia: J. B. Lippincott Company, 1905. 12mo.; pp. 647; over 400 illustrations. Price, \$3.

Mr. Cochrane's book, although not an original work, must be considered a most successful attempt to popularize modern engineering. He has described tersely, though vividly, the foremost technical achievements in civil engineering, steel-making, photography, wireless telegraphy, farming, glass-making, and most of the important American industries. The illustrations in the book vary in excellence. Some are extremely good and some nothing more nor less than catalogue cuts, which ought to have no place in a volume of this character. Apart from this defect, the book is one that can certainly be recommended to the non-technical reader.

RADIUM. And All About It. By S. R. Bottone. New York: Whittaker & Co., 1904. 12mo.; pp. 96. Price, 50 cents.

One of the latest of the popular manuals on recent scientific discoveries and inventions, which Mr. Bottone has been publishing in London. "Radium" is entertainingly written and well illustrated.

FRICITION AND LUBRICATION. A Handbook for Engineers, Mechanics, Superintendents, and Managers. By William M. Davis. Pittsburg: The Lubrication Publishing Company, 1904. 12mo.; pp. 265. Price, \$2.

In these days of rigid economies and close attention to details, the engineer or manager who desires to attain to the greatest efficiency and economy in the operation of machinery in his charge must consider closely the cost, the quality, and the best methods of applying lubricants, as well as of fuel and the other elements which enter into the operation of a steam plant. The author is a practical engineer, who has made a special study of lubrication and is in a position to impart sound advice.

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