BOOKS

Handbook of Engineering Materials. Douglas F. Miner and John B. Seastone, editors. John Wiley and Sons, Inc., New York (1955). 1,380 pages. $17.50.

The purpose of this new handbook is to provide the engineer with a rather extensive array of general information about the materials he may use in his work. The editors have compiled engineering data and descriptive subject matter for a wide variety of materials including those used in construction, manufacturing, production, and industrial research.

The contents of this volume include not only physical and chemical properties of materials, but also applications, engineering characteristics, testing procedures, availability of various types of materials, and biblographical references.

The handbook is somewhat arbitrarily divided into four sections, which cover the following topics: general information on materials, metals, nonmetals, construction materials. An authoritative presentation of data in concise, logical form has been accomplished by drawing on the skill of the fifty-one contributors to the handbook.

One of the groups for which this collection of information can be useful is those engineers who often use data in more than one particular field. The chemical engineer who requires specific information in fields such as mechanical, electrical, or civil engineering would find the handbook a good source of frequently used data. In addition, the bibliography that is given with each particular topic directs the reader to sources which supply more detailed treatments than the handbook is able to provide.

An obvious effort has been made to provide up-to-date information and to include data on materials which have only recently become of engineering importance.

ROBERT M. SECOR

Introduction to Chemical Engineering. Walter L. Badger and Julius T. Banchero. McGraw-Hill Book Company, Inc., New York (1955). 753 pages. $9.50.

Although the publishers do not say so on the jacket, this book is essentially a modernized version of a well-known earlier work, "Elements of Chemical Engineering," by W. L. Badger and W. L. McCabe, the most recent edition of which was published by the McGraw-Hill Book Company in 1936. The same topics are covered. A considerable part of the later book is a word-by-word reprint of the earlier text.

The present volume brings up to date the material of the older work. For example, binary distillation is now presented initially by the use of the enthalpy-concentration diagram, with the McCabe-Thiele method being subsequently developed as a special case. Although much of the old book remains in the new, large parts of this work have been completely rewritten. The growth of chemical engineering theory in the years since the issue of the earlier text is reflected in an increase in the number of pages from 660 to 753.

As an undergraduate text and a text for the engineer seeking a review of chemical