the rapid growth of the literature, and yet desire to familiarize themselves with the facts brought out by scientific investigation.

HIDEYO NOGUCHI.

BOILER WATERS. BY WILLIAM WALLACE CHRISTIE. D. Van Nostrand Company. pp. 235. Price \$3.00.

The appearance of the book is excellent, the type being clear, the lines well spaced, and the illustrations both numerous and well selected. The subject-matter is set forth in ten chapters:—The properties of water; boiler scale; corrosion; feed-water pipes; priming and foaming; oil and grease; hardness; feed-water heaters; water softening and miscellaneous tables.

The chapters on feed-water heaters and on water softening are particularly good. Especial stress is laid upon the point that it is poor economy to use a boiler as a water purifier, the purification being better done elsewhere. The data are plentiful, are often tabulated, and are well chosen.

The book will be found decidedly useful, but it would have been greatly improved had its chemical portions been omitted.

The tests given for water examination are crude, and are very likely to mislead. The table of analyses of sundry waters, beginning on page 33, loses its value by reason of the reader not being informed of how the waters in question acted when used in boilers.

W. P. MASON.

HANDBUCH DER GESAMMTEN THONWAARENINDUSTRIE. BRUNO KERL. 3TE. AUFLAGE. BEARBEITET VON EDUARD CRAMER UND DR. HERMANN HECHT. FRIEDRICH VIEWEG UND SOHN, BRAUNSCHWEIG. 1907. s.s 1588. ABBILD. 518. Price M 48.50.

This book bears the imprint of being the third edition of the work of Bruno Kerl, which appeared in a second edition as long ago as 1879, but the author died in 1905 and Messrs. Cramer and Hecht have entirely rewritten it at the present time, increasing its bulk from 733 to 1,551 pages with the introduction of much new matter which was essential for a proper description of the advances in the ceramic industries in the last twenty-five years. It may be regarded, therefore, as essentially a new work and as such is most complete and encyclopaedic in character. It is, in fact, the third volume of the second group of Bolley-Engler's new Handbuch der chemischen Technologie which is being published by Vieweg und Sohn of Braunschweig, the other volumes of which have either received a flattering reception or are looked forward to with pleasure.

In the preface the authors state that they have been engaged in the work of preparing the manuscript for a period of ten years, which is not surprising, considering the amount of material that they have gathered together. With them several well-known authorities have collaborated such as Herr Bartel, Dr. Th. Ludwig and Dr. M. Fiebelkorn, as well as