Parts I and II, devoted to apparatus, reagents, and schemes for fire assays, contain so much useless and misleading information that the valuable portion is lost completely to the inexperienced reader. It would have been much better had the authors reduced these one hundred and thirty-nine pages to thirty.

HANDBOOK FOR THE BIO-CHEMICAL LABORATORY, INCLUDING METHODS OF PREPARATION AND NUMEROUS TESTS ARRANGED ALPHABETICALLY. BY JOHN A. MANDEL. New York: John Wiley & Sons. pp. 101. Price, \$1.50.

In this little book the author presents a very good compilation of laboratory processes for the production of a number of substances of physiological importance. Many of the descriptions of methods appear to be taken from well-known books of Drechsel, Halliburton, Gamgee, and others, but a distinct service has been rendered American students by bringing them together in compact form. Most of the processes described have stood the test of student practice and can be recommended as workable.

A list of common tests, employed mostly in laboratories of physiological chemistry, takes up about thirty-five pages of the book. Some of these tests are good, others could have been omitted without lessening the value of the book, as they are practically useless in investigation. In this part of the book several typographical errors have escaped the notice of the author. On page 76, for instance, "liquor of potassæ" should not have been overlooked, and on page 85, under the Molisch test "solution of a naphthol" should read "solution of  $\alpha$ -naphthol." Other errors noticed are of minor importance and not misleading. J. H. LONG.

## BOOKS RECEIVED.

Tables for the Determination of Minerals by Physical Properties. By Persifor Frazer. xii + 163 pp. J. B. Lippincott Co. 1897. Price, \$1.50.

The Wooly-Aphis of the Apple. Bulletin No. 35. Agricultural Experiment Station of the State of Missouri. Columbia, Missouri. July, 1896. 26 pp.

An Introductory Course of Qualitative Chemical Analysis with Explanatory Notes and Stoichiometrical Problems. By Henry P. Talbot, Ph.D. 125 pp. 1897. New York: The Macmillan Co. Price, \$1.50.