

metalloids. The sections that are to follow will doubtless be of equal excellence.

JOHN MARSHALL.

**FOODS AND THEIR ADULTERATION.** Origin, Manufacture and Composition of Food Products. Description of Common Adulteration, Food Standards, and National Food Laws and Regulations. By HARVEY W. WILEY, M.D., Ph.D. Price \$4.00. Octavo, 625 pages. P. Blakiston's Sons & Co., Philadelphia.

With the widespread interest given to Foods, not alone by the scientists and manufacturers and distributors, but also by the legislators and consumers, no time is more appropriate for the appearance of an authentic manual on this subject, than the present. It is fortunate for the American consumers that a treatise has appeared, written by such a well known and highly recognized authority as Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry, U. S. Department of Agriculture.

Dr. Wiley divides his subject matter into three classes:—Foods, beverages and condiments. Foods and condiments are considered only in this the first volume, and beverages will be taken up in the second volume, now in active preparation. Milk is included among the foods, as the author very correctly states: "Milk, although a liquid substance, is hardly to be considered a beverage, and on account of its high properties may be classed, together with its preparations, under the first head."

Analytical chemical methods and detailed figures of analyses are intentionally omitted, although in every case the average chemical composition of each class is given. This is a distinct advantage, making the manual more concise, especially also as the manual is designed—"to interest the consumer, as well as the manufacturer, the scientific, as well as the general reader."

The different products are treated under the following sub-divisions: Introduction: A brief outline of Proper Ration, Social Function of Food. Definition, Composition and Classification, and Explanation of some of the more Common Chemical Terms.

- Part 1—Meats and Meat Products.
- Part 2—Poultry and Eggs and Game Birds.
- Part 3—Fish Foods.
- Part 4—Milk and Milk Products and Oleomargarine.
- Part 5—Cereal Foods.
- Part 6—Vegetables, Condiments, Fruits.
- Part 7—Vegetable Oils and Fats, and Nuts.
- Part 8—Fungi as Foods.
- Part 9—Sugar, Sirup, Confectionery, and Honey.
- Part 10—Infants' and Invalids' Foods.

The space allowed the reviewer is too limited to allow him to go into detail as to any part of this excellent manual. Every part is written in the characteristic plain and forcible style of the author, showing complete

mastery of the subject and based on the very extensive personal experience of Dr. Wiley. All opinions and conclusions drawn "respecting adulterations, misbranding, nutritive value, and wholesomeness are the individual expressions of the author and are not to be considered in any other manner." A necessary, although perhaps not required explanation, on account of the official position that Dr. Wiley holds.

The reviewer cannot agree with the author "that the inartistic treatment of a subject of this kind, is not one which is calculated to excite any sympathetic interest or appeal to the natural desire for literary and artistic expression." The literary style is such that both scientist and layman are liable to try to finish the manual from "cover to cover" at one reading. The artistic make up is excellent throughout, as to type, tables and illustrations and the book is exceptionally free from errors or imperfections. The Table of Contents, Index and List of Illustrations (11 colored plates and 86 others) are complete and splendidly arranged.

The reviewer has no hesitation in stating that this latest manual from the pen of Dr. Harvey W. Wiley is one of the best scientific and popular additions to food literature, and that it can be recommended without qualification, not alone to the specialist interested in the manufacture, distribution or control of food products, but also to the physician, sanitarian, legislator and to every consumer of food products.

EDWARD GUDEMAN.

GLUE AND GELATINE. THE PRACTICAL TREATISE ON METHODS OF TESTING AND USE. BY R. LIVINGSTON FERNBACH. pp. IX + 208. Price \$3.00. D. Van Nostrand & Co.

This book presents to us the most practical treatise from the chemical technological point of view that has as yet been published.

The author takes up the nature, properties and sources of various kinds of commercial glues and their manufacture. He next examines them from a physical point of view and gives the tests and classification thus derived. He then examines them in a chemical way and it must be admitted that when a conservative author only gives us moisture, ash, acidity, alkalinity, acids and fats as the well established chemical methods of valuation, which have little value as a qualitative factor, then it must be acknowledged that the subject is difficult.

Mr. Fernbach starts his third chapter: "It must be reaffirmed at the outset that analysis supplies no data as to the strength of the product." The methods offered for the approximate assay of constituent elements and the estimation of glue content, can hardly be called chemical methods, but they are the best we have.

In his chapter on adulteration, he has followed Allen very closely from a chemical standpoint, bearing in mind the necessity of having his method clear and concise on each subject. The whole value of this work to chem-