

as in the earlier ones, the author has endeavored to keep abreast of the times, and we find mentioned here the results of recent synthetical experiments, such as those upon the sugars; and many new substances that in recent years have become prominent because of their medicinal properties have been introduced. While the book is not intended to be a text-book in the ordinary sense, nor to serve as an introduction to the science, it can, nevertheless, be strongly recommended to all students of chemistry, who, in connection with their lecture and laboratory courses, desire to have a convenient and compact reference book—a book containing all the more important facts of general and descriptive chemistry clearly stated and provided with an excellent index. EDWARD H. KEISER.

*Field, Forest and Garden Botany.* A simple introduction to the common plants of the United States east of the 100th Meridian, both wild and cultivated. By ASA GRAY. Revised and extended by L. H. BAILEY. American Book Co. 1895. 8vo. pp. 519.

The first edition of this useful popular botany was issued in 1868 as a companion book to the author's 'Manual of the Botany of the Northern United States.' The present revision is planned to fill the same place as relates to the sixth edition of the 'Manual,' giving, as it does, concise descriptions of the more common native plants, and of the large number of species cultivated for use or ornament. The number of the latter category has greatly increased during the twenty-seven years which have elapsed since the first issue of the work, and as regards these the treatment is exceedingly complete. The selection of the 'common' native species has been a matter of great difficulty, and in this the book will probably be found unsatisfactory. The more usual plants of the region north of Virginia and Tennessee are for the most part in-

cluded, but the Southern native flora is almost wholly omitted, so that in this respect the title is misleading. As a guide to the cultivated species it will find its greatest value. It is our opinion, however, that if the scope of the work had been restricted to the domesticated flora, and the descriptions of these plants been more fully drawn out, it would have been more generally serviceable than by treating them with the native species.

The necessity which has been felt of making the book a companion to the 'Manual' has kept up the old and unfortunate arrangement of groups which we find in that work, although we are pleased to find that the Gymnosperms have been brought into their logical position.

N. L. B.

*Description des ravageurs de la vigne. Insects et champignons parasites.* HENRI JOLICOEUR. 4°. Reims et Paris. 1894. Pp. viii., 236, pl. 20.

This sumptuous volume with large pages and wide margins is one of the latest contributions to the rapidly increasing literature of disease of plants. The French have always taken the greatest interest in diseases of the vine, and quite naturally, because of the extent of the industry in their country. The author of the present volume is the general secretary of the Society of Viticulture and Horticulture of Reims, and while he brings to the subject a knowledge of what various French authors have to say upon the subjects discussed, from its pages there never could be gleaned the fact that the English speaking races had ever done any work upon the various diseases. This is, perhaps, a general fault of the French, since they are so imbued with admiration for their own country that other countries hold a very subordinate place.

The work under notice is divided into two parts, one treating of parasitic ani-