line from a heterogeneous mixture of small types differing gametically among themselves. Here we have a real explanation compatible with the belief that to be inherited variations must have affected the germ cell structurally -a view to which the author apparently adheres.

Mendel's original investigations are briefly discussed by the author, but all of the numerous, recent contributions along this line are left untouched. Of course the immense amount of labor necessary to compile a book of seven hundred pages in a new subject would necessitate the work being actually behind the date of the preface, but one would like to see more notice taken of the many valuable investigations of contemporary biologists. A more extended consideration of late cytological and Mendelian research would have changed materially the author's treatment of atavism, prepotency and the determination of sex.

The work as a whole, however, brings together an enormous number of facts along diverse lines, and, though largely zoological, will undoubtedly prove of great value as a reference basis for a course of lectures on the subject, even if the new facts, which are continually being contributed in such profusion, make it of less value as an ironclad text-book. Edward M. East
The Connecticut Agricultural.
Experiment Station
Mushrooms, Edible and Otherwise. By M. E. Hard, M.A. Large octavo. Pp. xii +609 , with 504 half-tone figures from photographs, many of them full-page plates. Distributed by The Ohio Library Co., Columbus, Ohio. Under the above title Mr. Hard has given us an exceedingly interesting and valuable book upon a subject in which every one is interested, whether he is a botanist or not. The book is intended primarily for the beginner and a chapter including such subjects as, Why Study Mushrooms? Mushrooms and Toadstools, How to Preserve Mushrooms, etc., and An Analytical Key, is written in words so simple and yet so accurate that even the beginning student will gain a ready hold
upon the group and will not be encumbered with a load of useless and unscientific data. As the late Dr. Kellerman states in the introduction, "The author does not write for the specially educated few, but for the mass of intelligent people-those who read and study, but who observe more." Thus the work is intended to appeal more especially to the people at large, but there is also much good in it for the college student of mycology. The generic and specific descriptions, and the great range of forms depicted in word and picture, are so nicely worked out that the book is one of the very best of the American publications of its kind. Without doubt this is the finest and most carefully arranged set of half-tone figures of American Agarics to be found in a single book.

A little more than one half ( 349 pages) of the book is devoted to the Agarics, the remainder being divided between the Polyporaceæ, Hydnaceæ, Phelephoraceæ, Clavariaceæ, Tremellini, Gasteromycetes, Ascomycetes, and a chapter each on the Myxomycetes, Recipes for Cooking Mushrooms, and How to Grow Mushrooms. These chapters are characterized by the same interesting style and excellent illustrations.

The author is determined that every one shall come to know mushrooms, first from the practical side to be able to identify the ediole ones, and finally to know them from a more scientific standpoint, and then to be led to the broader study of mycology as a whole. The student of this book will unconsciously be led along this very path. As one turns the pages of the book he is delighted almost beyond expression, and he feels that Mr. Hard has rendered a great service to science in general and to mycology in particular in giving us this excellent work.

Raymond J. Pool
The University of Nerbasea

## SPECIAL ARTIOLES

notes on the first generation hybrid of gnothera lata $q \times 0$ g geas ot
During the summer of 1907 three offspring of Oenothera lata $\$ \times 0$. gigas on were reared to maturity in the garden at the Station for

