

system to the body as a whole. Herein, in the reviewer's opinion, lies the weakness of the method, since the elementary student has no standard or basis for comparison.

The book is well produced and contains some good photographs of stuffed and living animals from museums and zoos. The anatomical figures, however, are of variable quality, many being too small or too faintly drawn, or even so poor as to be misleading. The text, though on the whole well done, is at times inaccurate, perhaps as the result of pushing comparisons too far. A bibliography and glossary are appended.

N. B. EALES.

The Molluscs of South Australia

By Bernard C. Cotton and Frank K. Godfrey. Part 1: The Pelecypoda. (Handbooks of the Flora and Fauna of South Australia.) Pp. 314. (Adelaide: Government Printer, 1938.) 7s. 6d.

THIS book is the tenth in the series "Handbooks of the Flora and Fauna of South Australia". It is purely conchological and deals with the Pelecypoda. There is an introductory chapter on distribution and methods of collecting, and an account is given of the structure of a typical bivalve mollusc. Keys are used for tracing specimens to families, genera and species; but these are based on conchological characters only. The descriptive text is illustrated with good figures of the shells.

The object of this series is to provide Australian naturalists with inexpensive but accurate handbooks dealing with the indigenous flora and fauna. Many of the volumes are pioneer efforts, none more so than this one, for although great collectors like Angas, Tate and Verco have made lists or deposited specimens in the South Australian Museum, no comprehensive account of the bivalves has hitherto been published. The work of these two Adelaide city men deserves the highest praise from every naturalist, and we hope that it will inspire the production of a more scientific treatise on the group, for a bivalve without a body is a mere shell.

N. B. EALES.

Population: To-day's Question

By G. F. McCleary. Pp. 222. (London: George Allen and Unwin, Ltd., 1938.) 6s. net.

THE author, who as former principal medical officer of the National Health Insurance Commission and medical officer of health of two London boroughs had ample opportunities of studying the various problems of population, has given a lively and lucid exposition of this subject in this little work. The historical aspects are first set forth, special attention, of course, being given to the work of Malthus, followed by an account of the modern methods of measuring the growth of the population. The author then discusses the causes of the great increase in population which began in the eighteenth century and continued until about sixty years ago, when a marked decline in the birth-rate began. Finally, the important subject of birth control receives full consideration, including its social, economic and political results.

CHEMISTRY

The Chemical Formulary

A Collection of Valuable, Timely, Practical Commercial Formulæ and Recipes for making Thousands of Products in Many Fields of Industry. Vol. 4. Editor-in-Chief, H. Bennett. Pp. x+632. (London: Chapman and Hall, Ltd., 1939.) 25s. net.

TO the three volumes of the "Chemical Formulary" there has now been added a fourth, in which are to be found many formulæ and recipes gathered together during the past year by members of a large editorial board. This American assembly of useful compounding information, obtained variously from commercial practice and from patent and general literature, covers a very wide range of products ranging from lipstick to lubricants, from concrete to cold cream, from solutions that entice an oyster open to a method for preparing a sulphuric acid catalyst.

In view of the wide application and use of compounded materials of all kinds, the value of a register such as this needs no emphasis. Intelligently used, it conveys a great deal of interesting information, and while it may not in every conceivable case specify the best possible admixture of ingredients for a particular purpose, it will nevertheless save the experimenter much time by presenting him with a reasonable starting point for his trials. The amateur researcher, endowed with that degree of skill, curiosity, and courage requisite for the purpose, will find much to interest him in the sections devoted to cosmetics, to beverages, liquors and flavours, to photography, and to the farm and garden. Engineers and chemists will find particularly valuable such sections as those on materials of construction, paints, soaps, emulsions, adhesives, and inks. The layman who has no intention of putting any of the recipes to a practical test will discover that with the aid of this book he can spend a profitable hour learning something of the composition and application of materials in everyday use.

A. A. E.

Lehrbuch der chemischen Physik

Von Prof. Arnold Eucken. Zweite vollkommen neu bearbeitete Auflage. Band 1: Die korpuskularen Bausteine der Materie. Pp. xix+717. (Leipzig: Akademische Verlagsgesellschaft m.b.H., 1938.) 40 gold marks.

THE new edition of Eucken's "Lehrbuch der chemischen Physik" is to be in two parts, of which this is the first. It deals with corpuscles and radiation, and the treatment is on the whole theoretical and mathematical. Several specialists have co-operated in the preparation of sections, some of which are more detailed and difficult than others. The basis is quantum-mechanical. Since the treatment includes molecules, there is a long account of valency. There are also detailed accounts of various types of spectra. The range of subjects is very large, so that a detailed account of the contents can scarcely be given, but the main object is to provide an account