

**Lecture Experiments in Chemistry**

By G. Fowles. Pp. xvi+564. (London: G. Bell and Sons, Ltd., 1937.) 16s. net.

ONE of the difficulties facing the young teacher of chemistry is the devising and executing of experiments suitable for class and laboratory use. For some years before taking up the first post, the teacher will have been performing experiments in what are regarded as more advanced parts of the subject, and when the time comes to deal with the supposedly simple experiments involved in a course of School Certificate standard, trouble begins for those who are unaware of the great difficulty of many such experiments and have not the necessary skill and experience.

To such teachers the work of Mr. Fowles will be both welcome and beneficial. His book is confined mostly to School Certificate standard, and the material is arranged in lessons, which will also be useful until the teacher has enough confidence to evolve an independent scheme of teaching. Many alternative experiments are given, and the references to books will be useful to older teachers who wish to keep up to date. Several sections deal with subjects not adequately dealt with in the usual text-books, such as colloids, indicators, etc., although in some cases the treatment here seems rather too difficult for the standard at which Mr. Fowles aims.

There is some repetition in the book, as for example, when the preparation of a gas such as ammonia is described several times in different experiments, and the size of the book could have been materially reduced by more careful arrangement of material, cross references, etc. The appendixes on aims and methods of teaching chemistry will be read with interest by teachers. The range of the book is too restricted to make it of much use in more advanced courses, and the disconnected order is also a drawback to its use in courses in universities, for which it is obviously not intended.

**The Extra Pharmacopoeia**

By W. Martindale. Twenty-first edition. In 2 vols. Vol. I. Pp. xxxv+1182. (London: The Pharmaceutical Press, 1936.) 27s. 6d.

THE Pharmaceutical Press has now taken over the publication of this standard work from Messrs. H. K. Lewis and Co., Ltd. A new edition of the first volume has now appeared with an enlarged page and a blue cover. This volume is complete in itself and gives an account of the pharmaceutical and therapeutic properties of practically all the drugs prescribed by medical men. The revision must have involved a great deal of work, even when divided among seventeen pharmacists. Thousands of references to recent medical literature have been included, in the place of older and less important information.

The general arrangement has been to some extent rationalized, so that drugs with similar actions appear together, but the process has not been carried far enough. For example, the section on acidum aceticum in the twentieth edition included the acetates, acetylcholine, choline, glycine and betaine hydrochloride. The latter has been properly transferred

to the section on hydrochloric acid, but choline has been left where it was, with new company in the form of thallium acetate and cysteine. The extensive index largely compensates for defects of arrangement, but it would be difficult, for example, to find the substance commonly known as benzedrine under the alias of desoxynorephedrine.

The book contains an amazing quantity of information and is remarkably up to date. The inclusion of the names of manufacturers of proprietary remedies is a very welcome addition. The information about these substances will do much to encourage rational prescribing. Every medical man and every pharmacist should possess this book.

**A Monograph of the British Neuroptera**

By F. J. Killington. Vol. 1. (Ray Society Vol. 122 for the Year 1935.) Pp. xix+269+15 plates. (London: Bernard Quaritch, Ltd., 1936.) 25s.

IT is now nearly seventy years since the appearance of McLachlan's monograph on British Neuroptera. In the meantime, the most notable contributions to a knowledge of this subject have been the studies by the late C. L. Withycombe, which were mainly in the fields of morphology and biology. The book before us provides, as nearly as possible, a complete account of the British members of the Planipennia. Its author has also incorporated the results of his own observations, and has succeeded in producing a remarkably well-balanced treatise. It is gratifying to see morphology, biology and taxonomy all come in for adequate treatment.

The first 180 pages provide the reader with a general introduction to the order, including also some accounts of its fossil representatives and of the phylogeny. There follows a detailed treatment of the British species up to the beginning of the family Hemerobiidæ. The rest of this family, together with the whole of the Chrysopidæ, are to form the subject of a second volume which has yet to appear. The book is well arranged and excellently illustrated, the greater number of the figures being new. The author is to be congratulated on having produced a work of real merit and of a character which might well be emulated by monographers of other groups.

A. D. I.

**Aeroplane Structures**

By Dr. A. J. Sutton Pippard and Capt. J. Laurence Pritchard. Second edition. Pp. xvi+368+13 plates. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1935.) 21s. net.

THIS book forms an excellent introduction to the problems connected with the structural design of aircraft. The presentation starts from first principles, which are fully explained, and proceeds in easy steps to numerous practical applications, many of which are carried through to the numerical solution. A number of diagrams and tables should prove also of value for those engaged in actual design work. The authors, whose great practical and teaching experience makes itself felt throughout the book, have succeeded in bringing home the fundamentals, and the book can be unreservedly recommended. A. B.