

been given to the ammonium ion, which has been repeated later on (pp. 176-177) for the substituted ammonium salts.

The paraffins and their aliphatic derivatives, such as alcohols, ethers, aldehydes, ketones, fatty acids and amines, are described in the following chapters; a pleasing feature of which is the number of graphs that have been given to show the relation between the molecular weights of homologues and their melting and boiling points.

After a short description of the olefines and acetylenes and their derivatives, a fairly detailed account is given of the dibasic acids, together with derivatives such as urea, ureides and diureides. The amino-acids and proteins are discussed in the same chapter as the hydroxy and keto acids, which is not a very suitable arrangement. The ultracentrifuge method of measuring the molecular weights of proteins is described, and the theory of the method is given in an appendix at the end of the book. A detailed account of the structure of the chief carbohydrates and of the reactions of the cyanogen derivatives and organo-metallic compounds is given.

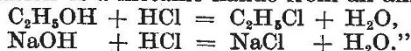
Benzene and its more important derivatives are described adequately on the whole, although the account of the resonance effect on substitution in the benzene ring is too brief to be clear.

The heterocyclic compounds are illustrated in the main by a discussion of furane, furfural, pyrrole, indole, pyridene and quinoine. The terpenes and alkaloids are described in the closing chapters of the book, which also contains logarithm tables and a good index, as well as a wide selection of questions at the end of each chapter.

One of the outstanding features of the book is the large number of structural formulæ which have been given; but it is very unfortunate that apart from a few obvious misprints, several of these formulæ are based on obsolete structures; for example, ethylene ozonide, the Grignard reagent, and penta-covalent nitrogen in alanine, glycine, betaine, sulphanilic acid, etc. In this connexion it is surprising to find that although the modern formula for the nitro-derivatives has been given, the nitro-compounds are represented for the most part by the classical penta-covalent nitrogen structure.

Another criticism is that too much space has been devoted to obsolete or semi-obsolete processes, and many reactions which are now of far-reaching importance are omitted or given scanty treatment. Thus, the manufacture of methyl alcohol from wood spirit is described prior to, and in more detail than, the carbon monoxide-hydrogen method; while it is implied that the only technical preparation of acetone is from pyroligneous acid. No mention is made of the chlorination of acetylene and the subsequent preparation of useful solvents; and the polymerization of the olefines, now of supreme industrial importance, is dismissed in three lines.

The statement (with the accompanying equations) that the formation of an alkyl halide from an alcohol and hydrogen hydracid "structurally resembles the formation of a metallic halide from an alkali:



will make the reader rub his eyes and wonder whether the theory of the complete ionization of strong acids and bases has been discarded.

On the whole, I do not consider that this book is suitable for use as a school text-book; but portions of it may be useful to university students, provided

that due regard is paid to the criticisms made above. The book is printed in clear type on paper of good quality, and the binding is excellent for a war-time publication.

A. C. CAVELL.

## PSYCHIATRY FOR EVERYMAN

### A Handbook of Psychiatry

By Dr. P. M. Lichtenstein and Dr. S. M. Small. Pp. 330. (London: Kegan Paul, Trench, Trubner and Co., Ltd., 1944.) 16s. net.

**D**URING the past three years, a number of books dealing with psychiatry have been published. They have all been condensed and mostly very well done. The present book by Lichtenstein and Small of New York presents the subject from a rather different aspect. It is described as "having been prepared not only for students of psychiatry, but for all those whose work brings them into contact with mentally disturbed persons". It is very well done, and will serve the purpose for which it was prepared extremely well. It will probably appeal most to the social worker and those whose work is almost entirely concerned with the mentally abnormal, but there are many relatives of those mentally disordered who might with great advantage read, mark and learn. Their attitude towards both patient, nurses and medical men might change greatly.

It is difficult to select any one chapter of the book as better done than any other. Naturally in a work so condensed and simplified it is difficult to deal adequately with subjects like psychotherapy and general principles of psychiatric therapy, but the reader will be able to realize how much progress has been made and is still being made in treatment in what is admittedly the most difficult branch of medicine.

It is a pity that in discussing the etiology of schizophrenia the authors do not mention the work of Hemphill and Reiss at Bristol on biopsy of the testicle. This work is confirming the general direction taken by the views of Mott put forward in 1922, which were afterwards rather discredited. The results of biopsy show very definite changes in the testicle. The modern view of paranoia does not accept the presence of hallucinations as part of the clinical entity. Both pellagra and beriberi are surely vitamin deficiency diseases and *not* infectious in origin.

We would like to see included under the senile disorders, Pick's disease. Alzheimer's disease is included as a pre-senile condition, and Pick's disease should be mentioned with it. It is a mistake to say that with electric shock treatment the patient has a complete amnesia after the experience. Some patients remember everything prior to the unconscious phase, and quite a few have a very decided objection to the treatment, often amounting to a definite fear.

Having regard to the amount of space devoted by the popular Press to the subject of psychosurgery, the section dealing with this most fascinating development in modern treatment might well have been considerably expanded. The mortality-rate in Great Britain is distinctly less than the 4-5 per cent quoted by these authors.

The book is well produced, very easy to read, and we recommend it heartily as an introduction to that most fascinating study—human abnormality.

G. W. T. H. FLEMING.