

Teddington directed by Prof. G. T. Morgan; there the author gained his experience and carried out pioneer work. A pleasing feature of the work at Teddington has been the facility afforded to members of industrial firms to gain experience in the design and construction of high-pressure plant. Their needs have given the author a clue as to those aspects of his subject in which information is of the greatest practical value.

The book is essentially a chemical engineering treatise, and is therefore fully illustrated with pictures of actual plant and diagrammatic and detailed drawings. The author has sought to collect together all the information pertinent to the subject. Thus he deals with gas compressors; with the preparation, purification and cost of the industrial gases; with the design of pressure vessels; with the measurement of pressure; with valves, fittings and pipes.

High pressures, together with high temperatures, have set a number of new problems for the metallurgist; the creep of steel, embrittlement and the penetration by hydrogen have been new factors for study, and many unexpected difficulties have developed in the manufacture of large pressure vessels for high-pressure service. Ammonia, methanol, the hydrogenation of fatty oils, of coal oils and of petroleum, are still the large-scale pressure processes. In addition, there is the high-pressure oil cracking industry. An ever increasing number of other products are being manufactured in high-pressure catalytic circulatory plants.

There is a definite need for this book, which will be found to contain a good deal of information now published for the first time.

*The Ideas of Physical Chemistry.* By H. McKay and H. A. C. McKay. Pp. x+301+8 plates. (London: William Heinemann, Ltd., 1934.) 7s. 6d. net.

THIS volume, published without preface, but dedicated to the authors' mother and grandmother, appears from the wrapper to have been written for the "layman" or "non-chemical specialist". It is there referred to as an introduction, in which the facts of physical chemistry are described in simple language which anyone can understand. A perusal of the text gives the impression that the authors have attended a recent course of up-to-date lectures on physical chemistry, in connexion with which some modern textbooks were recommended for supplementary reading, and that they have then written up their lecture notes in twenty-seven chapters, in the optimistic expectation that lay readers will possess the same grounding in chemistry and physics as the authors had when they began the course, and will therefore be able to follow their summaries of the subjects thus selected. The impression that the authors are relying on second-hand information, and have not gone back to original sources for the material used in constructing the book, is also suggested by the diagrams which illustrate the text, since these are almost all 'blackboard sketches'. On the other hand, seven plates, mainly of spectra, are admirably reproduced.

The subjects dealt with are not easy to expound or to understand, and it is doubtful whether the lay reader will be able to follow with advantage a narrative in which so much is taken for granted; on the other hand, the serious student ought at least to select for supplementary reading books which are based upon first-hand contact with original sources; but there is perhaps an intermediate grade of readers to whom the present compilation will be useful, and the publishers have done their share in making the book attractive to them.

*The Official Year-Book of the Scientific and Learned Societies of Great Britain and Ireland: with a Record of Publications issued during Session 1933-1934.* Compiled from Official Sources: Fifty-first Annual issue. Pp. vii+164. (London: Charles Griffin and Co., Ltd., 1934.) 10s. net.

THE fifty-first annual issue of this well-known Year-book is likely to be as invaluable as its predecessors. All the particulars are compiled from official sources, and therefore reliable. Government departments as well as learned societies are represented, and information is given concerning address, membership, meetings and publications. To facilitate reference, the societies are classified by subject into fourteen sections, and a good index is appended.

It is gratifying to note that this reference book is receiving increased support. The publishers deserve this encouragement, for the volume is well produced, and is full of useful information. It should be on the shelves of all libraries, institutions, laboratories, etc., which are interested in any branch of science.

*Popular Handbook of Indian Birds.* By Hugh Whistler. Second edition. Pp. xxviii+513+20 plates. (London and Edinburgh: Gurney and Jackson, 1935.) 15s. net.

A REVIEW of the first edition of this useful handbook to the birds of India was published in NATURE of October 6, 1928, p. 533. The book is very good value for its price, which perhaps explains why the first edition was so quickly exhausted. In that edition, 250 common Indian birds were described; in the second edition, 275 are described at length. A new feature is the brief mention with short descriptions of a further 230 species. The requisite number of extra illustrations have been added. The whole text has been revised and brought up to date.

*Facts and Theories of Psychoanalysis.* By Dr. Ives Hendrick. Pp. xi+308+xii. (London: Kegan Paul and Co., Ltd., 1934.) 10s. 6d. net.

DR. IVES HENDRICK gives here what is probably the best account of the present position of this art—psychoanalysis can scarcely be said to have reached the position of a science yet. The book is divided into four parts dealing with the facts, theories, therapy and present status of psychoanalysis. The author is largely a Freudian, and so does not approve of the theories of Adler, although to many in Great Britain the latter are more acceptable; but then the theories are not psychoanalysis as it ought to be understood as referring purely to Freudian theory.