Short Reviews of Scientific Books

Hydrostatics. (Ramsey. Cambridge University Press, London. 7/6.)

This book is intended as " a textbook for the use of first year students at the universities, and for the higher divisions in the schools ". Teachers should be acquainted with the textbooks on dynamics and statics by the same author (A. S. Ramsey, M.A., President of Magdalene College, Cambridge), and consequently will be interested in this new volume, though it is above the standard and scope of the subject as taught in our senior classes at schools. Students in first year at our universities will certainly find it a practical aid, even as an introduction to their later work on hydromechanics, which many of them study from that excellent " Treatise on Hydromechanics " published by this author (with the late Dr. Besant).

This book, of 169 pages, demy 8vo, is divided into nine chapters, including one on " Pressure of Gases. The Atmosphere ", one on " Hydrostatic Machines ", and one on " Capillarity ", as well as those dealing with matters which must be covered even in an elementary book. The method of calculus is employed, without requiring a greater knowledge than that of the beginner. The teacher of mathematics will find many completed problems which he can employ to give practice in the use of the calculus as such. It is a textbook of mathematics rather than of physics. The teacher of physics may well read it for the advantage of the formal treatment of those sections of the work which he includes in his own courses, and will find it a useful library reference book to which to direct enquirers.

The book is recommended as a valuable addition to the more general textbooks, most of which are compelled to treat elementary hydrostatics somewhat briefly.

(Our copy from the Cambridge University Press.) E.H.B.

James Watt. (Dickinson. Cambridge University Press, London. 4/6.)

This is published as one of the " Craftsmen " series, and is of some two hundred pages, crown 8vo, well prepared, and illustrated by a number of excellent plates, in addition to many page figures. The first chapter is devoted to a consideration of the social and industrial condition of England in the period prior to the arrival of Watt, which serves to place the inventor in the correct perspective plane.

There are other, possibly all more expensive, lives of James Watt available. Most scientists will be familiar with Smile's " Life of Boulton and Watt ", and with the Centenary Memorial volume by Dickinson, " James Watt and the Steam Engine ", but this new small book is of a different type, and might well be added to the school library. It is readable, is well balanced, and gives in a short space a knowledge of the man and his character, of the essentials of his life, work, and difficulties, and of his surroundings, personal and general.

(Our copy from the Cambridge University Press.) E.H.B.

Outlines of Organic Chemistry. (E. J. Holmyard. Edward Arnold & Co., London. 2nd Edition. 465 pp. 7/6.)

This is undoubtedly one of the best elementary textbooks of organic chemistry published in English. Among its many virtues is its very clear and concise presentation of the subject. Its interest is considerably enhanced by the inclusion of a certain amount of historical detail and information concerning the uses of organic chemicals. If the order of treatment recommended by the author is followed, the book should serve as an excellent introduction to the subject. Part I deals with history, methods of analysis and elementary theory. Then follows a most useful section devoted to more advanced theory : stereo-isomerism, tautomerism, valency in organic compounds (a simple outline of electronic theory), catalytic methods and reactions. The remainder of the book is devoted to the usually considered classes of organic compounds, all very admirably treated. The book can be confidently recommended to all taking up the subject of organic chemistry for the first time.

R.McL.

Science Progress. (Edward Arnold & Co., London.)

Two issues have been received since the last appearance of ENVIRONMENT, Vol. XXXI, No. 122 (October, 1936) and Vol. XXXI, No. 123 (January, 1937).

In the October issue appear several articles of particular interest to students and teachers, notably that by J. E. Sears, Jnr., on " Our Basic Standards of Measurement ". The author is the Superintendent of the Metrology Department of the N.P.L., so that one does not begin to read with the thought that perhaps one knows more than the writer. Confidence in the physician is in itself a valuable prescription. The journal is well worth acquiring to have available this article alone, the list of references appended to it, and the plates. The chemist is given a short (too short) article on " Compounds of the Inert Gases " (Bradley) ; Professor Tyndall contributes a valuable article on that controversial subject " The Mobility of Gaseous Ions ", which saddens us by the omission of any reference to Australian work on the subject ; and other articles are of the usual high interest and value.

The January issue has articles on " The Regulation of the Hæmoglobin in the Blood of Mammals " (Dr. Boycott), readable by other than biologists ; the descriptions of the results of experiments on the alterations of circulating hæmoglobin (rabbits) is certainly very interesting. An article on " Resinous Plant Products " (Hedley Barry) will appeal particularly to Australian botanists and chemists. The allied subjects treated in " Cohesive Force in Metals " (Mott) and " The Exchange of Energy Between a Gas and a Solid or Liquid Surface " (Altz) make more difficult reading except for those specially interested in physical chemistry. The same applies to the valuable, though condensed, article on " The Physical Properties of Disperse Systems " (Richardson).

In both numbers the articles on " Recent Advances in Science " provide a valuable summary of progress.

E.H.B.

Sydney University Extension Board

PUBLIC LECTURES

Your attention is drawn to the Courses of Lectures to be delivered at the University, so far arranged for 1937, and not yet commenced.

(Information regarding those now running may be obtained on application to the Extension Board, The University.)

(A). UNDERSTANDING THE AUSTRALIAN ABORIGINES. A course of ten lectures on Thursdays of Trinity Term, commencing at 5 p.m. on Thursday, 10th June, by Professor A. P. Elkin. (See separate notifications on pages vii.)

(B). BUSINESS AND LAW. A course of thirteen lectures on "The Law of Contracts", "The Sales of Land", "Landlord and Tenant", and "The Valuation of Real Estate", on Tuesdays, commencing on Tuesday, 20th April, at 7.45 p.m.

(C). PHARMACEUTICAL LECTURES. A course of six lectures primarily for members of the Pharmaceutical Society of New South Wales, on Mondays, commencing at 8.30 p.m. on Monday, 10th May.

(D). AMERICAN HISTORY SINCE 1870, WITH SPECIAL REGARD TO THE SOCIAL-ECONOMIC DEVELOPMENT OF THE UNITED STATES. A course of four lectures on this subject will be delivered by Mr. Hartley Grattan, a visiting lecturer, on Thursdays, commencing 22nd July, 1937, at 8 p.m.

(E). THE SCIENCE OF PHOTOGRAPHY. A course of five lectures will be given by Dr. N. B. Lewis at the University on this subject on Mondays and Thursdays, commencing 19th July, at 8 p.m.

(F). THE HISTORICAL DEVELOPMENT OF SCIENCE. A course of twelve lectures, on Mondays, Wednesdays, and Fridays, at 5 p.m., is being arranged under this general title. It will cover the development of physical, chemical, and biological sciences; the first lecture will be delivered on Monday, 14th June.

(G). TOWN PLANNING. The Vernon Memorial Lectures on Town Planning will be given again this year, probably on Wednesday nights at 7.45 o'clock, commencing on a date in June yet to be fixed.

(H). GAS HAZARDS IN PEACE AND WAR. At the present time considerable interest is being taken in this subject, and arrangements have been made for a course of four public lectures by the Professor of Physiology, (H. Whitridge Davies, M.B., B.S.). These will be delivered at 5 o'clock on Thursday afternoons, commencing at the University on Thursday, 17th June.

(I). SOCIAL STATISTICS IN RELATION TO SOCIAL SCIENCE. Provided that there be sufficient response, a course of fifteen lectures on this subject will be delivered by Professor Harvey Sutton. These would commence in Trinity Term, probably being given on Tuesday afternoons at 5 o'clock.

(J). ELEMENTS OF SOCIAL SCIENCE. Provided that there be sufficient response, a course of fifteen lectures on this subject will be delivered by Dr. Duncan. These would commence in Trinity Term, and would probably be given on Friday afternoons at 5 o'clock.

(K). MODERN EUROPEAN HISTORY. A course of three public lectures will be delivered by Professor S. H. Roberts (recently returned from Europe) on Thursdays, 8th, 15th and 22nd July, at 8 p.m.

(L). ELEMENTARY CHEMISTRY: With Particular Reference to Chemistry in the Home. A course of ten lecture-demonstrations, which may be attended on Tuesdays OR Wednesdays at 5 p.m.; commencing Tuesday, 8th June, OR Wednesday, 9th June (two different classes), at 5 p.m. By D. P. Mellor, M.Sc.

Some of these courses will be of interest to you. Will you please write to the Secretary, The Extension Board, The University, giving your name and address so that fuller information may be sent to you? It would also be of assistance if you made this information available to others.