

Short Reviews.

Textbook of Quantitative Analysis. By Prof. William Thomas Hall. Pp. vii + 279. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1930.) 12s. 6d. net.

THIS book sets out in detail a course in analytical chemistry for the more advanced grades of intermediate students, who are likely to proceed to a final course in some branch of chemistry. It is based largely on Treadwell and Hall's well-known work, and is complete for the purpose in view so far as inorganic analysis is desired. An introductory course of organic analysis might, we think, have been included with advantage, even at a sacrifice of some of the more specialised portions such as the chapter on steel analysis and tungsten and titanium in ores. Prof. Hall takes the line that it is more advantageous for the student to begin analytical chemistry with volumetric analysis, on the ground that the student is likely to obtain a better view of the subject. This may well be the result in practice, for a volumetric process may be a far more searching test than a gravimetric. A feature of this work is the attention devoted to potentiometric methods. The chapter assigned to this is necessarily a short one in the circumstances, but is nevertheless a desirable addition to a book of more or less elementary character. The volume is free from printing errors, is well got up, and may be commended for its general utility as an intermediate textbook of analytical chemistry.

J. J. F.

La mesure des rayons de courbure des surfaces sphériques employées en optique. Par Albert Arnulf. Pp. 179. (Paris: Éditions de la Revue d'Optique théorique et instrumentale, 1930.)

THIS monograph by the director of practical work in the Institute of Optics at Paris gives an excellent account of the theory and practice of the measurement of the radii of spherical surfaces used in optics. The first part deals briefly with the ordinary and dihedral spherometers, their use and errors. The second part, about two-thirds of the book, gives a full account of the method of the dihedron of G. Burch as developed by Fabry, both for workshop and laboratory use, of the method of tangent spheres invented by Fabry, and of interference methods as practised in the laboratory of the Institute of Optics. The remainder of the book deals fully with the autocollimation methods, due originally to Guild, improved by Prytz, and perfected in the Institute, and also gives an account of the various pieces of apparatus built for carrying out these methods.

The book is well illustrated by diagrams and drawings of the apparatus described, and freely supplied with tables giving the results of laboratory experiments and the errors incurred in the various methods. It is extraordinarily complete for its size, and will no doubt prove of the greatest use to those engaged in the measurements indicated and in the construction of the optical apparatus needed.

Faraday. By E. W. Ashcroft. Pp. 134. (London: The British Electrical and Allied Manufacturers Association, 1931.) 7s. 6d. net.

WITH the forthcoming celebrations of the centenary of the discovery, on Aug. 29, 1831, by Michael Faraday of electromagnetic induction, the interest of scientific workers and of the general public will turn towards the life-story of this remarkable man. His friend and contemporary, Dr. Bence Jones, published a biography, but the time has now come when we can appreciate better the permanent value of Faraday's life and work. Early this year, Mr. Rollo Appleyard issued a brief 'life', and Mr. E. W. Ashcroft has now produced an equally brief survey but of a different type; whereas Mr. Appleyard gave us an intimate view of Faraday, Mr. Ashcroft deals rather with broad aspects of his work and philosophy. He takes successive periods in Faraday's career and endeavours to trace from his writings and from those of his contemporaries, both British and foreign, the growth of his character and work.

As a book, we may criticise the lack of headings to the twenty short chapters and the absence of an index, but we prefer to regard it as an inspiring little souvenir of a great but very human man, whose work marks the inception of an important stage in the progress of civilisation.

Epidemiological Essays. By Dr. F. G. Crookshank. Pp. ix + 136. (London: Kegan Paul and Co., Ltd., 1930.) 7s. 6d. net.

THIS little book, by a well-known consultant physician interested in epidemiology, consists of ten papers which, with the exception of the essay entitled "Why Times Flies", contributed to *Psyche*, have all been previously published in various medical journals. It may be doubted if some of the papers included were worth saving from the well-merited oblivion which enshrouds most contributions to the medical press; but those interested in the history of medicine and epidemiology are advised to read the essay on the "Trousse-Galants" of 1528-29 and 1545-46, a mysterious disease which seems to have been a severe form of influenza, and that entitled "Some Problems of Influenza", in which the author discusses the periodicity of the disease and the correlation between influenzal prevalences and cosmic and telluric influences.

Introduction to Human Parasitology. By Prof. Asa C. Chandler. Fourth edition, rewritten and enlarged, superseding "Animal Parasites and Human Diseases". Pp. xiv + 655. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1930.) 25s. net.

THIS volume is an extended form of an earlier book which was intended for students and the lay public. This larger edition should be more useful to students of biological and medical sciences where an intensive study is not indicated. Its presentation is clear and readable. A short, incomplete account of filterable viruses is included with protozoa, helminths, and arthropods. Only animal parasites are dealt with.