BOOK REVIEW

THE ANALYSIS OF DRUGS AND CHEMICALS, by Norman Evers and Wilfred Smith. Pp. xii + 546 (including Index). Charles Griffin & Co. Ltd., London, 1955. 60s.

The Analysis of Drugs and Chemicals retains the general form of its predecessor published in 1929 but galenicals, occupying a large section of the earlier work, are included in a relatively small section of the present volume in which organic chemicals, both natural and synthetic, claim the major space. The death of Mr. Elsdon robbed Dr. Evers of his co-author but he has been fortunate in securing the assistance of Mr. Smith who, as a result of many years experience in drug analysis, is well known in the pharmaceutical field.

The first portion of the book is devoted to general methods of analysis to which, as far as possible, the assays of individual substances are referred. These early chapters will prove most helpful to young workers who sometimes find difficulty in using the B.P. and B.P.C. in which much information is included in the appendices. After an introduction dealing with the care of the balance and calibration of apparatus, there follow chapters on physical methods and volumetric analysis. A chapter on general methods for determination of specific constituents such as moisture, ash, ammonia, arsenic etc. contains much useful information.

The main part of the book consists of chapters dealing with inorganic and organic chemicals, natural compounds and their derivatives, fixed oils, fats, waxes and soaps, volatile oils, crude drugs, galenicals and other pharmaceutical preparations. A final chapter on the use of statistics gives an introduction to this increasingly important facet of analytical chemistry. Fourteen appendices give tables summarising much valuable analytical data. A paragraph is devoted to each substance and includes a summary of essential facts together with any relevant reference to the literature. Products have been arranged alphabetically and a good general index is included.

It is claimed that the volume has been compiled with close reference to the current editions of the B.P. and B.P.C. but all the information, however, has not been brought up to date. The use of chloroform in the determination of cephæline in emetine is described when, in fact, this solvent vitiates the result as it extracts cephæline from its solution in sodium hydroxide; the B.P. uses ether as solvent. The melting point of methadone picrolonate is given as 160° C. and the other form of the salt melting at 180° is not mentioned; the B.P. gives both melting points. The colorimetric assay of digoxin has been taken from the B.P. 1948; the B.P. 1953 describes a much more satisfactory method.

The authors intend that their book should supplement and not replace the B.P. and B.P.C. and it is important that this should be appreciated by students who may be misled by the brevity of some of the information. For example, the assay of solapsone is referred to the assay of sulpha-drugs without making it clear that the product must be hydrolysed before the sodium nitrite titration can be carried out. The isolation of stilbœstrol from stilbœstrol dipropionate is also described inadequately.

The reviewer would not wish these minor criticisms to detract from the enormous effort which the authors have made in compiling this work, which is well produced on good paper and is remarkably free from typographical errors. There is no doubt that this volume will be found on the shelves of many busy analysts and that students will be grateful to the authors for providing them with such a comprehensive summary of modern methods of pharmaceutical analysis.

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