

Book Reviews

Chemistry in the Service of Medicine, edited by DR. F. N. L. POYNTER, London, Pitman Medical Publishing Co. Ltd., 1963, pp. 207, 25s.

This volume contains the papers presented at the Second Congress of the History of Medicine and Pharmacy, organized by the Faculty of the History of Medicine and Pharmacy of the Worshipful Society of Apothecaries, and it maintains the high standard set by the first volume.

In the introduction Sir Alexander Todd points out the long-standing relationship between chemistry and medicine, dating from at least the time of the alchemists' searches for the elixir of life. He believes that the search for medicines provided as much a stimulus to chemistry as did metallurgy, pottery and other crafts and emphasized that medicine could make little progress until the basic sciences, especially chemistry, had advanced sufficiently to provide an adequate basis for experimental medicine.

Although Paracelsus was by no means the first person to use chemicals as remedies, it is appropriate that the first paper should be 'Paracelsian Doctrine in English Medicine', for it was this controversial figure who popularized chemical therapy. In this paper Dr. A. G. Debus, of Harvard, discusses the introduction of chemically prepared remedies, mentioning the works of the principal advocates of the doctrine. He refers to several pharmacists specializing in chemical remedies as early as 1576 and, after outlining the development of analytical methods, he discusses Paracelsian mysticism and concludes that, despite their empiricism and superstition, Paracelsus and his followers played an important if paradoxical part in the Scientific Revolution.

Dr. F. W. Gibbs reviews the contributions of the great Dutch physician-chemist, Boerhaave, and shows how his influence extended to Britain, especially to Scotland.

The President of the Congress, Prof. Douglas McKie, gives a masterly survey of chemistry in the service of medicine from 1660 to 1800, showing how apothecaries, chemists and physicians all contributed to the growth of knowledge during this period.

The next paper forms a natural sequence, being the 'Rise of Biochemistry between 1800 and 1900', by Prof. F. G. Young. In it he shows how the advances in organic chemistry made possible research into biochemical processes and outlines the part played by British chemists in these developments.

Prof. W. D. M. Paton gives a most interesting account of the early days of pharmacology with especial reference to the nineteenth century. He illustrates the changing materia medica by graphs showing the rise and fall of the numbers of tinctures and extracts in the pharmacopoeias, beginning with the first *London Pharmacopoeia*, and the tremendous increase in the numbers of tablets and injections after about 1948. Other diagrams show the increasing rate of introduction of 'unnatural' chemical structures and the increased rate of revision of the *Pharmacopoeia*. The growth of the subject is illustrated by a cumulative chart of chairs of pharmacology from none in 1900 to about twenty in 1961.

Dr. W. D. Foster shows the rise of chemical pathology from the empirical tests of Paracelsian days to its establishment as an essential part of modern medicine in about 1925. He shows that, as with biochemistry, development of this subject had to follow advances in organic chemistry.

Of much more recent history is the paper 'Chemistry and Endocrinology' by Sir Charles Dodds. As might be expected from one who had contributed much to this

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field, Sir Charles gives a lucid and concise survey of a complicated subject. He shows that, although medicine owes a debt to chemistry, the reverse is also true for the stimulus provided by medical research has led chemists to discover chemical structures so complicated that no chemist could have developed them *ab initio*.

Prof. A. Haddow's paper on the contribution of chemistry to cancer research and Prof. Catcheside's on chemistry and genetics belong to the realms of 'unfinished business', for these subjects are still in early stages of development. Their inclusion shows that the organizers of the Congress are aware that history is a continuing process. Both papers give fascinating accounts of these two important and involved subjects.

Dr. T. F. Macrae in 'Chemistry and Nutrition' shows how research into food constituents, especially vitamins, has enabled several previously widespread and fatal diseases, such as scurvy, to be conquered, at least in those countries where the results of this research have been applied.

Dr. W. A. R. Thompson, in a paper entitled 'From Antisepsis to Antibiosis', as well as tracing the development of the control of sepsis from Lister's work to the discovery of the antibiotics by Fleming, gives a few interesting glimpses of the pre-history of the subject.

The final paper, by Dr. F. L. Rose, 'Origin and Rise of Synthetic Drugs', gives an appropriate ending to the Proceedings for it is the systematic examination of many series of compounds, started by Ehrlich, that has led to the development of many important drugs and gives promise of future conquests of disease.

Dr. Rose illustrates his paper with examples from Ehrlich's work up to the development of modern drugs such as antimalarials and diuretics.

The volume will take its place with its predecessor in what promises to be a most important and interesting series of contributions to the history of medicine and pharmacy.

J. D. WHITTET

Three Hundred Years of Psychiatry. 1535-1860. A history presented in selected English texts, by RICHARD HUNTER and IDA MACALPINE, London, Oxford University Press, 1963, pp. xxvi, 1107, 84s.

From time to time the mountain of psychiatric literature tires of giving birth to mice and produces something which is lasting and not ephemeral. When such a product is at the same time an important treatise in the history of medicine, the result is likely to be exceptional indeed. Such is the case with the masterly study by Drs. Hunter and Macalpine of the development of psychiatry from the Middle Ages up to 1860. The authors have attacked their subject from two different directions, each contribution being not only informative but also interesting, even fascinating. In the first place the reader is given an excerpt from the works of many scores of writers who from 1535 onwards have added to the knowledge of the insanities, their causes, nature and treatment. This aspect of the book is intriguing and is easy reading indeed, for with both profit and delight one can open anywhere and dip. In addition each literary selection has been prefaced by a critical account of the writer himself, and short biographical details are afforded us, coupled with a reasoned statement as to his achievement and importance. Nor is that all. Drs. Hunter and Macalpine have written an elegant and critical essay upon the present status of psychiatry in the light of the past, which is a classic *in petto*. According to his private prejudices the reader will peruse these pages with a cynical nod, a chuckle, or a scowl.

Plus ça change is the background theme and one can but wryly concur with the