

Book Reviews

Drug Adulteration, Detection and Control in Nineteenth-Century Britain, by E. W. STIEB, Madison, Milwaukee, and London, University of Wisconsin Press, 1966, pp. xi, 335, illus., 56s.

Drug adulteration is equally important for the history of medicine, pharmacy, the pure sciences such as chemistry and physics, and social history. This is fully appreciated by Stieb whose book, in some measure, forms a companion volume to F. A. Filby's *A History of Food Adulteration and Analysis*, London, 1934. After a general introduction leading to the year 1820 (Accum's *Treatise on Adulterations*) Stieb devotes himself to the next eighty-six years, to 1906 (first United States pure food and drug legislation). Two main themes are developed separately: the rise of analytical methods (e.g. sensory tests and the application of physics, chemistry and microscopy), and the evolution of social controls. Each section on an analytical method is not, naturally enough, entirely concerned with British contributions alone though these are given adequate emphasis. The second theme—dealing entirely with Britain—covers such topics as the extent of adulteration practices (a horrifying picture), the attitudes of the medical and the pharmaceutical professions to the problem, the roles of the individual and of the government in reform, and the emergence of special societies and publications.

The arrangement of the material has advantages in allowing an extended discussion of each topic and the inclusion of a considerable amount of information. Much of the value of the book lies in the fact that these full discussions on specific subjects will interest a wide variety of historians of the nineteenth century. Yet the author's breakdown of the material has allowed certain themes significant to the whole story—both the scientific and the social aspects—to become fragmented or even lost. It will not be irrelevant to indicate some topics which, in the reviewer's opinion, could have helped to link together the features of the story related by Stieb.

A clear indication of developments in medical, chemical and pharmaceutical education, and, in particular, of the growth of the one discipline intimately connected with adulteration—pharmacognosy—would have brought many threads together. When the story of British pharmacognosy is fully told it will throw much light on the evolution of medical and pharmaceutical sciences. Through the efforts of A. T. Thomson, Jonathan Pereira and Robert Bentley—all teachers at the Pharmaceutical Society's school from 1842–1887—as well as many personalities outside the academic world, pharmacognosy became an independent subject distinct from the existing wide-ranging *materia medica* courses which included therapeutics. These forty-five years saw the steady development of pharmacognosy as a research-orientated subject with much emphasis on discovering the sources of crude drugs. From 1887 till the end of the century the subject developed even more rapidly, partly through syllabus changes at the Pharmaceutical Society's school which increased emphasis on practical work and plant chemistry. This was largely due to the stimulus of H. G. Greenish, who was professor of *materia medica* (pharmacognosy), secretary to the Pharmaceutical Society's 1898 *British Pharmacopoeia* committee, and editor of the 1914 *British Pharmacopoeia*.

Research and teaching progressed equally as is reflected in a succession of articles and papers in the pharmaceutical press of the 1890s. Developments can also be

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measured by improvements of drug standards in the 1898 *British Pharmacopoeia* (e.g. increasing recognition of the value of the microscope). However, these advances only really bore fruit in the 1914 *British Pharmacopoeia* where, for instance, ash values and the histology of powders were conspicuous for the first time. (That interest in powder histology developed so late despite the early recognition of nefarious practices by the drug grinders is a subject deserving full study.) The 1914 *British Pharmacopoeia*, it should be added, was so markedly superior to its predecessors that it is perhaps unfortunate that the author has not taken this as a terminal date for his study.

It must be remembered that developments in the science of pharmacognosy, as part of the Pharmaceutical Society's enterprises in education, did not affect the average practising pharmacist—or at least most of those who did not attend the Society's school. Nevertheless it is a pity that the role of the average practitioner—medical as well as pharmaceutical—could not have been given more space by Stieb. It would have helped in discussing the extent of adulteration and, in particular, the role of individuals (where only Accum, Hassall, Postgate and Wakley are considered).

There was probably much truth in the 1856 statement of the Directors of The General Apothecaries' Company (formed soon after the 1855 Select Committee Report on food and drug adulteration) that 'many pharmaceutical Chemists are better instructed now than formerly, and doubtless a large proportion of them conscientiously endeavour to avoid the sale of spurious and adulterated drugs'. Certainly it seems significant that when chemists and druggists were endeavouring to create an organized profession many were advertising the purity of their drugs. The General Apothecaries' Company, like the older Liverpool Apothecaries' Company (the provinces must not be forgotten), was founded 'for the purpose of securing to the profession and the public a supply of unadulterated drugs and chemicals'. It is interesting that both companies appointed a 'scientific chemist' whose duties included analysis. However, just how successful these enterprises were in terms of the provision of good quality drugs has not been ascertained. Nor has there been an assessment of the role of the pharmaceutical industry in general; there is good reason to believe that some companies at least supplied good quality drugs and chemicals for there were a number of quaker businesses with men of the calibre of the celebrated William Allen.

The above comments are not offered as criticism of omissions in the book under review, but as a reminder that some of the threads of an extremely complex story are not apparent in the author's particular approach to the subject. Yet as it stands the book—a pioneering achievement—is of inestimable value, a value which is enhanced with a particularly comprehensive bibliography (included in the 102 pages of notes) which, like the text, can only occasionally be faulted or, in questions of interpretation, queried.

The book is based on a Ph.D. thesis by Stieb and provides another monument to the scholarship of the history of pharmacy which has issued from the University of Wisconsin in the last few decades.

J. K. CRELLIN.

The Story of William Hunter, by CHARLES ILLINGWORTH, Edinburgh and London, E. & S. Livingstone, 1967, pp. viii, 134, illus., 35s.