

Book Reviews

on Starling's influence on contemporary cardio-vascular physiology. The authors, Dr. Carleton B. Chapman and Dr. Jere H. Mitchell of the University of Texas, have rendered a fine service in presenting us with such a carefully prepared résumé of Starling's work and their devoted work will receive wide acclamation. The reviewer's only criticism is the lack of more biographical information on the main characters in this drama of experimental investigation. Sidney Patterson for example was working as a general practitioner in a small wheat town in Australia when his former Professor of Physiology at Melbourne, Sir Charles Martin, persuaded him to take a Beit Fellowship and work at University College with Starling. He became a most important member of the team and after the war, having married Starling's eldest daughter, returned to Australia as Director of the Walter and Eliza Hall Institute.

It is nice to be able to record that Starling's work has recently been confirmed in the intact human subject by Dr. Eugene Braunwald of Bethesda. ('The Control of Ventricular Function in Man', *Brit. Heart J.*, 1965, 27, 1).

ARTHUR HOLLMAN

Foundations of Anesthesiology, by A. FAULCONER and T. E. KEYS, Springfield, Illinois, C. C. Thomas, 1965, 2 vols, pp. 715 and 1,337.

In surveying any particular branch of medicine, the historian is obliged to go back to original papers and publications. In many cases there will already have been pondered over by his predecessors and some may have assumed their rightful place in the perspective of the history of the subject. But from the point of view of the practitioner within such a discipline, a look back at the work of the pioneers will, more often than not, widen his view of his work, enable him to grasp present concepts more surely, and may sometimes give him clues to further work which he may follow. So often, too, does the modern student become bogged down in a morass of technicalities, that a glance at the older simpler work may help to clear the way for him.

Such a book as the present gives him the opportunity so to look back, while it will also provide the historian of anaesthesia an access to works not otherwise readily available.

The authors of these interesting volumes are respectively Head of the Section of Anaesthesiology, and Librarian, at the Mayo Clinic, and the latter is already well known for his writings upon the history of anaesthesia. These qualifications give them authority to compile a notable anthology of one hundred and fifty papers on anaesthesia and related topics. They divide these into eight sections, the first of which, on *Respiratory Physiology*, ranges from Vesalius on *Artificial Respiration in a Sow* (1543), through Paul Bert's famous paper *Gases Contained in the Blood at Different Barometric Pressures* (1878) to Yandell Henderson's *Lecture on Respiration in Anaesthesia* (1925). The latter is an interesting paper in which much of modern theory is envisaged, though as the authors of the present volume point out, the views expressed on the use of carbon dioxide would shock the modern student. In this connection, it is important to realize that Waters' paper on carbon dioxide absorption had appeared two years earlier and this also is reproduced in the appropriate section. Even more fundamentally important are the papers by Barcroft on *Anoxaemia* (1920) and those of Paul Bert (1878) and Haldane and Smith (1893). These titles

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indicate the range covered in this section, a pattern copied throughout the book.

Each section is prefaced by a short introduction, and each author is given a brief, but useful, biographical note.

There are many translations from the German and French, all of which will provide the English reader with a most useful source for some of these valuable, and otherwise inaccessible, papers.

Omissions there must be in such a work, as the compilers recognize in their preface, and it is perhaps quibbling to suggest that the curare experiments of Benjamin Brodie (1811) might have included those in which tracheostomy was combined with artificial respiration: and that Crile's classic paper on 'anoci-association' might have been reproduced, though there is compensation for this in Cushing's *Avoidance of Shock in Major Amputations by Cocainisation* (1902), in which Crile's work is mentioned, as are the famous 'ether charts' developed by Cushing and his student colleague E. H. Codman.

Anaesthetic apparatus does not unfortunately receive a separate section. This is an important omission, though many interesting plates of apparatus are reproduced, notably those of Paul Bert, of Priestley, and of Cotton and Boothby, whose nitrous oxide/oxygen/ether apparatus of 1912 heralded the change from the older rough and ready methods to some degree of accuracy in administration of gases. The carbon dioxide absorption apparatus of Jackson (1915) deserves mention, but the work on this subject of Snow (1850) and Alfred Coleman (1862), both of whom developed apparatus, is not mentioned, and was evidently not known even to Waters.

These are minor omissions which in no way detract from the value of these volumes, from which every anaesthetist could extract valuable information, and to which the historian will inevitably turn in any future study of the history of anaesthesia. And what an excellent thing it is to find complete indices in each volume.

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