

This book is valuable for all physicians, and has special usefulness for anesthesiologists. For those who wish to engage in research work in this area, it is essential.

JAY J. JACOBY, M.D.

Physiology of Cardiac Surgery. Hypothermia, Extracorporeal Circulation and Extracorporeal Cooling. By FRANK GOLLAN, M.D., Assistant Director of Professional Services for Research, Veterans Administration Hospital, Nashville, Tennessee. Cloth. \$4.50 Pp. 96, with 18 illustrations. Charles C. Thomas, Publisher, Springfield, Illinois; Blackwell Scientific Publications, Ltd., Oxford, England, and Ryerson Press, Toronto, Canada, 1959.

An essay or an oration may be informative, thought provoking, stimulating or merely entertaining. This essay, The Beaumont Lecture of the Wayne County Medical Society, is all four. Dr. Gollan discusses three of the most controversial physiologic problems of cardiac surgery, namely, hypothermia, extracorporeal circulation and extracorporeal cooling. His discussion is not a review of the published material on these subjects, although he builds his discussion on the observations of more than 160 articles, dating back to the early 19th Century. He does not attempt to evaluate or suggest applications of presently available equipment for medical or surgical purposes, but does place present applications in their historical perspectives and presents an interpretation of current controversies. This leads the author to suggest many areas that are fertile fields for investigation.

The author's apparent familiarity with the subject matter and his skillful use of the English language combine to make this treatise both delightful and entertaining, as well as informative. The thoughtful clinician cannot help but profit from a perusal of this beautifully organized essay.

WILLIAM O. McQUISTON, M.D.

A Manual of Reflection Oximetry: and Some Other Applications of Reflection Photometry. By W. G. ZIJLSTRA, M.D., Department of Physiology, University of Groningen. First Edition. Paper. \$4.75. Pp. 125

with 86 figures and 11 tables. Publisher: Koninklijke Van Gorcum & Comp. N.V., Assen, Netherlands, 1958.

Anesthesiology has entered upon a phase in which monitoring of vital signs and data is becoming of increasing importance. Whether this surge of interest will improve the welfare of the patient in the operating room is a moot point. There are those who say that the diversion of attention away from the patient and toward mechanical and electronic gadgets is a retrograde step, while others indicate that progress such as this is inevitable and we should improve our knowledge and position in the medical world by absorbing all we can about monitoring aids.

The latter group will enjoy and appreciate this concise review and description of photoelectric methods whereby it is possible to observe from moment to moment the arterial oxygen saturation of patients under different circumstances, including the state of anesthesia. To this reviewer, most of the book was understandable, although the mathematical formulas and equations in one or two sections were beyond his ken.

It has always been my impression, corroborated by a little experience several years ago, that oximetry essentially is a research tool: that the sensitivity of the apparatus, the rather prolonged standardization required, and the number of variables within the patient that had to be taken into consideration prevented this technique from assuming clinical usefulness in the operating room, as one achieves, for example, with an electrocardiographic apparatus.

However, after perusing this manual, it may be that this impression is no longer correct. In the final chapter, which is concerned with applications of the method, there are some excellent illustrations showing the direct, clinical application of oximetry. For those who wish to delve into this relatively new, but obviously developing, method of monitoring, this little volume will make interesting reading.

C. R. STEPHEN, M.D.

Handbook of Circulation. Analysis and Compilation. By PHILIP L. ALTMAN. Edited by DOROTHY S. DITTMER and RU-