

**A Primer of Electrocardiography.** FOURTH EDITION. REVISED. BY GEORGE E. BURCH, M.D., F.A.C.P. Henderson Professor of Medicine, Tulane University School of Medicine; Physician-in-Chief, Tulane Unit, Charity Hospital, AND TRAVIS WINSOR, M.D., F.A.C.P., Assistant Clinical Professor of Medicine, University of Southern California Medical School; Director, Heart Research Foundation, Los Angeles. Cloth. \$5.00. Pp. 293, with 286 illustrations. Lea & Febiger, Philadelphia, 1960.

This represents the fourth edition of a book which has enjoyed a great demand by beginning students of electrocardiography. A measure of its popularity may be taken from the fact that this represents the twentieth printing of this book since appearance of the first edition in 1945, not counting translations into four foreign languages.

The text consists of five chapters and an appendix. The first chapter, "Principles of Electrocardiography" presents the physical and theoretical basis of electrocardiography and the electrocardiogram. Without becoming involved with the finer details of electrical circuits or the physiology of excitation, the essential facts are presented and adhered to consistently, not, as in so many primers of electrocardiography, explained in a cursory manner and then abandoned for a simpler presentation by means of incomplete electrical circuits diagrams. The relationship of the signals obtained with the standard limb leads to the patterns of depolarization and repolarization of a hypothetical cell are explained in this chapter, and the concept of the mean electrical axis is introduced. Chapter 2, "An Analysis of Various Components of the Electrocardiogram and Their Clinical Significance," extends these considerations to the normal heart, and the heart altered by disease, and digitalis and quinidine. Conduction defects are utilized artfully to emphasize the importance of temporal relationships of electrical events in various portions of the heart in determining the configuration of the electrocardiogram. Chapter 3, "Precordial Leads," introduces the concept of the unipolar lead, and defines the precordial leads, the unipolar limb leads and the esophageal leads. Their

uses for more discriminant diagnosis are illustrated through further discussion of bundle branch blocks, a rather thorough analysis of myocardial infarctions, and the alterations produced by ischemia, injury and death of heart tissue. Chapter 4, "Disorders of the Heart Beat," deals with the arrhythmias. Chapter 5, "Clinical Applications of the Electrocardiogram," presents a useful protocol for reading the electrocardiogram, and cautiously relates various electrocardiographic diagnoses to specific disease states. Spatial vectorcardiography is introduced together with a delightful set of stereoscopic tracings. The ventricular gradient is explained and its significance emphasized. The appendix includes charts for finding electrical axes, tables of normal intervals and amplitudes, and lists of criteria for diagnosis of myocardial disease. There is a subject index, but no bibliography. Although no actual electrocardiograms are used, the text is amply illustrated with diagrams and hypothetical tracings.

The text of this fourth edition varies little from that of previous editions, having been expanded only slightly to include the influence of quinidine and more material on right and left bundle branch block and right and left ventricular hypertrophy. The authors have succeeded admirably in accomplishing what they set out to do, to establish a "foundation upon which to build a useful, practical and theoretical knowledge of electrocardiography. Once the principles governing the electrical phenomena are clearly understood, their variations and extensions require relatively little imagination." Command of at least this much electrocardiography is a "must" for the modern anesthesiologist.

DUNCAN A. HOLADAY, M.D.

**The Cardiac Arrhythmias.** BY BRENDAN PHIBBS, M.D., Casper Clinic, Casper Wyoming. Cloth. \$7.50. Pp. 128, with illustrations. The C. V. Mosby Co., St. Louis, Missouri, 1961.

Dr. Phibbs, a cardiologist and formerly a teacher of cardiology, has prepared an excellent monograph devoted to the arrhythmias. He has set out to improve the ability of general physicians to accurately label irregularities of the pulse.