obscured by the lack of data concerning the survival periods of the patients following operation.

The author develops his thesis that essential hypertension is "a pathological physiology of that nerve tissue which is directly concerned with the control of the diastolic and systolic pressure and the force of the heart beat, which means that part of the sympathetic complex which is most immediately related to the arterial tree, namely, the celiac ganglia, the celiac plexus and the aortic plexus."

This book is the work of a brilliant master surgeon. Full evaluation of the clinical improvement after operation will be possible only after a lapse of years. Physiologists will disagree with much of the hypothesis concerning the nature of essential hypertension. However, any contribution of Dr. Crile's to the problem of hypertension merits careful consideration.

Textbook of Neuro-anatomy and the Sense Organs.
O. Larsell. 342 pp. \$6.00. Appleton-Century,
New York, 1939.

A new and excellent work for beginners and all wishing to review the fundamentals of the nervous system. One-half the book is taken up with a straight-forward account of the sense organs, spinal cord, medulla oblongata, and sympathetic nervous system. A simple account of the higher centres follows, which avoids the tedious minutiæ of the olfactory system and the confusing discussion of debated points. The restraint and lucidity of the text are matched by the large number of original drawings and singularly effective diagrams.

The Physiology of Anæsthesia. H. K. Beecher, A.B., A.M., M.D. 388 pp. \$3.75. Oxford University Press, London and New York, 1938.

This is an excellent book, the quality of which teachers and students have long felt the need. Doctor Beecher has taken great pains to give a comprehensive account of our present knowledge of the physiology of anæsthesia.

It is comforting to note the easy manner with which the theories of narcosis are treated. The action of local anæsthetics, the principles underlying spinal anæsthesia, and the effects of spinal anæsthesia are all dealt with quite clearly. Chapters II and III on the Respiration and Anæsthesia, and the Circulation and Anæsthesia, respectively, contain an abundance of valuable information. But there are a number of anæsthetists who will not agree with the author in his trenchant remarks against tribromethanol (avertin), in both chapters. The chapter on Organic Effects of Anæsthetic Agents is full of important details concerning the actions which may take place during anæsthesia in the blood, on the liver, the kidneys and other organs. Only, one is disappointed to find that the acidosis of anæsthesia is not discussed more fully. The author admits this when he says:
"While a consideration of this subject is of importance to anæsthesia, the controversial nature of the changes reported excludes a detailed account of them here." Perhaps he has been unduly influenced by the iconoclastic statements of Dallemagne, whose data, to the reviewer, have not seemed to be dependable.

Throughout this book the author points out the necessity for further investigation. This should stimulate young men who have the urge to find out. The bibliography of 45 pages is very select and will be found to be exceedingly helpful.

Dental Science and Dental Art. Edited by S. M. Gordon, Ph.D. 731 pp., illust. \$9.50. Lea & Febiger, Phila., 1938.

"Dental Science and Dental Art" is a complete, modern, instructive and interesting collaboration of several medical and dental authors, ably edited by

Samuel Gordon, Ph.D. The editor has been fortunate enough to secure as his collaborators many outstanding medical and dental minds. Each collaborator has presented a complete treatise on his specialized subject and it is interesting to note that the bibliography of each treatise is complete, thus adding to the value of the topic from a reader's standpoint.

The principal chapters are as follows: Tooth Development; Experimental Dental Histopathology; The Composition and Calcium-Phosporus Metabolism of Teeth; Biology of the Investing Structures of the Teeth; The Biologic Aspects of Orthodontia; The Physiology of the Salivary Glands; Salivary Calculus; The Problem of Dental Caries; Biochemical Aspects of Dental Caries; Bacteriologic and Immunologic Changes in Dental Caries; Calcium and Phosphorus Compounds in Relation to Dental Nutrition; Chronic Endemic Dental Fluorosis (Mottled Enamel); The Etiology of Vincent's Infection; The Clinical Aspects and Therapy of Vincent's Infection; Selected Diseases of the Mouth; The Present Status of the Pulpless Tooth and Factors Concerning Therapy; Restorative Materials; Principles of Inhalation Anæsthesia; The Clinical Aspects of General Anæsthesia; Local Anæsthia—Theoretical and Applied; Antiseptics and Disinfectants; Statistical Methods in Dentistry; as will be seen the scope of the book is wide.

In the reviewer's opinion "Dental Science and Dental Art" offers to the dental undergraduate, general practitioner and specialist alike, the first opportinity of reading in one volume the story of dentistry from the development of the tooth to the production of various types of anæsthesias for its removal. The book is unhesitatingly recommended as an aid to a better understanding between medical and dental science.

Cancer—With Special Reference to Cancer of the Breast. R. J. Behan. 844 pp., illust. \$11.50. McAinsh, Toronto, 1938.

Originally intended as a treatise on cancer of the breast, the author discovered that only by a thorough understanding of cancer in general could a student arrive at a proper conception of cancer of the breast.

The text covers a discussion of practically every conceivable theory, fact or fancy connected with cancer literature. The bibliography is enormous and is arranged as foot-notes to each page. But the author fails to present a summary of conclusions. The reader is left to form a judgment from his own experience or collateral reading. It is a stupendous work of collaboration and reference and as such is of value to medical libraries, and to workers in the special field of cancer. But it is decidedly not a book for the general practitioner or even for the general surgeon.

Silicosis and Asbestosis. A. J. Lanza. 439 pp., illust. \$4.25. Oxford University Press, New York, 1938.

This book brings together in compact form and for the first time a wealth of information concerning the medical and public health aspects of silicosis and asbestosis. It includes contributions to the history, etiology, symptoms and diagnosis of silicosis and asbestosis by Sayers and Lanza, a lengthy section on roentgen-ray diagnosis by Pendergrass, a chapter on pathology by Gloyne, a splendid section on experimental pathology by Gardner, and chapters on occupational, preventive and legislative aspects in Great Britain by Middleton, and on public health and economic aspects in the United States of America by Lanza. The clinical and pathological findings are presented in simple, clear and concise form. The section dealing with the roentgen-ray diagnosis of silicosis and asbestosis includes a detailed account of the roentgenological findings referable to the chest in health, lengthy discussions of various medical and legal classifications of silicosis, descriptions of the roentgenological findings in silicosis, silicosis with infection and silico-tuberculosis, and an account of the

roentgenological findings in asbestosis. The author often cited today, points out that the abnormal shadows in chest roent. Lepage Janeway gas genograms of men with simple silicosis vary with the type and duration of exposure. He comments at length upon the roentgenological findings in silicosis with infection and silico-tuberculosis. He makes one statement which, in the opinion of the present reviewer, deserves special attention. This is to the effect that, in the absence of clinical or laboratory findings, it is necessary to study serial chest roentgenograms, in order to determine whether an infection has or has not been superimposed on a silicotic process. Gardner's contribution, which consists of a review of previously published experimental work and an account of work which has not appeared in print hitherto, is admirably presented. The observations recorded therein appear to provide clues to some of the perplexing problems in silicosis. The chapters dealing with the occupational, preventive and legislative aspects of silicosis and asbestosis in Great Britain and the public health and economic aspects of these diseases in the United States of America are concise and eminently practical. This work should prove to be invaluable to all who have to deal with pneumoconiosis.

Treatment by Manipulation in General and Consulting Practice. A. G. T. Fisher. 3rd ed., 245 pp., illust. 12s. 6d. H. K. Lewis, London, 1939.

The organization of the subject-matter is of interest and its presentation follows a logical sequence which is of value in the perusal of the contents. In the discussion of osteopathy he classifies the "cures" into three categories which embody the spine with the breaking-down of adhesions, those elsewhere associated with neuralgia, and finally those in which the complaint is chiefly of a neurotic type. The pathology, prevention and diagnosis of adhesions are given experimental and clinical verification along lines which leave no doubt as to the capabilities of the author to continue the preparation of this concise text. Organized medicine has proceeded with a good deal of prodding to enter the field of "manipulations" in the treatment of disease and to accept the use of heat and massage in the minor realms of treatment of conditions remedial by manipulation, and here is a book founded on sound pathological grounds for instruction in the use of these therapeutic measures.

Modern Surgical Technic. M. Thorek. 3 vols., 2045 pages, illust. \$39.00. J. B. Lippincott, Montreal, 1938.

This work is written by a surgeon who has spent many years in the performance of his art, particularly in the Cook County Hospital, Chicago. He wishes to portray the techniques of the tried and proved procedures and, inasmuch as possible, those accepted today, whilst retaining those of long-accepted value. Excellent paper is used throughout, while the

Excellent paper is used throughout, while the illustrations are made most clear by the use of semi-diagrammatic proportions when photography is less exact, and it is in the latter regard that a great deal of the value of this work rests. In common with most books of operative surgery a brief summary of anatomical consideration is given preceding each chapter; the anatomical variations would have enhanced its value. Each operation is believed to have its indications for performance and this is left to the experience and judgment of the reader. The technique is given in progressive detail and should be of value to those not entirely familiar with it. It is remarkable that one man should have been able to acquire, retain, and recall the amount of operative detail given in the space of many years of practice. The field of cleft-palate and its amelioration has not been approached with all the detail available with due consideration to end-result, and, by the way, this work does not take into its folds that evidence of criteria which is so

often cited today. Dr. Thorek's modifications of Lepage-Janeway gastrostomy and electrosurgical obliteration of the gall-bladder are two of the more interesting techniques. This work covers the entire field of surgery, albeit some of the measures in use at present are not given.

Background to Modern Science. By various Writers. 254 pp. \$2.25. Macmillan, Toronto, 1938.

This book consists of a series of ten lectures which were delivered at Cambridge at various times with the idea of presenting the science and scientific technology of the present day as an evolution from the discoveries of the past. The hope was that these lectures would aid in establishing the history of science and technology, which had been much neglected previously, as a truly cultural subject.

Good wine, it is said, needs no bush. A simple list of the subjects dealt with, together with the names of the distinguished authors, will suffice to indicate the quality of the pabulum provided. Greek Natural Philosophy and Modern Science—Francis M. Cornford; From Aristotle to Galileo—Sir William Dampier; Forty Years of Physics—the late Lord Rutherford; Forty Years of Crystal Physics—W. L. Bragg; Forty Years of Astronomy—Sir Arthur Eddington; Forty Years of Physiology and Pathology—John A. Ryle; Forty Years of Parasitology and Tropical Medicine—the late G. H. F. Nuttall; Forty Years of Evolution Theory—R. C. Punnett; Forty Years of Genetics—J. B. S. Haldane.

Prof. Cornford finds the spirit of the Greek ancients in their disinterested love of truth; Sir William Dampier gives us the mediæval point of view; the "Forty Years" series presents the salient facts of modern science, but not without giving us the historical background as well. Lord Rutherford is, as usual, clear, convincing and modest, giving honour where honour is due. His section is a revelation. You had better read this book.

A Textbook of Biology. S. Mangham and A. R. Hockley. 613 pp. \$6.25. Macmillan, Toronto, 1938.

This textbook is designed primarily to meet the requirement in Biology for the preliminary scientific examination of the Pharmaceutical Society of Great Britain. It is divided into a botanical and a zoological part. The former, at least, decidedly exceeds the above requirement, as also that of pharmacy training in Canada. It is noteworthy for its very extensive use and explanation of technical terms, all of which are conspicuous in leaded type. A knowledge of descriptive terminology is supposed to be essential for the study of standard works on pharmacognosy and flowering plants. In this respect, however, the work may also be useful as a sort of dictionary to botanists in general. The same feature distinguishes the zoological part. At the same time the book includes a good deal of physiology and other branches of biology which figure more conspicuously in the textbooks of today; in short it is a unique combination of the old-fashioned and the modern. Except perhaps for its size and price it should be well adapted to its purpose.

Surgeons All. H. Graham. 426 pp., illust. 18s. Rich & Cowan, London, 1939.

A very readable story book of surgery intended for popular consumption. The author's name may not meet the eye in the Medical Directory, but he is vouched for as a "savant" by Dr. Gogarty, of Dublin, in the enthusiastic foreword, and by his own narrative as well. In any case Harvey Graham is a suitable name for one who writes with such gusto of both pathfinder and quack.