



# THE HEAD AND NECK IN ROENTGEN DIAGNOSIS



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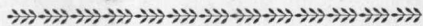
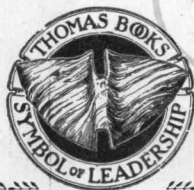
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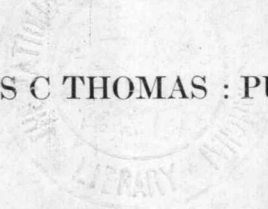
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*TO THE MEMORY of the Pioneers and Early Investigators who Unselfishly Gave Their Bodies and Minds to the Task of Establishing the First Principles and Truths in the Use of the Roentgen Rays in the Practice of Medicine and Surgery, Thereby Laying the Foundation Stones of the Modern Science of Radiology*

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## PREFACE

In order that maximal results in medical and surgical diagnosis by means of the roentgen rays may be obtained, the basic and technical aspects of radiology must be correlated and integrated intimately with apposite facts in developmental and adult morphology, physiology, pathology, and observations in clinical medicine and surgery and the special branches.

To this end the present volume has been prepared, the thought being that the modern radiologist has a wider and deeper interest than solely making and reading roentgenograms. Although the reasons for the inclusion of much of the subject matter are obvious and immediately apparent, the selection of a list of human affections and conditions and fundamental matter for consideration has not always been as simple as would appear. In order to hold the text to a single volume, descriptions and discussions, in many instances, had to be curtailed; in others, omitted altogether. In the choice of material there may be some errors in judgment. It is, however, hoped that the several chapters are fairly representative and, at least, moderately comprehensive.

In the selection of subject matter for a book such as this, it would, of course, be too much to expect to have unanimity of opinion. Some, probably, would select matter not included and others would exclude certain presentations and discussions here given. In attempting an integration of basic matter with the more purely roentgenological phases, an effort has been made, for the most part, to include only relevant facts and descriptions. The task has not always been easy. Although believing that an utterly nihilistic point of view with reference to the underlying and cognate subjects would be bad and lead to a chaotic condition in medical radiology, it is recognized that many details in the pertinent basic sciences, although important elsewhere, do not especially concern the radiologist. Unless deemed essential, detailed considerations of descriptive and physiologic anatomy have been generally omitted. In some instances, discussions are more extended for the sake of completeness and clarity.

The authors are not unmindful of the help derived from the recorded observations of others, both in the specific field of radiology and the important cognate sciences. Due credit has been given throughout the text wherever reference is made to prior work. Especially helpful has been the personal interest manifested by a large number of radiologists. A number of illustrations have been taken directly or modified from other books and papers and the earlier publications of the present authors, for all of which proper credit is given in the respective legends. The authors are appreciative of the many courtesies extended by writers and publishers. The majority of the illustrations appear, however, for the first time.

The authors are especially indebted to Dr. LeRoy M. Ennis for valuable assistance in preparing Chapter V, on the teeth and jaws; to Dr. Karl

Kornblum for valuable help in preparing portions of Chapter I, on the skull; to Dr. Edgar W. Spackman for help in Chapter VIII, on intraorbital and intraocular foreign bodies; to Dr. Percy Brown for his interest and suggestions in the preparation of portions of the manuscript; to Dr. A. J. Ramsay for critical reading of certain sections of the text; and to Drs. George W. Chamberlin, Philip J. Hodes, Gilbert W. Heublein, Rosalind S. Thorner, John H. Jamison, Robert P. Barden, and A. Judson Graves for valued help in collecting data and preparing certain aspects of the original copy. The authors are also appreciative of the interest and care manifested by Mrs. Frederic V. Lewis and Miss Myrtle Bremerman in their work on the many references and the manuscript, and that of Miss Dorothy W. Davis for technical assistance. Appreciation is also extended to Miss Elizabeth Minter for care and attention in preparing many of the drawings and diagrams and doing most of the lettering; to Miss Elita Sackse for translations and certain drawings; to W. H. Martin, W. H. Hoedt, Francis K. Delp and Albert Simpson for care in preparing the photographs and negative prints. Thanks are due to Mrs. Vera Gobrecht Glass and Miss Margaret C. Bandel for much help during the preparation of the original copy and the final manuscript and to Dr. George A. Bennett for valued help in reading proof.

In the course of presenting the purer aspects of roentgenology and correlating them with the related and pertinent facts in anatomy, physiology, pathology and certain clinical observations, and in the preparation and labelling of over 1200 illustrations, it is almost inevitable that certain errors and discrepancies should have entered the finished manuscript and found their way into the present volume. The authors would ask the kindly indulgence of the reader and would appreciate to be informed of any errors that may be found.

The reader is directed to the use of the terms "radiology" and "roentgenology." The use of these terms has been employed according to the nomenclature set up by the American Medical Association, namely, that radiology includes the application of all branches of radiant energy, whereas roentgenology is confined to the use of the roentgen rays in diagnosis and therapy. Although the term "radiology" is occasionally required and used, the term "roentgenology" is more generally applicable in the various chapters of this book and is, therefore, more extensively employed.

The authors wish to express deep appreciation to Charles C Thomas, Publisher, for his hearty and generous cooperation and valued counsel in the publication of this volume.

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