## PREFACE.

The present work is the outcome of an investigation undertaken some years ago when I first began to notice the condition of the appendix in every abdominal operation, an undertaking which soon grew to unexpected proportions. The literature of the subject is so extensive that I fear I may not have done full justice to the many faithful workers in the field; indeed, even as the pages are passing through the press, several valuable articles have appeared too late for recognition.

Under the conviction that surgery and pathology are best taught by demonstration I have tried to parallel the text with graphic illustrations, and in a few instances the figure with its legend stands alone. I acknowledge here my indebtedness to Mr. Horn, Mr. Brödel, Miss Huntington, and Mr. Becker for their splendid artistic work; the enthusiasm with which they have entered into various researches and prosecuted every phase of their work has greatly enhanced my own pleasure and satisfaction. The anatomical chapters were written by Mr. Brödel and illustrated, for the most part, by Miss Ruth Huntington, now Mrs. Brödel.

I will avail myself of this opportunity to say a few words relative to the illustration of medical works and the proper use of good figures.

The changes in the appearance of an organ brought about by disease are often manifested in such delicate deviations from the normal topography that it requires the hand and eye of a genuine artist, and one who is also a well-informed anatomist and careful pathologist, to represent the morbid condition accurately. The sense of vision, when unaided, often fails to grasp the significance with completeness, and in such a case the true artist will palpate the fresh specimen and then represent the combined results of sight and touch. The superficial structure alone is frequently insufficient to demonstrate the character of the specimen, and the artist must find means of exhibiting the surface relations in association with the interior. This can be done: (1) by inserting lines, (2) by cutting away portions of the surface and thus displaying the depth, (3) by magnifying the organ and drawing it as though translucent, and (4) by explanatory diagrams, cross-sections, etc.

From these considerations it is evident that an intelligent interpretation of a pathological specimen or of an anatomical or clinical demonstration through the eye and hand of a trained scientific artist must be vastly superior as a means vi PREFACE.

of instruction to the best photograph. Yet how often when we appeal to an illustration for light on a difficult text do we find a hazy, woolly, milky, or coarse drawing, which only succeeds in leaving our confusion worse confounded.

Good, true illustrations are a most valuable handmaid in medical instruction, for what the eye of the student has grasped remains, as old Horace memorably said, indelibly impressed after a fashion unequaled by the clearest verbal description. I would beg the reader, therefore, not to be satisfied with glancing hurriedly over these illustrations and their legends, returning at once to the text, but to study each figure with care.

The essential feature, its centre of interest, is generally emphasized by greater contrast in shading, by which the attention of the observer is insensibly focussed. The differences in the tone value of the peritoneum over the small and large intestine, and of the fat, adhesions, etc., are given in a manner as realistic as is possible in black and white drawings. Cysts are made translucent as in the fresh condition. The method of making our originals, whether pen and ink, half-tone, or color, has been selected with a view to the use for which the picture was designed. A simple topographical relationship is best shown by line drawing, and steps in a operation, half schematically represented, are done in pen and ink. For anatomical and pathological characteristics where delicate surface structures and plastic effects are required, we have used wash drawings adapted for half-tone reproduction.

In the microscopic pictures even the individual cells have been drawn with the utmost fidelity; in no case have they been schematized. Many of the pictures will be best appreciated if studied with a low-power hand lens.

I will here ask the reader to correct the reference on page 93 from p. 183 to p. 186.

One of the pleasantest parts of my task has been the fact that I have been constantly dependent upon the good offices of willing friends.

Dr. Caroline Latimer has been my faithful aid from the beginning, revising the English of the manuscript and caring for it and for the proof in all stages, besides assisting in various other ways too numerous to mention. Her own original labors will be found in the historical chapters, upon which she has spent months of enthusiastic effort.

Dr. Henry Christian, one of our own graduates, now of the Boston City Hospital, has contributed the chapter on autopsy findings.

Dr. William A. Ford, of the Johns Hopkins Hospital, wrote that on the bacteriology of the appendix and cecum.

My friend, Dr. Harvey Cushing, wrote the section relating to cocaine anesthesia in the chapter on preliminaries to operation.

My colleague, Dr. Halsted, from the first graciously placed the entire material of his large surgical service at my disposal. I am also glad to acknowledge my debt to Dr. J. M. T. Finney and the other members of the surgical staff;

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the extent to which they have aided me is in evidence everywhere throughout the text.

My associate, Dr. Guy L. Hunner, has helped me in revising the chapters on treatment.

I am indebted to Dr. J. Erlanger for assistance in carrying out the physiological experiments described in Chap. VIII.

Many friends, notably Dr. Maurice H. Richardson, of Boston, Dr. Robert Abbé, of New York, and Dr. J. B. Murphy, of Chicago, have been most kind and patient in answering numerous and, I fear, often troublesome letters of inquiry.

I have to thank Dr. John B. Deaver, of Philadelphia, for the use of his large stock of material, as well as Dr. A. O. J. Kelly.

Dr. Henry Elsner came to my aid in the chapter on appendicitis in typhoid fever.

Every one who has had to consult many books in the preparation of a large work will realize the extent of my obligations to Dr. Robert Fletcher, and also, especially, to the late Dr. J. E. Merrill, in my necessary use of that monumental foundation of J. S. Billings, the Surgeon-General's Library.

The section on leucocytosis is not so comprehensive as I had intended, but I hope to enlarge and extend it in a subsequent edition.

In conclusion, let me thank all my friends, at home and abroad, for specimens, notes, and drawings, as well as for the genial atmosphere of cordial interest with which they have invested the subject from the beginning.

Lastly, I would call attention to the index of names. It has been one of the pleasantest features of the work to realize, as I culled these from the text, the truth of that inspired declaration of the great apostle to the Gentiles: "Others have labored, ye have entered into their labors."

HOWARD A. KELLY.

Baltimore, January 23, 1905.