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# Operative Surgery



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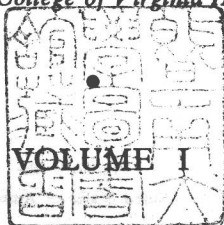
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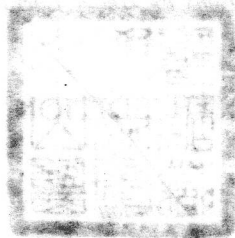
HENRY KIMPTON

1953

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This sixth edition is dedicated  
to

the original author of this work

**J. SHELTON HORSLEY, SR., M.D.**

distinguished surgeon, author, and teacher  
without whose inspiration and teaching  
this edition could never have been accomplished

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## PREFACE TO SIXTH EDITION

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The fifth edition of *Operative Surgery* was published in 1940, thirteen years ago. World War II started the following year and continued during the period in which a new edition ordinarily would have been published. Shortly after the war ended, Dr. J. Shelton Horsley, the senior author, died. Following Dr. Horsley's death it was thought for a time that it would be advisable to discontinue the book, for it was realized that his remarkable energy, broad surgical experience, and, above all, his mature wisdom would be sorely missed in the preparation of another edition. However, because of repeated requests from the publishers, The C. V. Mosby Company, and after one of us (G.W.H.) agreed to assume the responsibility of handling the details of the undertaking, it was decided to proceed with this, the sixth edition. It was obvious that the book would have to be largely rewritten, for the decade following the publication of the fifth edition had been one of remarkable change and progress in surgery. This progress was the result of a large number of factors, among them the occurrence of World War II. War has always stimulated new developments in surgery. Other factors, even more important than war, were the advent of the antibiotics, the development of satisfactory methods for storing blood, and, along with this, the belated appreciation of the necessity for the immediate replacement of blood lost during extensive operative procedures. Also of significance was the increasing appreciation of the necessity for more closely following the metabolic changes incident to illness and trauma, including surgical trauma. The first edition of this book, published in 1921, thirty-two years ago, called special attention to the importance of maintaining normal physiological balance and also dealt with those problems met with in general surgery and, in addition, certain conditions now cared for in the highly specialized fields of urology, orthopedics, and neurological surgery. Also included were procedures now handled almost exclusively by the plastic surgeons and other procedures in the province of the otolaryngologists. Yet the operations included in that edition were with few exceptions selected on the basis of a satisfactory experience with them by one surgeon. The same was largely true of the procedures presented in the second and third editions, published in 1924 and 1928, respectively. By the time of the publication of the fourth edition in 1937, the situation had changed so decidedly that Dr. Horsley felt it advisable to have an associate editor and also decided to include major contributions from specialists in neurological surgery, orthopedic surgery, and urology. The section on plastic surgery was written by Dr. John S. Horsley, Jr., who, though a general surgeon, was particularly interested in reconstruction and reparative surgery.

Because of the tremendous scope of surgery today and also as a result of the aggressiveness of the surgical specialties, there has been progressive limitation of the field described as general surgery. The authors believe that there is danger in



## *Preface*

too high a degree of specialization and also believe it is necessary that surgeons be broadly trained, even though they may later choose to restrict their work to certain areas or systems within the body. Only by such restriction is one able to develop a high degree of proficiency in certain of the technics employed in special fields. With these considerations in mind, it seemed advisable to include a description of the commonly employed gynecological operations, for a large majority of such operations are performed by general surgeons. By the same token it seemed desirable to eliminate some of the more highly technical operative procedures employed in some of the special fields, notably in neurological surgery.

Because of the untimely deaths of John S. Horsley, Jr., and Donald M. Faulkner, the sections on plastic surgery and on orthopedic surgery had to be reassigned; plastic surgery to Dr. Henry J. Warthen, Jr., and Dr. Leroy Smith, and orthopedic surgery to Dr. M. J. Hoover. On account of the illness and retirement of Dr. C. C. Coleman, Dr. Charles E. Troland was asked to revise the section on neurological surgery.

We were fortunate to have Dr. A. I. Dodson again write the section on urology.

The gynecologic operations are ably described by Dr. Randolph H. Hoge.

A number of other surgeons were invited to make contributions on subjects in which they have developed particular interest and proficiency. We believe that their contributions add greatly to the value of this book. Their names and titles and their respective contributions are listed.

We were especially fortunate to be able again to have Miss Helen Lorraine make all of the drawings for this edition, and her beautiful and accurate drawings add immeasurably to this book.

We wish to thank all of our contributors who have given so unstintingly of their time and talent to make this edition an accomplished fact. The untiring efforts and encouragement of Mrs. Daisy Spivey Fauntleroy in the careful preparation of the manuscript are gratefully acknowledged.

I. A. BIGGER

GUY W. HORSLEY

Richmond, Virginia

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## PREFACE TO FOURTH EDITION

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The fourth edition of this book is written under different conditions from those that existed when the first edition was published in 1921. Then I was working, at least to some extent, in urologic, orthopedic, plastic and neurologic surgery, as well as in so-called general surgery, and that edition was largely a record of my personal experience, with the addition, in instances where I had not performed certain operations, of described methods that appeared to me to be best suited for the lesion in question. In recent years, however, the specialties in surgery have become so distinct and aggressive that the general surgeon's field has necessarily contracted, while the specialties have become so elaborate that it would be impossible for any general surgeon to keep abreast with all of them. The methods of diagnosis in many of these specialties, as for instance urology and bronchoscopy, are now so complex that constant touch with them is required in order to be proficient in their use; and if a general surgeon devotes sufficient time to these methods of diagnosis to become really proficient in them, he must obviously neglect some portion of his work, as surgical pathology, which has a more direct bearing upon the fundamentals of general surgery. Therefore, regardless of the wishes of the general surgeon, much of the work previously done by him naturally gravitates to the various specialists.

Because of this condition, when the publishers requested a fourth edition of the *Operative Surgery*, I refused to undertake it unless I could have associated with me men who are well-qualified specialists and who could cover the fields that I attempted to cover in the first edition far better than I am capable of doing.

When this concession was made, I invited Dr. I. A. Bigger, professor of surgery at the Medical College of Virginia, to act as co-author of the book. Dr. Bigger has not only had extensive experience as a teacher in the Medical School of the University of Virginia and in the Medical School of Vanderbilt University before becoming head of the department of surgery of the Medical College of Virginia, but has done notable work in thoracic surgery as well as in general surgery. He is responsible for the chapters on surgery of the neck, thorax, breast, hernia, sympathetic nervous system, and some of the operations upon the extremities.

The operations upon the pericardium, heart, and intrapericardial portion of the great vessels, especially those procedures indicated in the treatment of trauma to these structures, have been chosen by Dr. Bigger as a result of his considerable personal experience in this field of surgery. Usually the operations described are selected because he has found them to be satisfactory, but in some instances several operations for the same condition are given and no attempt is made to indicate the method of choice.

Dr. Bigger and I invited Dr. C. C. Coleman, professor of neurological surgery at the Medical College of Virginia, to write on the surgery of the central nervous system and the cranial nerves; Dr. A. I. Dodson, professor of urology at the Medical College of Virginia and urologist to St. Elizabeth's Hospital, on urology; Dr.



John S. Horsley, Jr., assistant professor of surgery at the Medical College of Virginia and surgeon to St. Elizabeth's Hospital, on plastic surgery; and Dr. Donald M. Faulkner, orthopedic surgeon to Memorial Hospital and associate orthopedist to the Medical College of Virginia, on orthopedic surgery. Dr. Guy W. Horsley, who, though a general surgeon, is particularly interested in proctology, has given much aid in the preparation of the chapter on proctology. The assistance of others, for which we are grateful, is acknowledged in footnotes in the chapters in which their work appears.

This fourth edition follows the same general lines as the other editions and does not attempt to be an encyclopedic work. The methods described are those which either have been actually used by the author who writes of them or which seem to him to be the best for the lesion under consideration. Efforts have been made to base operative procedures upon physiologic function as well as upon anatomic structure and to retain physiologic function whenever consistent with the main object of the operation. For instance, in surgery of the stomach, a modification of the Billroth I method is described which we believe should be used in partial gastrectomy whenever possible, because the duodenum is the natural receptacle for the gastric contents.

Many new operative procedures are described which have not heretofore been published in a book, but none has been recommended which does not seem sound. At the same time such chapters as that on surgical drainage and on the underlying principles of the operations for malignant tumors have been retained. There are many new chapters, as the chapter on the surgery of acute abdominal conditions, and much of the work in the special fields has not heretofore appeared in any book.

Dr. Coleman, Dr. Dodson, Dr. John S. Horsley, Jr., and Dr. Faulkner have all included a number of new procedures in their various specialties, some of which are original with them.

Miss Helen Lorraine has very effectively added more than 500 new illustrations to this fourth edition.

The large amount of new material makes publication in two volumes necessary.

J. SHELTON HORSLEY

Richmond, Virginia

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I wish to express my appreciation to Dr. Horsley for allowing me the privilege of assisting in the revision of his book on Operative Surgery and for his generous help in this work.

I am glad to acknowledge my indebtedness to my associate, Dr. Harry J. Warthem, for his aid in correcting the manuscript as well as for his contribution on osteomyelitis. Miss Helen Lorraine has made beautiful drawings which add so much to a book of this kind. My secretary, Miss Christine Provine, deserves especial mention for her care in preparing the manuscript.

I. A. BIGGER

Richmond, Virginia

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## PREFACE TO FIRST EDITION

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In this book particular stress has been laid upon the preservation of physiologic function and the interpretation of the biologic processes that follow surgical operations.

Naturally, a knowledge of anatomy is essential for operative surgery, but in many regions of the body an effort to conserve or to restore as far as possible the physiologic function of the tissues involved in the operation has often been neglected. Merely following anatomical landmarks and making a beautiful dissection with accurately placed ligatures and sutures should not be the sole aim of the surgeon. These things, of course, should be included in the surgeon's ideals, but it is even more important that the operation results in the extirpation or correction of the pathology, and in the restoration of the physiology of the tissues or organs. One of the chief aims of this book is to emphasize those physiologic and biologic principles which, to some extent, obtain in every surgical operation.

The biologic processes that follow the application of surgical drainage, for instance, have been too frequently not considered at all and surgical drainage has been regarded as solely or chiefly mechanical. The treatment of fractures by metal plates or screws produces excellent immediate mechanical results, but a little study of the biologic processes following the use of metal plates should convince the surgeon that this is not a satisfactory operation. Physiologic principles, if logically followed, in operations for ulcer of the stomach and for resection of the intestine, appear to lead to certain definite technics, even though others may be anatomically and mechanically unobjectionable. The development of collateral circulation around an aneurism by partial or intermittent occlusion of the artery, as has been practiced by Halsted and by Matas, is often a much safer procedure than the immediate and permanent occlusion of the vessel. Developing a blood supply in the pedicle of a flap by the gradual dissection of the flap in different stages, insures against gangrene and makes possible better plastic results because it brings more nutrition to the reconstructed tissues. There are many other examples that might be cited.

No attempt has been made to include in this volume all surgical operations. Such an encyclopedia of operations is found in many excellent textbooks and systems of surgery. Every operation that I have described is either one that I have done or else an operation that appears to me to be the one best suited for the disease. Frequently, conditions are such that different operations may be indicated for what appears to be the same affection. In order to meet this situation, I have often described several operations, each one of which I believe, under certain conditions, would be appropriate. In this way the book is to a considerable extent a record of my personal experience.

All of the drawings are by Miss Helen Lorraine, except the illustrations of Dr. J. W. Long's enterostomy, which were drawn by William F. Didusch.

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It is a pleasure to acknowledge my obligation to Mrs. A. C. Norris, my former secretary, who, in spite of her domestic duties, consented to help in the preparation of the manuscript for this book. She has greatly lightened the labor of its preparation.

My thanks are due Dr. W. T. Graham for many helpful suggestions about the sections dealing with orthopedic surgical operations.

J. SHELTON HORSLEY

Richmond, Virginia

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