

# **THE ORTHOPEDIC TREATMENT OF GUNSHOT INJURIES**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649126040

The orthopedic treatment of gunshot injuries by Leo Mayer & E. G. Brackett

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.  
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

[www.triestepublishing.com](http://www.triestepublishing.com)

**LEO MAYER & E. G. BRACKETT**

**THE ORTHOPEDIC  
TREATMENT OF  
GUNSHOT INJURIES**



THE  
ORTHOPEDIC TREATMENT  
OF  
GUNSHOT INJURIES

BY

LEO MAYER, A. M., M. D.

*Instructor in Orthopedic Surgery*

*New York Postgraduate Medical School and Hospital*

WITH AN INTRODUCTION BY

COL. E. G. BRACKETT, M. C. N. A.

*Director of Military Orthopedic Surgery*

ILLUSTRATED

PHILADELPHIA AND LONDON

W. B. SAUNDERS COMPANY

1918

ME 168

Al 168<sup>10</sup>

1-7-18

---

Copyright, 1918, by W. B. Saunders Company

---

---

PRINTED IN AMERICA

To All

WHO BY WORD AND DEED ARE  
STRIVING TO AID THE  
CAUSE OF THE  
**Crippled Soldier**  
THIS  
BOOK IS DEDICATED

## INTRODUCTION

---

It is a satisfaction to give a welcome to a book that comes to us at a time when it is definitely needed. We are having to decide problems in surgery, which are either new, or which present such new phases, that we must re-adjust ourselves in the methods of their reception and treatment. Dr. Mayer, in his presentation of the subject in this book, has led to these important questions, and has given the results of a practical experience with many of the new problems which have come to us in the last three years of military life. It has been definitely demonstrated that early radical methods are frequently necessary for ultimate conservative results, and for the final completion of full function, and that continued treatment given as early as possible, and in many instances that the early application of correct mechanical principles, are necessary, if we are to have in mind the complete rehabilitation of the injured man. The importance of the restoration of the disabled individual back into his working life is now having its proper recognition, under the stimulus of war conditions, although we must remember that this problem is not new, for it has had, for some time, the attention of a few men, who had recognized its importance and have done much toward establishing this feature in industrial surgery. The need of surgeons who have a knowledge of these correct principles and of the mechanical supplements to surgery, is emphasized in this work of Dr. Mayer.

Dr. Mayer has called attention to the need of planning the treatment of long surgical cases so that the patient can be restored finally to his full function, and has also emphasized that this includes not only the restoration of his physical and mental condition, but also the restoration of the individual himself back to the position which places him in a wage-earning status. This is particularly applicable at the present



time, when so much is being planned for the complete rehabilitation of the men disabled in the war, and it is also valuable just now, to have this emphasized in the surgical task, the scope of which combines these two principles, directed toward the relief of the immediate (medical) and the remote (functional) conditions. It is wise to emphasize the relation of the application of the correct mechanical principles to surgical measures, to provide the ultimate as well as the immediate result, and to thus avoid the long and unnecessary after-treatment, in overcoming secondary defects and deformities, which may so frequently be avoided. The restoration of the injured man should begin with the first treatment, so that the plan should have for its object the uninterrupted care, from the first medical or surgical treatment, to the working period of the individual.

This attention to the mechanical features of treatment includes in many cases the fitting of artificial limbs. Too little thought and time has been given in the past by the medical profession to this most important subject, not only to the proper selection of the substitutes, but also to the fitting and training in their use, and to the early preparation of the stump for their reception. As much time and personal attention should be given by the surgeon to this important subject as to that of splints and apparatus for acute joint affections. This subject is now beginning to have the proper realization of its importance by the prominence of its demands, and the reader will find in this book the proper emphasis on this phase of the work.

E. G. BRACKETT, COL. M. C., N. A.

## PREFACE

---

THIS book is not a treatise on orthopedic surgery. Its purpose is merely to emphasize certain principles and rules of guidance in the treatment of war injuries that have been of value to me. These principles may be termed orthopedic since they deal with the prevention and cure of deformity. It is foolish to haggle over the definition of orthopedic surgery or to try to define the limits between it and general surgery. Every military surgeon who is called upon to work in a war hospital, must have orthopedic knowledge, and every orthopedist who has to treat gun-shot injuries must be a man of surgical attainments. The two specialties merge so intimately in all injuries of the extremities that the attempt to divorce them seems to me artificial.

In this work I shall not refer to those injuries or deformities, such as sprains or dislocations, that are commonly seen in times of peace, although a knowledge of their treatment is most important for the military surgeon, but only to those produced by the explosives of modern warfare. For the treatment of the former, the reader is referred to the classic text-books and to two publications of Sir Robert Jones, "Injuries to the Joints," and "Notes on Orthopedic Surgery." These two booklets are invaluable to everyone practising traumatic surgery.

I am considering the treatment of war injuries under two main groups: that given at the front, and that at the base hospital. In the field, the essential orthopedic problem is proper fixation of the injured part; in the base hospital, the proper time to discontinue fixation and restore motion.

The chapters on the injuries to tendons and the peripheral

nerves represent in condensed form the substance of a course given to military surgeons in Major Fred. H. Albee's Department of the Post-Graduate Hospital, New York City. I am led to include the anatomic data at the request of my students who have felt it of advantage to study the anatomic essentials stripped of the unnecessary encumbrances of the anatomic text-book.

One chapter of the book is devoted to artificial limbs, not that the subject is yet ripe for thorough treatment but because I hope thereby to interest medical men generally in this most important branch of study. Too often the surgeon merely amputates and leaves all else to the brace maker. This is an incorrect practice. Even the best brace maker is, after all a technician, not a physician, and the fitting of a prosthesis does not correspond to the fitting of a suit, but to the finest adjustment of an orthopedic brace or flat-foot support. In-nate mechanical sense and an accurate knowledge of the anatomy and physiology of the locomotor apparatus are essential factors in the proper selection and application of an artificial limb. It is a task requiring all the skill that the physician can bring to his work, and frequently the problem is so difficult that it will baffle the best of us.

I am also including a chapter on the organization of reconstruction hospitals, since in the event of the continuance of the war this topic will demand earnest consideration by the American physician and social worker. In all the belligerent countries the reconstruction hospital has been recognized as essential to the welfare of the individual cripple and to that of the community, since it is the best method of rejuvenating the physically handicapped and of rendering them productive members of society.

The illustrations, except when specific mention is made of other sources, are from photographs and drawings made for or by me during my service as Orthopedic Surgeon to the Urban Red Cross Hospital and to the Oscar-Helene Home for Crippled Children.