Gunshot Wounds, and Other Injuries of Nerves

Mitchell Silas Weir
GUNSHOT WOUNDS

AND OTHER

INJURIES OF NERVES.
GUNSHOT WOUNDS

AND OTHER

INJURIES OF NERVES.

BY

S. WEIR MITCHELL, M.D.

GEORGE R. MOREHOUSE, M.D.

AND

WILLIAM W. KEEN, M.D.

ACTING ASSISTANT SURGONS U.S.A.

IN CHARGE OF U.S.A. WARDS FOR DISEASES OF THE NERVOUS SYSTEM, TURNER'S LANE HOSPITAL, PHILADELPHIA.

PHILADELPHIA:
J. B. LIPPINCOTT & CO.
1864.
PREFACE.

The cases upon which this little volume is founded were studied during about fifteen months, beginning in May, 1863. At that date, Dr. Wm. A. Hammond, then the Surgeon-General, ordered that certain wards should be set apart for the treatment of Diseases of the Nervous System in the U. S. Army Hospital, Christian Street, Philadelphia. Two of the authors of this volume were placed in charge of these wards; and the third, Dr. Keen, was subsequently added as resident surgeon. Many difficulties and embarrassments naturally arose at the outset of an undertaking so novel as that of a special hospital meant to receive only a limited class of cases. As the Surgeon-General increased the number of such hospitals, creating distinct wards for various classes of diseases, these obstacles soon disappeared, and the good results of the system became apparent.

The authors of this essay desire to thank Dr. Hammond for the steady interest with which he regarded their inquiries, and to acknowledge the watchful care with
which he fostered the interests of scientific medicine, while organizing and perfecting that vast system of hospitals for which the country owes a debt of gratitude to a genius alike enterprising, intelligent, and laborious.

For constant and courteous attention to their special requisitions, they are also much indebted to Surgeon-General Barnes, M.D., U. S. A.; and for the unfailing zeal with which he has aided their purposes, and forwarded the scientific and benevolent objects of their wards, they are glad of the opportunity to thank the able and assiduous Inspector of this Department, Lieutenant-Colonel Le Conte, M.D., U. S. A.

October, 1884.
CONTENTS.

CHAPTER I.
Division of Subject................................................................. 9

CHAPTER II.
Primary Effects of Wounds or other Injuries of Large Nerves... 18

CHAPTER III.
Wounds of Nerve Centres....................................................... 21

CHAPTER IV.
Wounds of Special Nerves—Wound of the Sympathetic Nerve... 39
Wound involving the Fifth Pair of Cerebral Nerves............... 44
Wounds involving the Portio Dura Nerve (Seventh Pair)......... 47

CHAPTER V.
Wounds and other Injuries of Nerve Trunks......................... 56

CHAPTER VI.
Wounds of Nerve Trunks—Continued..................................... 68

CHAPTER VII.
Lesions of Sensation............................................................ 96

CHAPTER VIII.
Of the Influence of Wounds of Nerves upon Muscular Movement.. 119
CONTENTS.

CHAPTER IX.  
Of the Condition of Calorific Action in Injuries of Nerves......... 134

CHAPTER X.  
Treatment—Of the use of Electricity in the Diagnosis, Prognosis,  
and Treatment of Injuries of Nerves.............................. 136

CHAPTER XI.  
Diagnosis, Prognosis, and Treatment of Nerve Wounds and their  
Consequences ......................................................... 148
CHAPTER I.

DIVISION OF SUBJECT.

When the U. S. A. Hospital for Diseases of the Nervous System was organized in May, 1863, it was at first proposed to limit its usefulness so that only those cases should be received. It soon became plain that it would be advisable to include also wounds and other injuries of nerves, and accordingly an order to that effect was issued.

No sooner did this class of patients begin to fill our wards, than we perceived that a new and interesting field of observation was here opened to view. Before long, so many of these cases were collected that, for a time, they formed the majority of our patients. Among them were representatives of every conceivable form of nerve injury,—from shot and shell, from sabre cuts, contusions, and dislocations. So complete was the field of study, that it was not uncommon to find at one time in the wards four or five cases of gunshot injuries of any single large nerve. It thus happened that phenomena which one day seemed rare and curious, were seen anew in other cases the next day, and grew commonplace as our patients became numerous.

Whatever may be wanting in this essay is, therefore, due alone to its authors, since never before in