A Textbook of the Science and Art of Obstetrics

Garrigues Henry Jacques
A TEXT-BOOK

OF

THE SCIENCE AND ART

OF

OBSTETRICS

BY

HENRY J. GARRIGUES, A.M., M.D.

CONSULTING OBSTETRIC SURGEON TO THE NEW YORK MATERNITY HOSPITAL; GYNECOLOGIST TO ST. MARK'S HOSPITAL; PROFESSOR OF OBSTETRICS IN THE POST-GRADUATE MEDICAL SCHOOL (RETired); PROFESSOR OF GYNECOLOGY AND OBSTETRICS IN THE SCHOOL FOR CLINICAL MEDICINE (RETired); HONORARY FELLOW OF THE AMERICAN GYNECOLOGICAL SOCIETY; HONORARY FELLOW OF THE OBSTETRICAL SOCIETY OF EDINBURGH; EX-PRESIDENT OF THE GERMAN MEDICAL SOCIETY, ETC.

WITH FIVE HUNDRED AND FOUR ILLUSTRATIONS

PHILADELPHIA AND LONDON

J. B. LIPPINCOTT COMPANY

1902
COPYRIGHT, 1902,
BY
J. B. LIPPINCOTT COMPANY.

ELECTROTYPED AND PRINTED BY J. B. LIPPINCOTT COMPANY, PHILADELPHIA, U.S.A.
PREFACE

Unlike gynaecology, the science and art of obstetrics are hundreds and even thousands of years old, and most of its principles have long been firmly established. During the last twenty-five years only four really great improvements have been made,—antisepsis, with its offspring asepsis, the axis-traction forceps, the improved Caesarean section, and the revival of symphyseotomy. This science can, therefore, be taught in a more didactic and less discursive way.

The aim of the author has been strictly to write a text-book, not a book of reference, as many books are that are called text-books, but abound in details, which only show the reading of their authors, and embarrass the student who wants to become acquainted with this branch of medico-chirurgical science as well as the practitioner who seeks information about a case under his care. Few proper names have been introduced, and these mostly where it was necessary to designate certain instruments or methods of operating. The references made to the author’s former writings should chiefly be looked upon as vouchers for his right to take the magisterial tone used in the text, as they show that the book largely is based on personal observation and research. Still, in treating of subjects about which he has written before, everything has been brought up to date.

Beginners ought to study obstetrics before gynaecology, since the former is the key to the latter. But, on the other hand, it would lead too far to describe in the text all that should be known by the student in order to understand obstetrics; and it would be too difficult for him to find what he needs in a text-book of gynaecology. The author, therefore, frequently refers to pages in his “Text-book of Diseases of Women,” so as to enable the reader readily to look up those points which he needs for his obstetric studies.

In presenting the science and art of obstetrics the author has striven to lead the reader gradually from the simple to the compli-
cated, from the easy to the difficult. All matters referring to the normal process of pregnancy, labor, and puerpery have, therefore, been placed before the description of abnormal conditions and their treatment.

Symphyseotomy being practically a new operation, and the Caesarean section having undergone so great changes in recent times, the author has not thought it proper to treat of these operations in the same didactic tone in which the bulk of the book is written, but has entered into a discussion of different views and given references to many publications concerning them.

It is a peculiarity of obstetric art that the physician from the very moment he begins practising may encounter any kind of complications and difficulties, which have to be met at once. The author has, therefore, endeavored to be as brief, clear, and precise in expression as possible, although, on the other hand, he has tried to avoid unnecessary scientific dryness.

The work is so profusely illustrated that one who is somewhat familiar with this branch of science can refresh his memory by merely turning over its pages and looking at the pictures. Many of the illustrations are new and drawn directly from nature, in order to avoid the manifold inaccuracies found in current representations even of such solid objects as the bones of the pelvis.

As far as possible, objects are represented in their actual size, which is deemed much more instructive than to ask the reader to draw on his imagination in understanding mechanical problems and questions of development.
CONTENTS

NORMAL DIVISION

PART I.—FOUNDATION.

CHAPTER I. ................................................................. 1
Puberty ........................................................................ 1

CHAPTER II. ................................................................. 2
Nubility ..................................................................... 2

CHAPTER III. ............................................................... 2
Ovulation and the Ovum ........................................... 2

CHAPTER IV. ................................................................. 13
Menstruation ............................................................. 13

CHAPTER V. ................................................................. 18
Copulation ................................................................ 18

CHAPTER VI. ............................................................... 21
Fecundation ............................................................... 21

PART II.—NORMAL PREGNANCY.

CHAPTER I. ................................................................. 27
Transportation and Embedding of the Ovum. Decidua .......... 27

CHAPTER II. ................................................................. 31
Chorion .................................................................... 31

CHAPTER III. ............................................................... 34
Placenta .................................................................... 34

CHAPTER IV. ............................................................... 36
Development of the Ovum and the Embryo ............... 36

CHAPTER V. ............................................................... 40
Amnion .................................................................... 40

CHAPTER VI. ............................................................... 40
Allantois ................................................................ 40
CONTENTS.

CHAPTER VII. YOLK-SAC, OR UMBILICAL VESICLE ........................................... 41

CHAPTER VIII. FORMATION OF THE UMBILICAL CORD ................................................. 42

CHAPTER IX. NUTRITION ..................................................................................... 43

CHAPTER X. SECRETION AND EXCRETION ............................................................... 45

CHAPTER XI. RESPIRATION ................................................................................. 46

CHAPTER XII. CIRCULATION ............................................................................... 46

CHAPTER XIII. OTHER FUNCTIONS ..................................................................... 51

CHAPTER XIV. DURATION OF PREGNANCY ......................................................... 51

CHAPTER XV. DEVELOPMENT OF THE FOETUS IN EACH LUNAR MONTH ............... 54

CHAPTER XVI. VIABILITY ..................................................................................... 63

CHAPTER XVII. MATURITY OF THE FOETUS ....................................................... 64

CHAPTER XVIII. OVUM AND PLACENTA AT TERM ............................................... 66

CHAPTER XIX. CAUSE OF THE SEX OF THE FOETUS ........................................... 73

CHAPTER XX. ATTITUDE, PRESENTATION, AND POSITION OF THE FOETUS .......... 75

CHAPTER XXI. CHANGES IN THE MOTHER DURING PREGNANCY ................. 84

CHAPTER XXII. THE UTERUS AT THE END OF PREGNANCY ................................ 98

CHAPTER XXIII. SIGNS OF PREGNANCY .............................................................. 100
PART III.—NORMAL LABOR.

CHAPTER I.

Causes of Labor .................................................. 129

CHAPTER II.

The Anatomy of the Parturient Canal ......................... 130

A. The Pelvis ..................................................... 130
   1. The Bones of the Pelvis .................................. 130
   2. The Ligaments of the Pelvis ............................. 135
   3. The Pelvis as a Whole .................................... 137
   4. The Inclination and Axes of the Pelvis ................. 141
   5. Differences between the Male and the Female Pelvis .. 144
   6. The Pelvis of the New-Born ............................ 144
   7. Differences of the Pelvis in Different Races .......... 146

B. The Soft Parts of the Parturient Canal ..................... 147
   1. Muscles .................................................. 147
   2. Fascie of the Perineum .................................. 151
   3. The Uterus. The Lower Uterine Segment ................ 153
   4. The Cervix, the Vagina, and the Vulva ................. 155

CHAPTER III.

The Fetal Head .................................................. 156

CHAPTER IV.

Chief Features of Childbirth ................................ 161

CHAPTER V.

The Expellant Forces ........................................... 163
   1. Innervation of the Uterus ............................... 163
   2. Labor-Pains ............................................. 163
   3. Stages of Labor ......................................... 167
   4. Influence of Labor on the Mother ...................... 177
   5. Influence of Labor on the Child ....................... 178
   6. Duration of Labor ....................................... 179
CONTENTS.

CHAPTER VI.
Cause of Respiration ........................................ 179

CHAPTER VII.
Conduct of Normal Labor ..................................... 180

CHAPTER VIII.
Care of the New-Born Child ................................. 208

CHAPTER IX.
Midwives .......................................................... 211

CHAPTER X.
Lying-in Institutions ........................................... 216

PART IV.—NORMAL Puerpery.

Definition ......................................................... 225

CHAPTER I.
The Condition of the Mother .................................. 226

CHAPTER II.
The Care of the Mother ........................................ 233

CHAPTER III.
Signs of the Puerperal State ................................. 243

CHAPTER IV.
The Condition of the Child ................................... 244

CHAPTER V.
The Care of the Child .......................................... 246

CHAPTER VI.
Congenital Weakness .......................................... 253

ABNORMAL DIVISION

PART I.—ABNORMAL PREGNANCY.

CHAPTER I.
Multiple Fetation ............................................... 257
§ 1. Superfecundation ........................................... 257
§ 2. Superfetation ............................................... 257
§ 3. Common Multiple Fetation .............................. 258