

**STUDENT'S MANUAL OF  
COMPARATIVE  
ANATOMY AND GUIDE  
TO DISSECTION, PART I**

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Student's manual of comparative anatomy and guide to dissection, Part I by G. Herbert Morrell

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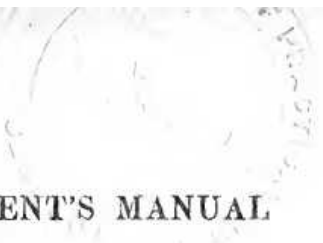
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**G. HERBERT MORRELL**

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TO DISSECTION, PART I**



Book  
Morrell  
14072



THE STUDENT'S MANUAL  
OF  
COMPARATIVE ANATOMY,  
AND  
GUIDE TO DISSECTION.

DESIGNED FOR THE USE OF SCHOOLS AND OF JUNIOR STUDENTS  
IN THE UNIVERSITIES.

PART I.  
MAMMALIA.  
(ANATOMY AND DISSECTION.)

BY  
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COMPARATIVE ANATOMY,

AND

GUIDE TO DISSECTION.

PART I.

MAMMALIA.

(ANATOMY AND DISSECTION.)



## ERRATA.

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- Page 6, line 5, *for* Proboscedia, *read* Proboscidea.  
" 16, " 11 from bottom, *for* Phascochæres, *read* Phacoçhærus.  
*for* Dycoteles, *read* Dicotyles.  
" 11, " 3, *for* Phascolomydæ, *read* Phascolomidæ.  
*for* Hysiprimmus, *read* Hysiprimnus.  
" 24, " 15, *for* post-scapalar, *read* post-scapular.  
" 39, note, *for* aromion, *read* acromion.  
" 53, note, *for* Didelphydæ, *read* Didelphidæ.  
" 55, line 13, *for* Phascolomyidæ, *read* Phascolomidæ.  
" 81, " 7, *for*  $\frac{1}{1.1}$ , *read*  $\frac{1}{2}$  or  $\frac{1}{2.1}$  or  $\frac{1}{2}$ .  
" 85, " 10, *for* Hysiprininus, *read* Hysiprimnus.  
" 85, " 22, *for* Ornithorhynchus, *read* Ornithorhynchus.  
" 88, " 7, *for* Arthodactyla, *read* Artiodactyla.  
" 141 " 7 from bottom, *for* reptum, *read* septum.  
" 146 " 9 from bottom, *for* occuli, *read* oculi.  
" 159 " 6 from bottom, *dele* pair of.  
" 160 " 5, *for* of each pair of, *read* of the.  
" 168 " 4 from bottom, *add* in Man *after* temporal bone.  
" 181 " 2 from bottom, *for* clavide, *read* clavicle.  
" 182 " 2, *insert commas after* syringe *and* made.  
" 188 " 4, *for* rena *read* renal.  
" 235 " 2 from bottom, *for* Glasserian *read* Gasserian.



## P R E F A C E.

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IN preparing the following short outline of the Anatomy of the Mammalia, and of the Methods to be pursued in investigating (*a*) the arrangement of parts in the Mammalian Body, and (*b*) the special construction of certain of these parts, *e.g.* the Heart, Brain, Eye, and Cerebral Nervous System, frequent reference has been made to, and almost verbatim extracts taken from, the following books and papers, *viz.*:—

*Carpenter.* Principles of Comparative Physiology.

*Cobbold.* Cyc. Anatomy and Physiology,—*art.* Ruminantia.

*Ellis.* Demonstrations of Human Anatomy.

*Flower.* Osteology of the Mammalia, in Journal of Anatomy and Physiology, 1867 and 1869 (Mammalian Teeth). In Philosophical Transactions, 1867 (Marsupial Teeth), and 1865, p. 633 (Marsupial and Monotreme Brain).

*Gray.* Human Anatomy.

*Gulliver.* Proceedings of Zoological Society, March, 1870 (Striated Muscular Fibre of Œsophagus).

*Hewson.* Sydenham Society, 1846 (Blood Corpuscles).

*Hulke.* British Medical Journal, September, 1870 (Eye).

*Huxley.* Elements of Comparative Anatomy, 1864.

*Mayer.* Anat. Untersuchungen über das Auge der Cetaceen.

*Marshall, J.* Phil. Trans., 1850, p. 133 (Azygos Veins).

*Milne Edwards.* Leçons sur la Physiologie.

*Owen.* Comparative Anatomy and Physiology of Vertebrata, Vols. ii. and iii.

*Parker.* Shoulder Girdle.

*Quain.* Human Anatomy.

*Rapp.* Cetaceen.

*Rolleston.* Forms of Animal Life.

*Rutherford.* Quarterly Journal of Microscopical Science, Jan. 1872 (Preparation of the Retina).

*Strangeways.* Veterinary Anatomy.

*Turner* (Edinburgh). In Natural History Review, 1862 (Orbit).

*Van der Hoeven.* Handbook of Zoology, Vol. ii.

*Wagner.* Comparative Anatomy of Vertebrata.

*Waterhouse.* Natural History of Mammalia.

In making such extracts, it has been the object of the Author to present to the Student, within the limits of a few pages, a condensed summary of the salient points to be noted in studying the Mammalian organism; in other words, to point out shortly, and in one handy volume, the essence of matter spread over many pages in many different volumes. Although in some respects the opening pages of the present volume may bear upon their surface the impress of a species of "technical cram book"; it is hoped that the concluding pages, in which a series of Dissections are proposed to the Student, may in some measure erase such an impression, from the fact that in the pursuit of such practical study as there put out the Student is so brought face to face with many of the structures treated of in the former part of the volume that they cannot any longer remain to him mere abstract idealities, but must become well defined, tangible realities, impressed upon his mind as things seen.

In conclusion, the Author would express his sincere thanks to Mr. C. ROBERTSON, Demonstrator of Anatomy and Physiology in the University Museum, Oxford, for his untiring supervision of the proof-sheets passing through the press, and for his many valuable hints and suggestions as the work proceeded.

3 PARK STREET, OXFORD,

October, 1872.

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