

**THE HEATH SCHOLARSHIP PRIZE ESSAY.  
ON THE DEVELOPMENT AND ANATOMY  
OF THE PROSTATE  
GLAND. TOGETHER WITH AN ACCOUNT  
OF ITS INJURIES AND DISEASES AND  
THEIR SURGICAL TREATMENT**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649661824

The Heath Scholarship Prize Essay. On the Development and Anatomy of the Prostate Gland. Together with an Account of Its Injuries and Diseases and Their Surgical Treatment by W. G. Richardson

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Cover @ 2017

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**W. G. RICHARDSON**

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## THE PROSTATE GLAND

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LONDON  
J. & A. CHURCHILL  
7 GREAT MARLBOROUGH STREET

1904

4581

PRINTED BY  
SPOTTISWOODE AND CO. LTD., NEW-STREET SQUARE  
LONDON





## PREFACE

THE late George Yeoman Heath, M.D., M.B., D.C.L., F.R.C.S., Professor of Surgery in the University of Durham, and President of the University of Durham College of Medicine, bequeathed the sum of 4,000*l.* to found a scholarship in surgery, the interest to be awarded every second year.

All graduates in Medicine or in Surgery of the University of Durham are eligible to compete for this Scholarship.

In March 1902 the Trustees of the Heath Scholarship selected as the subject of the essay for 1904 'The Development and Anatomy of the Prostate Gland, together with an account of its injuries and diseases and their surgical treatment.'

On the recommendation of the Professor of Surgery (Mr. Frederick Page) the Council of the College of Medicine awarded the prize to my essay.

Although the allotted subject included an account of the injuries as well as the diseases of the prostate, I have made no mention of them. Uncomplicated injuries are very rare, and I have had no opportunity to observe any such case. Other diseases than that which is known as Chronic Enlargement or Hypertrophy have been dealt with in a very cursory manner. Chronic enlargement being the most important and commonest affection of the organ, it overshadows all other diseases of the prostate.

The essay was written with care not to reveal the identity of the author, and this prevented me from disclosing the names of the surgeons to whom I am indebted for the histories of seventeen of the cases and for many of the specimens. I should like to take this opportunity to thank Dr. Hume, Mr. Rutherford

Morison, Mr. Ridley, and Mr. Martin, who not only placed the histories of their patients at my disposal, but also allowed me to take the specimens which they removed during operations upon the prostate. To Mr. John Clay and Mr. G. Gray Turner, the surgical registrars at our Infirmary, I must also acknowledge my indebtedness for the notes of many of the cases.

The Council of the College of Medicine have very generously made me an additional grant of 25*l.* to be devoted to reproducing the drawings and have granted me permission to publish the essay.

It will be noticed that no references are made to the sources of information. I should like to have made good such an omission, but to do so would involve going over the whole work again. This is only an essay, and it makes no pretension to be a treatise on the subject of the prostate. I therefore publish it exactly as it was submitted.

The specimens and drawings which accompanied the essay are now in the museum of the College of Medicine. The drawings were all made by me from the specimens, with the exceptions of numbers 31, 32, and 33, which I copied from Owen's 'Comparative Anatomy,' and number 34, which I copied from the 'Journal of Anatomy and Physiology,' April 1901. I wish to thank Dr. Berry Hart for his kind permission to reproduce this illustration.

W. G. R.

*June 1904.*

## LIST OF SPECIMENS

### A. ANATOMY.

1. Normal Adult Prostate.
2. Normal Adult Prostate, with Vasa Deferentia and Vesiculae Seminales.
3. Accessory Organs of Generation, showing Prostate, Vasa Deferentia, Vesiculae Seminales, and Cowper's Glands.
4. Bladder, Prostate, and Urethra, in coronal section viewed from the front. Vesiculae Seminales, Vasa Deferentia, Ejaculatory Ducts, and Prostatic Utricle, viewed from behind.
5. Same as No. 4.
6. Sagittal Section of Adult Pelvis in middle line.
7. Sagittal Section of Adult Pelvis  $\frac{1}{2}$  inch to the left of middle line.
8. Sagittal Section of Adult Pelvis  $\frac{3}{4}$  inch to the left of middle line.
9. Coronal Section of Adult Pelvis immediately behind the Symphysis Pubis, viewed from behind.
10. Coronal Section of Adult Pelvis immediately in front of Prostate, viewed from behind.
11. Coronal Section of Adult Pelvis through Prostatic Urethra, viewed from behind.
12. Coronal Section of Adult Pelvis behind Urethra, viewed from behind.
13. Sagittal Section of Pelvis of Full-term Fetus.

### B. COMPARATIVE ANATOMY

14. Genitalia of Australian Opossum.
15. Genitalia of American Opossum.
16. Genitalia of Small American Opossum.
17. Genitalia of Squirrel.
18. Genitalia of Guinea-pig.
19. Genitalia of Guinea-pig.
20. Genitalia of Rabbit.
21. Genitalia of Hedgehog, in February.
22. Genitalia of Mole.
23. Bladder and Prostate of Dog.
24. Genitalia of Civet Cat.
25. Genitalia of Large Black Ape.
26. Genitalia of Large Black Ape.
27. Hypertrophied Bladder and Enlarged Prostate of dog.
28. Bladder and Prostate of Dog, with Vesical Calculus.

### C. PATHOLOGY

29. Enlarged Middle Lobe of Prostate.
30. Sacculated Bladder from same case as specimen 29.
31. Enlarged Prostate, sacculated inflamed Bladder, dilated Ureters, and Pelves of Kidneys.