

**THE NEW PHYSIOLOGY  
IN SURGICAL AND  
GENERAL PRACTICE**

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The new physiology in surgical and general practice by A. Rendle Short

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THE NEW PHYSIOLOGY  
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## P R E F A C E

THESE chapters are intended for the general practitioner, the consulting surgeon, and candidates for the higher examinations in physiology.

There was a time when one man could be physiologist and surgeon too, but the rapid march of progress in each field has left a great gap between the sciences which is continually widening. The triumphs of the surgeon are unknown to the physiologist, and the converse is equally true. Yet many of the discoveries of the past ten years which have so changed the face of physiology are fraught with vast possibilities for the clinician. This book is an attempt to sift out from the New Physiology that which is likely to be of value in the actual diagnosis and treatment of patients.

It would be a small service to lay before the practical reader mere theories or guess-work. With but few exceptions, only the established and settled conclusions arrived at by many competent and independent workers have been introduced. Part of the chapter on cutaneous anæsthetics and a few other researches and passing suggestions for which the author is personally responsible, must stand in a different category.

An effort has been made to explain matters so simply that they may be intelligible to those having the most elementary knowledge of physiology, and all technical terms have been avoided or defined.

There are excellent manuals now published treating of the application of physiology to diseases which principally concern the consulting physician. This little book limits itself to surgical problems, and to the common every-day aspects of disease that confront us all, physicians, surgeons, and general practitioners alike.

I owe a debt of thanks to my chief, Professor A. F. Stanley Kent, for some valuable suggestions and criticisms.

A. R. S.

BRISTOL,

*September, 1911.*

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CHAPTER I.

THE THYROID AND PARATHYROID  
GLANDS.

History—Removal of the thyroid and parathyroids—Removal of parathyroids alone—Removal of thyroid alone—Thyroid feeding—Chemistry of thyroid colloid—Parenchymatous goitre—Iodoform and thyroidism—Action of iodides on gummata and atheroma—Exophthalmic goitre—Practical deductions.

MUCH of the clinical and experimental work which has been done in connection with these glands can no longer be described as new, but it will be helpful to mention in passing some of the well-known results obtained by the first observers.

HISTORY.

As long ago as 1859, Schiff described the fatal result which inevitably supervenes after removal of the thyroid gland in dogs, but it was not until "cachexia strumipriva," or operative myxœdema, was found to follow so many of Kocher's early operations for goitre on patients coming from the goitrous Swiss valleys, that this fact attracted much attention. The