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ON
LONG, SHORT, AND WEAK SIGHT,
AND THEIR TREATMENT,
BY
The Scientific Use of Spectacles.

Now ready, 8vo., pp. 741, cloth, 24s.,

BY THE SAME AUTHOR,

A TREATISE ON THE DISEASES OF THE EYE,

Illustrated by numerous coloured Ophthalmoscopic Plates and
Engravings on Wood.

JOHN CHURCHILL & SONS, NEW BURLINGTON STREET.

ON

LONG, SHORT, AND WEAK SIGHT,

AND THEIR TREATMENT,

BY

The Scientific Use of Spectacles.

BY

J. SOELBERG WELLS,

PROFESSOR OF OPHTHALMOLOGY IN KING'S COLLEGE, LONDON; OPHTHALMIC SURGEON TO KING'S
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OPHTHALMIC HOSPITAL, MOORFIELDS.

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PREFACE.

I HAVE endeavoured in these pages to lay before the reader, in an easy and practical form, the modern theories of the affections of the Accommodation and Refraction of the Eye, so as to enable him at once to grasp the most salient and important points in the symptoms, diagnosis, and treatment of these diseases. I have purposely abstained from mathematical calculations, and have confined myself to such simple formulæ as I have found most serviceable in practice.

I have chiefly followed the views of Von Graefe and Donders in treating of these affections; indeed, it is to their admirable and important researches that we are mainly indebted for the scientific elucidation and treatment of this class of eye diseases.

The favourable reception accorded to the former editions of this work, has encouraged me to add

considerably to the present, in the hope of making it as complete a synopsis as possible of the group of diseases of which it treats.

The following symbols are frequently employed in the course of the work: $\frac{1}{A}$, means range of accommodation; *r*, punctum remotissimum (far point); *p*, punctum proximum (near point); ∞ , infinite distance; ', foot; ", inch; ''', line.

The test types of Jaeger may be obtained from the Secretary of the Royal London Ophthalmic Hospital, Moorfields; and those of Snellen from Messrs. Williams and Norgate, Henrietta Street, Covent Garden.

16, SAVILE ROW, W.
January, 1869.

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ON

LONG, SHORT, AND WEAK SIGHT,

AND THEIR TREATMENT BY THE

SCIENTIFIC USE OF SPECTACLES.

CHAPTER I.

THE ACCOMMODATION OF THE EYE.

The affections of the refraction and accommodation of the eye are daily assuming more importance, and are engaging more and more the attention of some of our most able and scientific ophthalmologists. For it is now known that certain forms of asthenopia and amblyopia, which had in former times set all remedies at defiance, are not due, as was generally supposed, to serious lesions of the inner tunics of the eyeball, but are in reality dependent upon some anomaly of the refraction of the eye, or a peculiar asymmetry of the organ (astigmatism). Since the discovery of these important facts, a considerable group of cases has

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