

THE DETERMINATION OF THE NECESSITY FOR WEARING GLASSES

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The Determination of the necessity for wearing glasses by D. B. St. John Roosa

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D. B. ST. JOHN ROOSA

**THE DETERMINATION
OF THE NECESSITY FOR
WEARING GLASSES**

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—OF THE—

NECESSITY FOR WEARING GLASSES.

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—BY—

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1887.
GEORGE S. DAVIS,
DETROIT, MICH.



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PREFATORY NOTE.

The object of this little book, is to serve as a guide to the general practitioner in determining whether a given patient does or does not require glasses, either to aid the vision or to relieve a symptom that may not be directly referred to the eye.

It is by no means a complete manual of errors of refraction or failures in accommodation, but I believe that a careful study of these pages, will enable the practitioner to decide in a large proportion of cases, when the question comes up, whether or not glasses will probably be of service.

I also hope, that the very busy man who is not inclined to seriously study the subject treated of in this little volume may get from the short time that he devotes to it, an accurate idea of how much has been accomplished in the last quarter of a century in adjusting glasses for the improvement of sight, and the mitigation and cure of distressing symptoms.

NEW YORK, January, 1887.

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CHAPTER I.

History of the arrangement of test-types as scientific tests of visual power.—The invention of the ophthalmoscope made it possible to measure the refraction of the eye.—How glasses were formerly chosen.—Donders on Accommodation and Refraction.—Apparatus required for testing vision.—Classification of conditions requiring glasses.

It was not until the year 1854, that any systematic attempt was made by the medical profession to accurately estimate the visual power. During this year, Alfred Smee, in England, and Eduard Jæger, in Austria, published a set of test-letters, or test-types for this purpose. These tests were convenient, but insufficient. They consisted merely of a collection of paragraphs in type, ranging from the finest that is made, to very large letters, such as are used in hand-bills. They gave no idea as to how far each size should be seen by a normal eye, and beyond the statement of the ability of the patient to read fine or coarse type fluently or slowly, it was not possible with them—valuable as they were, and still are—to give an exact idea of the visual power of a given person. In 1868, Snellen, of Holland, published a set of test-types, which virtually showed the problem of registering vision. Snellen's types are founded upon the principle of *determining the smallest angle in which the*