SUBJECTIVE ASTIGMOMETRY

THE FIRST RADIUS-Figure FOR SUBJECTIVE ASTIGMOMETRY*

BY

S. HOLTH, M.D.

OSLO

Javal demonstrated on September 4, 1865, at the Heidelberg meeting (Klin. Monatsbl. f. Augenheilk., 1865, pp. 336-340) an apparatus containing seven concave cylindrical lenses, which by combination represented 19 different concave cylinders with the axis adjustable in any meridian. The apparatus was not only for use in astigmatism in myopia (Javal's own refraction); by means of convex spherical lenses in the trial frame this apparatus could be used for astigmatism in any eye. The fact was, that the examination was made in near distance and binocularly with two objects: a circle before one eye and radiating lines before the other eye; the intention of this measure was to suspend convergence and accommodation—and in this way atropine should be superfluous.

The quoted report was not illustrated; but Javal's little radius figure for each 15th meridian may be seen in the first German edition of F. C. Donders "Die Anomalien der Refraction und Accommodation des Auges" (Wien 1866), p. 383, Fig. 153, which is reproduced here, Fig. 1, in the original size.

It is this radius-figure, magnified for the distance of six metres and surrounded with the clock periphery (radiating lines for every hour and for every half-hour), which even to-day is used by nearly all oculists for subjective astigmometry.

* From a lecture and demonstration, February 6, 1936, at the meeting of the Oslo Oculist Union.