A NEW KERATOSCOPE*† WITH SELF-LUMINOUS PLACIDO DISC

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THIS new instrument embodies the features of the Placido disc, but obviates the limitations of the old Placido disc, which has been found rather cumbersome for routine use.

The head of the instrument is made of a very tough plastic material and the concentric light and dark circles are illuminated through a battery handle, thus making the complete keratoscope convenient to handle, readily portable, and independent of external illumination (Figure).

In all surface irregularities of the cornea, elevations or depressions, irregular astigmatism, alignment of corneal grafts, etc., the distortion of the circular pattern is immediately discernible.

In the early stages of keratoconus, the horizontal and vertical crosslines are especially useful where the circles may still be regular but the two halves of the horizontal axis form an angle, which is the earliest sign of conical cornea (Amsler). In the later stages this angle becomes more marked, the distance between inner and outer circles becoming smaller temporally and below, while that between the inner and outer circles nasally and above becomes enlarged. The central circle may be slightly distorted and displaced downwards and outwards.

A further diagnostic procedure in cases of conical cornea is to ask the patient to look at the centre, then along the horizontal line at the innermost circle, first to the left and then to the right, then up and down along the vertical lines. This enables the central portions of the cornea to be explored. In the early stages of keratoconus it is found that an oscillation or rocking of the mires becomes apparent when the patient looks at these different points. The usual photograph taken by the keratograph gives a picture of the centre only, whereas with

* Received for publication May 13, 1957.

† Manufactured by Messrs. Keeler, London, W.1.

the keratoscope one can examine the whole paracentral area of the cornea in a few seconds.

The keratoscope head, which fits the Keeler 'New Era' ophthalmoscope handle, will be found a useful addition to the routine equipment of the ophthalmologist. The performance of this keratoscope is an improvement on the old placido disc as marked as that of the self-luminous ophthalmoscope in comparison with the reflecting type of instrument.