FOCALLY-ILLUMINATED HAND MAGNIFIER*

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The advantages of focal illumination implicit in the techniques used in laboratory- and bio-microscopy are seldom available for low-power examination of the anterior segment of the eye until that of simultaneous bimanual inspection with lens (or torch) and loupe has been mastered. This presents serious disadvantages to the uninitiated—the undergraduate for example—who frequently remains in ignorance of important ocular signs because in the time at his disposal he has been unable to become sufficiently skilled in examination methods.

The illuminated magnifier illustrated here has been produced to my design,† primarily for the purposes of undergraduate demonstration and casualty inspection.

It consists of a simple × 6 magnifier and a condenser lens so arranged that the latter produces an image of a "goal-post" filament at the principal focus of the former. Accuracy in adjusting the coincidence of these foci is simply achieved by altering the position of the bulb in its mount. A transistor-type battery gives good illumination for 3 weeks’ daily use.

I have used this type of magnifier for some years and find that, in addition to its primary purpose, it can be very useful for critical inspection of the cornea and anterior chamber in recumbent patients, or in infants, in whom the advantages of having one hand free for retraction of the eyelids are appreciable. For such purposes it is useful to have an instrument made with an aplanatic lens in place of the simple lens fitted to the student model.

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