

NEW DOUBLE-BLADED KNIFE FOR KERATOPLASTY AND OTHER SURGICAL PROCEDURES

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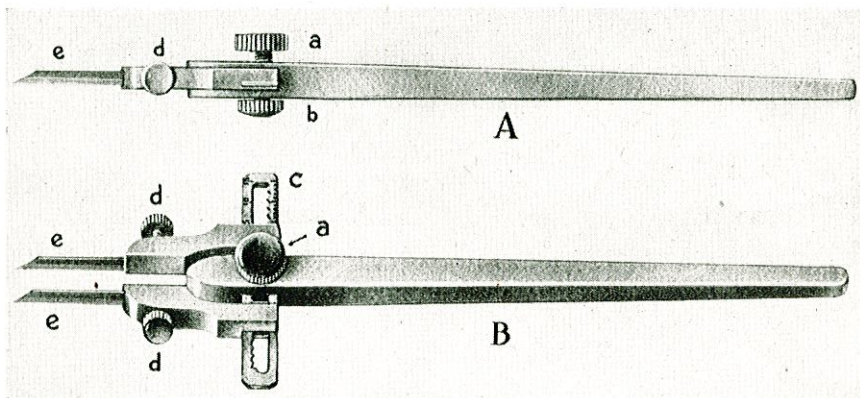


FIGURE 1.

IN 1932, in an article on keratoplasty, I described a double-bladed knife.¹ The instrument, provided with very sharp twin blades made of razor blade material, was used to perform square keratoplasties. The blades were fastened to the instrument by means of screws and the distance separating the blades could be adjusted to transplants of different sizes. The size of the graft was measured with a ruler marked in millimeters. The tightening of the screws which fastened the blades in position

and of those of the blade carriers had to be adjusted with the aid of a screwdriver.

In 1941, the double-bladed knife was modified, incorporating hand manipulated screws into the instrument which permitted the adjustment of the instrument to different sizes of transplants without employing a screwdriver. The screwdriver was needed only to fasten the blades into position, and the ruler was still necessary to measure the distance between the blades.

The new instrument presented now (fig. 1, A and B) has been improved still further to simplify its handling.* The

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* Manufactured by E. B. Meyrowitz Surgical Instrument Co., Inc., 520 Fifth Ave., New York.

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blades (e) are fastened to the blade carriers by the thumb screws (d). The adjustment of the distance between the blades is easily accomplished by a rack and pinion arrangement (b and c) which controls the adjustment of the blade carriers to different distances, and a thumb screw (a) which locks the blade carriers into position. In addition, a graduated scale in millimeters (c) has been incorporated into the instrument which measures the distance between the blades.

The instrument has been found useful also for keratoplasties whenever flaps of different lengths and even widths have to be made, such as in scleral resection for retinal detachments, as well as in some plastic operations in skin and mucosa.

REFERENCE

1. Castroviejo, Ramon: Keratoplasty: an historical and experimental study, including a new method, *Am. J. Ophth.*, 15:906-907 (Oct.) 1932.