

NEW HANDLE FOR RAZOR BLADE KNIVES: MANNER OF PREPARING THE BLADES

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IN 1932 I described a simple way of making very sharp knives out of razor blade material.¹ In 1933 a new handle to hold these blades was described and the handle-knife combination published as a new knife for ophthalmic surgery.² Although the handle described in 1933 had a quick-acting mechanism which permitted an easy change of the blade by turning a thumb screw and was simple enough, a new handle has been designed which further simplifies the previous one.*

The handle has been given an octagonal shape in order to facilitate holding it comfortably and securely in any position. Blades, not too flexible and single-edged, such as those illustrated in Fig. 2-a, have been found most desirable. Figure 2 illustrates the simple way of cutting these blades, shaping them to fit the handle. The blade is cut with special nippers (A). One of the limbs of the nippers has been replaced by a piece of steel with a groove ground into it, where the cutting edge of the other limb

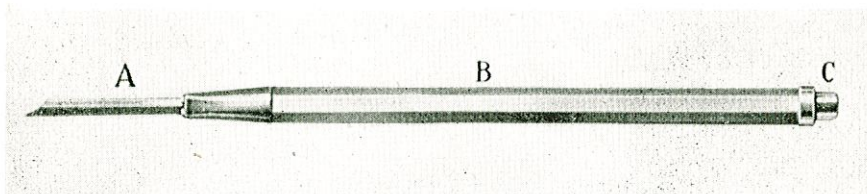


FIG. 1.—Author's new handle for razor blade.

In the new model (fig. 1) the handle (B) is hollow, having therein a slideable blade or chuck provided with jaws on one end to hold the blade (A), a push button (C) on the other end and a spring within the handle which permanently tightens the grip of the jaws on the blade. Pushing the button releases the jaws permitting the blade to be removed and a new one inserted. By releasing the pressure on the button, the jaws again clamp the blade firmly and the instrument is ready for use.

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

of the nippers fits. A stop plate screwed under the grooved limb of the tool serves to support the razor blade (b), resting the blade on the plate upon the dull border. With these nippers the blades can be cut lengthwise in two portions, one 3 mm. wide (c) containing the cutting edge and the remaining portion (d) of the blade to be discarded. The portion with the cutting edge is then cut obliquely (B) and finished as a knife with the shape represented in (e). The finished blade is then inserted into the handle and the utility knife (C) is ready for use.

I have found that this inexpensive knife, so easily made with first quality razor blade material, compares favorably with knives of considerably greater

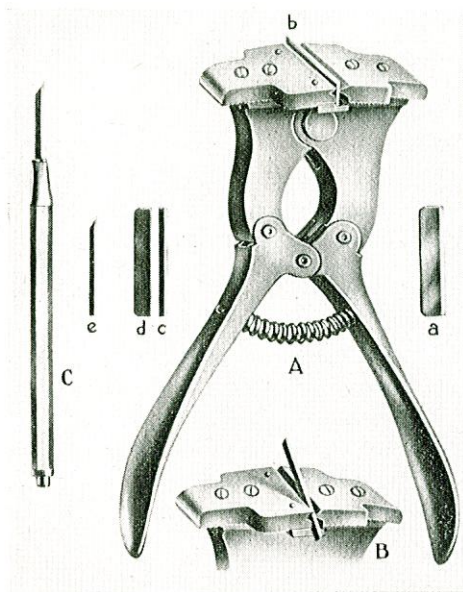


FIG. 2—Manner of preparing blades from razor blade material to fit the handle.

cost. On account of the low cost of these knives, a new one can be used for each operation, a great advantage over more expensive types of knives which require sharpening when they become dull. This utility knife has been found useful in operations on the lids as well as on the eyeball, including delicate procedures such as keratoplasties and keratectomies. The knife has also been found valuable outside the field of ophthalmic surgery, in plastic surgery and in other delicate surgical procedures.

REFERENCES

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2. ———: A new knife for ophthalmic surgery, *Am. J. Ophth.*, 16:336-337 (April) 1933.