THE HANDLE OF THE CATARACT KNIFE*

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THE VON GRAEFE knife has been called an instrument of perfection. Indeed it appears difficult to improve the shape of its blade, if it has the point in line with the back and is not so long and so narrow as to make it liable to bend. Concerning the handle, however, a claim may be made that a broader flat handle is preferable to the conventional one. Such a knife has been made according to my specifications † and has given me satisfaction (Figure).

FIGURE

The flat handle rests comfortably and steadily on the radial aspect of the surgeon's middle finger, and can be held securely and with little effort between this finger, the index finger, and thumb. When the knife is passing through the anterior chamber the flat handle transmits the sensation of remaining exactly in the frontal plane, and thus unintentional back pressure is prevented. After the counterpuncture, the section has to be made without hesitation or delay until the knife is well over the upper part of the iris. Too slow a section has a tearing effect, involving not only the tissue in contact with the knife but also the adjacent tissue. The tearing effect will be greater the softer the eye, and the more vertical the upward sweep of the knife. Even without back pressure the pull may cause premature loss of aqueous with prolapse of the iris in front of the knife. Tearing out of the fixation forceps may likewise be due to the pull of the knife. It is easier to develop the necessary momentum for the oblique upward sweep and so to avoid these complications by using a knife with a broad, flat handle. Further, it is obviously more difficult to commit the mistake of introducing the instrument upside down, an error which is connected with the nearly symmetrical appearance of the conventional handle.

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