APPLIANCES

PATWARDHAN'S CROSS-ACTION IRIS RETRACTOR WITH DOUBLE HOOK*†

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THIS instrument was originally designed in 1953 for facilitating the introduction of an acrylic lens implant after simple intracapsular cataract extraction. It is fairly easy to introduce the lower pole of the lenticulus behind the iris at 6 o'clock, but the iris has to be lifted up with an iris hook at 12 o'clock, so that the upper pole of the lenticulus can be placed behind it. The single iris hook which is usually supplied with ophthalmic operation instruments has the effect of festooning the iris at this point so that the manoeuvring of the lenticulus into position is still a matter of some difficulty after releasing it from the forceps. It was therefore thought that, if two such hooks could be introduced behind the iris, a broader piece of iris could be lifted up and the upper pole of the lenticulus could be more easily slipped in.

Method of Use

Fig. 1 shows the instrument. Its cross action can regulate the width of the strip of iris to be lifted and gives a good control without damaging the iris tissue.

FIG. 1.—Cross-action iris retractor with double hook.

FIG. 2.—Retraction of upper pupillary border.

Fig. 2 shows the retracting hooks separated after having been introduced behind the iris in the closed position. After the lenticulus is released from the forceps in which it is held, the curtain of iris can be brought forward over the anterior surface of the upper pole of the lenticulus and then released as the two hooks are brought together and withdrawn from the eye. The lenticulus can then be eased into position by gently stroking the iris with an iris repositor.

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† Manufactured by Albert Heiss, Tuttlingen, Western Germany.

This instrument has also been found useful in the following operations:

(1) In intracapsular cataract extraction. If the upper pupillary border is retracted, the lens can be grasped nearer its upper pole and extracted with the upper pole foremost, thus obviating any further manipulation such as tumbling and consequent disturbance of the vitreous (Fig. 3).

FIG. 3.—Instrument used as in Fig. 2, the intracapsular forceps grasping the upper pole of the lens.

FIG. 4.—Separation of posterior synechiae in upper quadrant.

(2) In separating posterior synechiae in the upper quadrant, say from 10 to 2 o'clock (Fig. 4).

(3) In cases in which after cataract blocks the pupillary area, when the incision with a keratome is made, a small opening may also be made in the capsule. After the points of the retractor have been introduced into the hole thus made, the cross action may be used to separate the fibres, thus avoiding a drag on its peripheral attachments (Fig. 5).

FIG. 5 (a, b).—Instrument in use for capsulotomy.

(4) In iridotomy if the pupil is drawn up because of previous vitreous loss during cataract extraction (Fig. 6).

FIG. 6 (a, b, c).—Instrument in use for iridotomy.