NEW APPLIANCES*

BY

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THE FOLLOWING instruments have been used at East Grinstead for a considerable period and have been of interest to visitors.

1. Air Tubes

The use of air to reconstitute the anterior chamber after cataract extraction or full-thickness keratoplasty is now an accepted procedure. In order to disturb the cataract section as little as possible, a fine, straight tube with a flattened, smooth end has been made.† The bore is 0.25 mm. in diameter and the flattened end is easily inserted between the lips of the incision without much separation (Fig. 1A).

For full-thickness keratoplasty an angled tube is used (Fig. 1B). Here again the diameter is 0.25 mm. and the terminal 4 mm. are angled to 45° with the shaft so as to facilitate introduction between the edge of the graft and the host cornea. Very little separation of the edges is required to introduce the tube.‡

FIG. 1.

2. Sponges

It is impossible to detect fine fibrils of wet cotton wool at operation and some may still adhere to incisions or graft bed even after forcible irrigation. Such fibrils have been seen in many clinics behind lamellar grafts and originate from cotton-wool pledgets or from the frayed edges of tetra swabs.

For over 2 years no wool swabs have been used in the Corneo-Plastic Unit at East Grinstead; they have been entirely replaced by the use of the camel-hair brush and cellulose sponges. These sponges are made from a wood-pulp viscose§

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† By Ernst Grieshaber of Schaffhausen.

‡ This instrument is made by John Weiss & Son Ltd, of London.

§ This material is manufactured by Sponcel Ltd, 40, Chancery Lane, London, W.C.2.

and the material absorbs up to 25 times its own weight of water. The sponge can be sterilized by boiling and repeatedly used; it can be cut into any required shape and does not fragment (Fig. 2).

FIG. 2.

3. Suture Forceps

It is fashionable to-day to use micro-silk for direct fixation of full-thickness grafts and Kalt 6/0 silk for overlay sutures. Conventional forceps are not suitable for securing such fine material and a special type has been devised to handle it.* These forceps have fine, rounded points without teeth, which enable the silk to be picked up cleanly from the surface of the cornea without fragmenting it. The ends of the forceps carry a long block without cross-hatching, since fine silk slips through the usual type of hatching. The block is 6 mm. long on the shaft of the forceps so that the silk can be readily picked up in mid-air. There is also a stop to avoid springing open the ends of the forceps with excessive pressure: the spring is light and the narrow shaft is highly polished to facilitate the tying of small knots.

FIG. 3.

I am indebted to the instrument makers for their willing co-operation and their ready assistance.

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* These forceps are made by C. W. Dixey & Son Ltd, of London.