A HOLDER NEEDLE*†

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THE finest movements of surgery are made with the fingers and thumb, not with the wrist and hand as a whole. In the usual method of suturing, the needle is grasped by the needle-holder which is held more or less in the palm of the hand. The fine, sharp needles of ophthalmic surgery, such as those made by Grieshaber, inevitably become dulled as they are grasped by the metal blades of the needle-holder in order to pull them out through the tissues, and there are some positions in which it is difficult for the needle-holder to approach, to insert, and then to grasp the emerging needle.

Because of these considerations, a needle has been evolved which is mounted on a simple ring held between the thumb and forefinger. Most of those so far tried have had one eye, but some have two eyes like those of the Singer surgical "sewing machine".

Description.—The Figure shows two sizes and kinds of "Holder Needle" made by Grieshaber.

The shorter, smaller needle has two eyes. The thread is inserted from the concave side of the rear eye, comes out in the groove on the convex side, then enters the forward eye, and comes out again on the concave side. The shorter end of the thread thus emerges from the forward eye and, when the point of the needle has been pushed through the tissue, the thread can be grasped by the forceps while the needle is pulled back leaving the thread in the tissue.

FIGURE.—Two specimens of the holder needle.

The longer needle has one eye, and the thread is inserted from the convex side and emerges on the concave side. Again the shorter end of the thread emerges when the needle is pushed through

the tissue and this shorter end is grasped while the needle is pulled back leaving the thread in the tissue.

As a further refinement to make this holder needle neater in use, a bobbin for the thread has been developed which is lodged in the space within the

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ring. The Singer surgical "sewing machine" has a spool of this kind in the handle.

Advantages in Use.—The needle is held by the ring between the finger and thumb, and can thus be used in any position and at any angle to the tissue. The sharp point is protected from dulling because it does not have to be grasped by a conventional needle-holder; once the thread is delivered, caught with a forceps, and held, the needle is drawn backwards like a sewing-machine needle or a cobbler's awl. To make this procedure smoother, there are grooves along the needle, as is mentioned above, to carry the thread and minimize resistance as it passes through the tissue.

There are very many uses for this "holder needle", with which a single suture, a mattress suture, a double-thread suture, and even a chain stitch can be made.

It is useful in plastic surgery of the eyelids. Since it can carry a long thread, it can be used for putting in one suture after another more rapidly and accurately than can be done with the conventional needle and needle-holder. I have also used it in corneo-scleral and conjunctivo-tenons suturing, and it is also very effective for corneal transplantations and scleral shortenings once the necessary skill has been developed through practice.

This needle requires special care and handling in preparation. It must be protected during sterilization like the points and blades of a cataract knife; a perfectly satisfactory way of doing this has not yet been evolved, but we are sure that this can be done.