APPLIANCE

STERILE ANTERIOR-CHAMBER IRRIGATION*

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No matter what type of operation is employed when extracting a cataract, it is often necessary to wash out the anterior chamber. In doing this it is obviously important that the solution used should be sterile.

As a general rule normal saline is employed which has been made up by the hospital dispenser and stored in glass-stoppered bottles. As these are not sterile on the outside, the usual procedure is for a nurse who has not scrubbed up, to pour the saline into a sterilized undine or container. In doing this there is a very good chance that she will contaminate the neck of the bottle with her fingers and so infect the solution. If it is not infected in this way there is every possibility that it will become so through exposure to the air.

The following is a simple method which is practically foolproof. The illustration shows a 4-oz. "American round" bottle with a metal screw cap. In the top of the cap there is a hole 9 mm. in diameter which is covered by a rubber disk. This bottle is two-thirds filled with normal saline and can be sterilized in an autoclave or placed in a sterilizer along with the instruments before the operation. When the surgeon is ready to irrigate the anterior chamber two sterile needles are passed through the rubber disk. One of these is a long fine needle which should be more than half the length of the container. The second is a short wide-bored needle connected to a length of rubber tubing on the other end of which is the anterior-chamber irrigation nozzle. When the bottle is inverted, air passes in through the long needle and the saline runs out through the short needle and along the tube. It is necessary to make sure that the short needle has a sufficiently wide bore. If it is too narrow the flow is not adequate.

Another advantage of this method is that, if it is necessary to irrigate a second time, the saline starts to run immediately without being preceded by numerous air bubbles as invariably happens when using an undine.

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FIGURE.—Sterilized normal saline container with needles in position.