its surroundings are carefully washed and purified with similar solution, especial care being taken to thoroughly cleanse all the nooks and crannies made by the foldings of the cartilage. Finally the ear is again syringed with warm carbolic and plugged with a narrow strip of gauze wrung out in the same antiseptic. A pad of this material is then placed in the hollow of the auricle, filling up all the irregularities of the ear, and secured by a small pad of wool and a bandage.

At the operation a piece of mackintosh sheeting is placed under the head and shoulders, covered with a towel wrung out in one in twenty carbolic, a second "one in twenty" towel being wrapped round the head, covering the hair. The surgeon removes the gauze from the ear and submits it to a second cleansing, first by syringing with one in twenty carbolic, then by swabbing with a mixture containing carbolic, one in twentyfive, with 1-500 part of perchloride of mercury ("Lister's Strong Mixture").

In the first cleansing of the ear, done by the nurse, it will be found very useful to employ an ætherial liquid soap to remove all greasy material. In operations in which it is required to shave a portion of the head, this should be done at the same time.

Instruments should be boiled and placed in one in forty carbolic. The steriliser should be kept going during the operation in order that any instrument dropped by the surgeon can be at once re-sterilised.

Certain small operations, such as the removal of granulations and polypi, incision of the drum membrane, the opening of small boils, and the extraction of foreign bodies, are frequently carried out in the out-patient room; the ear should always be purified first, and after the procedure is finished, it should be dressed by again syringing with one in forty carbolic and packing with gauze. This dressing must on no account be dispensed with, as its omission has at times been attended with serious and untoward consequences.

The major operations of aural surgery with which I propose to deal are those usually done under a general anæsthetic. They include the removal of exostoses (bony growths of the auditory canal), removal of the ossicles, mastoid operations, operations for cerebral and cerebellar abscess, and operations on the lateral sinus. These manipulations I propose to take *seriatim*, leaving their after-treatment to the last.

*Removal of exostoses.*—There are several methods of operating for this purpose. Some surgeons prefer to use the drill, others the mallet and chisel or gouge. It is generally preferable to turn the auricle forwards, so that in putting out the necessary instruments—should the nurse be called upon to do so—scalpel, periosteum elevator, needles, and sutures must not be forgotten. I may say here that whenever an operation necessitates the turning forward of the ear, the nurse should have prepared a strip of gauze, about two inches wide and twelve long, soaked in antiseptic solution, to be used as a retractor. In all operations on the ear there should also be prepared a syringe, gauze strips for packing, hot antiseptic solution, cotton swabs, and small sponges capable of being quickly mounted on Spencer Wells' forceps.

Removal of the ossicles.—Various special instruments are used for this operation, most of which can be found figured in the instrument catalogues. As the hæmorrhage is often sufficiently free to embarrass the clear view of the surgeon, there must be plenty of small sponges at hand for his use. Lister's strong mixture and hot antiseptic solution with a syringe must also be ready.

Mastoid operations.—Some surgeons differ widely in their methods of performing the different mastoid operations. It would be needless in an article like this to enter into any description of the different operations done. The procedures practically resolve themselves into two main groups, the simple opening of the mastoid in acute cases, and the opening of the mastoid and tympanum in cases of chronic suppuration. Some surgeons operate with the trephine, others with the drill or burr, whilst a third group employ the chisel and gouge. The last method is the one I prefer to follow.

Before the operation the side of the head requires to be shaved, an area of clear skin with a radius (measured from the centre of the opening of the ear) of about three and a half to four inches being necessary. It is better to shave too much than too little. Before shaving, the hair should be cut as short as possible with scissors.

This shaved area and the ear itself must be A large number of cotton carefully purified. swabs and small sponges on forceps should be prepared, and it is often advisable to tell off a nurse specially to attend to these and their proper cleansing throughout the operation. Gauze strips, one to act as a retractor, must not be forgotten. When it is likely that the operation will lead to the opening of the brain cavity or the lateral sinus, strips of iodoform gauze must always be prepared beforehand, ready for immediate use. In putting out instruments for these operations nothing should be forgotten, and it is better to err on the side of too many instruments. It is very annoying to the surgeon to find himself without a probe or scissors, or, as I have sometimes experienced, without even the most necessary mallet.



