

DR. THORNER'S MASTOID RETRACTOR.

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During the last eighteen months a new retractor, devised by Dr. M. Thorner, of Cincinnati, has been used in all mastoid operations performed at this hospital. This retractor is a small, flat S-shaped instrument of steel or German silver, about one-and-three-quarters of an inch long, and about five-eighths of an inch broad. It presents a smooth, round, blunt ending at one extremity, and at the other is shaped into a three or four-pronged hook. (Fig. 1.) That used ordi-



FIGURE 1.



FIGURE 2.

narily is this three-pronged retractor; but at times a special four-pronged anterior retractor is required. This is not only larger, but has also an important modification, inasmuch as that portion of the shaft bearing the four prongs is about one inch distant from the main body of the instrument, and is also considerably broader, as shown in Figure 2.* This special hook is used in all such cases where there is a large amount of tissue, together with the auricle, to be retracted anteriorly, as happens often because of great infiltration, or in the course of the so-called radical mastoid operation, when the auricle, together with the detached membranous auditory canal, are to be kept out of the field of operation. The prolonged shaft of this instrument, with its four prongs, dives into the depths back of the detached auricle, and readily takes a good and deep hold.

The instrument is used as follows: The incision having been made, the periosteum divided and turned back with a raspatory, the prongs

*The angle at which this four-pronged end is joined to the main body is in the latest pattern much more rounded than shown in the cut; it is about one-eighth of a circle.

of the retractors are inserted under the edge of the periosteum anteriorly and posteriorly (Fig. 3). Over the blunt end of the anterior retractor a strip of sterilized gauze or a narrow roller-bandage is now thrown, and the double strand carried across the forehead and around the head, and finally across the blunt end of the posterior retractor, where they are finally tied so as to fully retract the margins of the



FIGURE 3.

wound. Of late Dr. Thorner has occasionally applied the gauze strip across the root of the nose, but much oftener just below the nose, across the upper lip (Fig. 4), as in many, perhaps in the majority of cases, the conditions are more favorable to applying the retractors in this manner. In fact, this is one of the many advantages of this instrument: that the relative position of the retractors may be readily adapted to the individual conditions of the case, and, if occasion should require it, be changed at any time during the operation.

Other advantages of this useful appliance are the following:

1st. It holds the wound-margins apart more perfectly than can be done by any assistant. In all movements of the patient's head, whether made involuntarily by the patient himself, or in those made necessary by the operative procedure, the margins are held firmly and constantly apart. The hands of an assistant may become tired during these necessarily long operations and lose their hold; or a sudden movement of the patient's head, or a movement of the assistant himself, displaces the instrument held by him. The *largest* surface possible is thus *constantly* exposed to the manipulations of the operator.

2nd. It lessens the number of assistants required; sometimes the surgeon is not in the position to have a number of trained assistants at his disposal. But even then their work is rendered much easier if they need pay little or no attention to the retractors, and can devote all their attention to the other details. A most important point, however, is the fact that the small amount of room makes of necessity too

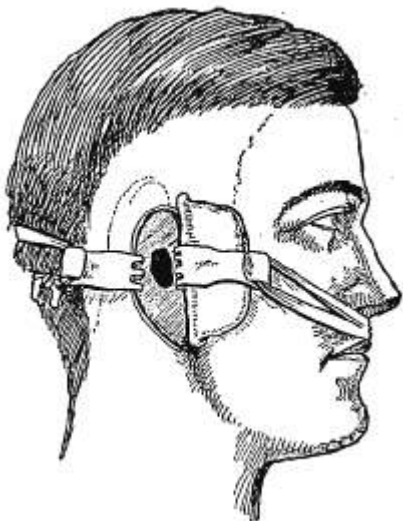


FIGURE 4.

many hands a source of annoyance and delay to the operator. Thus these retractors give to the operator the additional advantage of both light and room.

3rd. The retractors have a remarkable hemostatic effect, by completely controlling the oozing from the margins of the wound as soon as they are placed and the gauze strip is tightened up.

In conclusion, it may be said that the sharp prongs and their peculiar curve give them an absolutely secure hold. Should, however, a case require it, or whenever the operator prefers blunt retractors, the instrument may be readily reversed, and the blunt ends be used instead of the sharp hooks. If at any time the wound should need enlarging, or the gauze strip should become loosened, it can be tightened up in an instant by either being hooked upon the small finger of one of the assistants, or by placing a piece of rolled gauze between it and the head at any place where it is out of the way. These retractors can be sterilized, and are cheaper on account of their simple construction. And, finally, they can be and have been used in other surgical operations.