THE REVERSE ANTRUM BONE FORCEPS IN ANTRUM SURGERY.

BY LOUIS OSTROM, M. D., ROCK ISLAND, ILL.

Surgery of the Antrum of Highmore can be divided into two classes, radical and conservative. Of radical operations, we have a range of choice from the most radical of all, Denker's, to others

Fig. 1. Method showing the Enlarging of the Ostium Maxillare.

more, or less complicated, which should be reserved for the desperate cases, where the disease has caused extensive necrosis or other tissue destruction. It must be said that many radical operations are performed where much simpler methods would be by far more preferable for the patient, with just as good results and far less suffering, provided the operation is carefully made.

Conservative surgery is only a relative term, but ordinarily means simple drainage through the alveolus, canine fossa, middle or inferior meatus, with slight modifications. Midway between

these extremes lies a wide medium, which varies almost from radical to conservative. If the operation can be performed under local anesthesia, with no pain, and little or no delay or detention from ordinary business, the operation may be radical to the surgeon, but easy or conservative to the patient, and conversely, if the patient is subjected to inefficient local or general anesthesia, he certainly will consider the most conservative operation quite radical.

I have performed every known Antrum operation, and in selected cases the results have been perfect. The more I do of

Fig. 2. Showing Method of Removing Inferior Meatal Wall.

this work, however, the more I favor medium surgery, that is, operations that take little of my patient's time, and cause him the least suffering, and are made rapidly and give good results.

By the use of my Reverse Antrum Bone Forceps, the technique has been very much simplified, and the operation only takes a short time, with no suffering for the patient. In all cases of Antritis, I nearly always remove the anterior end of the middle turbinate (of course, I exclude in this paper all cases that originate from the teeth), because I have never seen a case of Antritis

that needed surgical interference in which the anterior end of the middle turbinate was not enlarged, and by pressure obstructed the ostium maxillare. When the middle turbinate has been removed, the ostium is carefully examined with a probe in regard to size, etc. If the ostium is thought to be too small to allow sufficient drainage, either because of swelling of the mucous membrane at the edges of the Hiatus semilunaris, or by reason of the anatomical construction of the individual case, the infundibular groove is enlarged as formerly described by others, with Myle's exploring trocar or a strong probe-pointed knife, bent at right angles, which

is thrust into the ostium, and which ordinarily cuts the groove quite easy. However, if only this is done, the slit quickly heals, and the condition remains as before. At this stage, I insert the movable blade of my forceps into the Ostium, and, by cutting downwards and forwards, an opening can be made large or small by cutting away the Uncinate process, and in a very short time. If there should be any objection to removing any portion of the middle turbinate, the Ostium can anyhow often be enlarged as above described in selected cases, making this a most conservative operation.

In a great majority of antrum cases, however, it is best to operate through the inferior meatus. In this case, more or less of the anterior portion of the inferior turbinate is removed, and the antrum wall perforated with trocar, chisel, or trephine. The opening is very easily enlarged backwards and upwards, by using almost any nasal bone forceps, or more easily with the curette. If, however, it is not desirable to enlarge the opening backwards, or if it has been enlarged enough, then I use my Reverse Antrum Bone Forceps, and cut away quickly and easily the anterior portion of the antrum wall of the meatus, as far forward as desired, with no danger to the outer antrum wall, as there is with burrs or raspatories, and no pain or shaking of the patient. Through this opening direct treatment can be carried on to the antrum, as indicated.

The instrument is otherwise very handy in almost any nasal operation, such as the anterior ethmoidal cells, synechias, turbinal hypertrophies, etc.

My sincere thanks are due to V. Mueller & Co., of Chicago, who have experimented on the forceps since May, 1906, and finally brought it to its present state of perfection, combining great strength within small space. A more complete description of my method and the instrument will be published in a later paper.

People's National Bank.