

ration in the ear, but it was not apparent that either the smell or the secretion was essentially affected by the application of the drug.—*Loc. cit.*, p. 301.

#### EXCISION OF THE MALLEUS.

Drs. REINHARD and LUDEWIG (*Archiv für Ohrenheilkunde*, Bd. 27, Feb. 1889, Report of Clinic in Halle) report six cases of excision of the malleus in the clinic within the fifteen months—January 1, 1887, to March 31, 1888. More cases, however, have been recorded in their private practice in the same period. In four cases there was a perforation in the membrana flaccida, close above the short process of the hammer. In all of these cases necrosis of the malleus head was diagnosed, and verified by the operation.

The very chronic discharge in the first case of excision of the malleus, was cured by the operation, and the subsequent free cleansing and drainage, in two months. The second case was benefited. The third case showed a similar result. The fourth case was cured in one month after the operation. The fifth case, with otorrhœa on both sides, was cured by the operation in both ears, for a month; then a return of otorrhœa ensued in both ears. This case being double otorrhœa, and operated on in both ears, furnished two excisions, and makes up the six mallei removed.

#### CARIES OF THE TEMPORAL BONE, FOLLOWED BY PENETRATION OF PUS INTO THE CRANIAL CAVITY, AND COLLECTION OF THE SAME IN THE LOWER PART OF THE NECK.

Prof. DE ROSSI, of Rome, has reported a case characterized by the above prominent symptoms (*Annales des Maladies de l'Oreille*, February, 1889). He maintains that when a purulent affection develops in the mastoid cavity, the pus tends to escape, not always in the direction of the least resistance. Its course is determined by the connective tissue, the bloodvessels, the lymphatics, and the nerves most accessible to the septic matters and the pyogenic microbes. Thus the broad and thick layer of connective tissue over the petrosquamous suture, explains in part the frequency of abscesses on the external wall of the mastoid, and the occasional necrosis in the bone at that point. Again, the numerous veinlets traversing the internal wall of the mastoid cavity form, with the connective tissue accompanying them, the best pathway for the pyogenic microbes into the transverse and sigmoid sinuses. This gives rise to a periphlebitis at these points, without perforation of the bone.

In the case presented by de Rossi to the Academy of Medicine in Rome, which formed the foundation of the paper before us, the pus which collected at the lower part of the neck could be forced out at the external auditory meatus, after following the nervo-vascular fasciæ, through the posterior foramen lacerum, entering again the cranial cavity, where a subdural abscess had formed, and passing by a perforation in the sigmoid sinus, arrived at last in the mastoid antrum, and from there escaped into the tympanic cavity. "It is worthy of note that the membrana tympani remained intact from the processes of disease." Yet it must have been incised if pus escaped in this case from the external auditory meatus; as we are informed it did.

The conclusion of Prof. de Rossi is: "Given symptoms of an intra- or