The lateral and petrosal sinuses were absolutely healthy. The seventh pair of nerves were surrounded with a purulent fluid which, with them, filled the meatus auditorius internus, but the nerves themselves and the bone of the meatus were healthy. The dura mater over the superior surface of the temporal bone was covered with a thick layer of purulent material, which, however, did not differ from the same material found upon the dura so extensively throughout this side of the head.

The bone corresponding to the roof of tympanum and mastoid antrum was found reddened, but showed no trace of ulceration or erosion, and though the dura mater was readily removed from this part, there was no subdural accumulation of pus. The bone was now allowed to freeze in snow for a few days. After being thawed out with cold water, a drop of pale reddish-yellow tenacious, muco-purulent material was found oozing through a small aperture in the bone at a point one centimeter external to the highest part of the ridge indicating the position of the superior semi-circular canal. Through the aperture a piece of fine silver wire was readily passed downwards and forwards across the tympanum. Judging from the appearance of the aperture, it probably served, in the normal state, for the transmission of a small blood-vessel.

The tympanic mucous membrane was thick, soft, pultaceous, and of a dingy red color. The tympanum was filled with a tenacious muco-purulent fluid, or rather with mucus containing a few pus cells. A similar material filled the spaces in the mastoid portion of the bone in the neighborhood of the tympanum. A remarkable anatomical feature in this bone was, that the lateral sinus curved so far forwards that it would have been difficult, if not impossible, to have perforated the mastoid antrum in the usual way without injuring the sinus. The cancellous tissue about the antrum was not at all in communication with that of the mastoid process. This fact probably accounts for the fact that the latter structure did not present any of the external evidences of inflammation.