however, of any conditions which block the nostrils. Mouth-breaking is a well-known cause of pharyngeal disease, and when nasal respiration is impeded in persons suffering from ear symptoms, it should be re-established. Still, so far as the *direct* influence of hypertrophied tonsils upon the ear is concerned, Roosa states that it is doubtful if they ever enlarge to the extent of pressing upon the mouths of the tubes. He advises their removal upon the grounds I have advanced : that they may "effect the health of the pharynx." I have seen patients cured of middle ear disease by the removal of post-nasal vegetations, although hypertrophied tonsils were also present. Another source of danger to the ears from naso-pharyngeal disease direct microbic invasion through the tubes. This undoubtedly occurs.

Occasionally one will observe a patient who has earache, and possibly defective hearing, and find one or more of the throat lesions mentioned, but the examination of the ear will be negative. The drumhead does not present any increased vascularity. Evidently there is no tympanic inflammation. The pain is not so severe or lasting as in tympanic catarrh. It is felt as a shooting neuralgic pain in the ear. I have had under my care two sisters who have shown this condition. One consulted me for occasional attacks of deafness and earache some time ago. I reported her case in the *Maryland Medical Journal* of Dec. 26th, 1891, in an article upon post-nasal vegetations as a cause of deafness. I frequently examined her ear when painful, but there was no inflammation. When I removed the vegetations with Mackenzie's forceps, she experienced severe pain in both ears. Her sister has follicular pharyngitis and tonsillitis. Earache with her is not a marked symptom, but her hearing has been poor. I have, however, often produced an otalgia, or ear neuralgia, with her by simply pressing the tonsils with a probe, or applying an applicator to the naso-pharynx.

I experienced myself last spring a definite and painful proof of the power of throat disease to cause reflex earache without inflammatory changes. I was suffering from an attack of acute tonsillitis on the left side. The afternoon of the second day, my left ear gave me some pain. This steadily increased until by night it was agonizing. I obtained some relief from anodynes, but very little. I could still hear fairly, and could inflate the drum through the Eustachian. Early in the morning I sent for Prof. Chisolm. I feared that he would find an acute aural catarrh. Greatly to my relief he did not. His words were: "It is reflex. The drumhead is not even congested." The correctness of his diagnosis was proven by the sequel. I obtained some relief from the large doses of salicylate of sodium he ordered, but the pain did not cease till my tonsil was well. No ear trouble followed. These cases prove, I think, the power of throat lesions to produce a purely neuralgic earache. Whether or not this reflex can eventually cause organic lesions in the ear, I am not prepared to say ; still, they bring us straight back to my theme—the necessity of finding the cause of earache. In the cases of the two sisters mentioned, the causes were of themselves capable of damaging the ears through the Eustachians. The channel of transmission in these cases was almost certainly the glosso-pharyngeal nerve, which supplies the tonsils, pharynx and tympanum with sensory fibres.

The teeth, and more particularly dentition, constitute a source of ear disease which is not sufficiently appreciated. The occurrence of otorrhœa in babies during dentition is frequently observed. Earache in infants, I am sure, is not always recognized as promptly as it should be. I see babies with otorrhœa whose clinical history is very clearly read backwards from the otorrhœa to dentition, but the pain the little one then had in the ear was not attributed to that organ. I have now a little patient nineteen months old, who first had otorrhœa when one year old, the sequel of measles. Both ears are affected. Twice have I succeeded in stopping the discharge, and twice has the boy had a relapse, each time at the cutting of a new tooth.

Sexton, of New York, who has given the subject of oral irritation careful study, considers irritation from the mouth a most prolific cause of ear disease. He goes so far as to condemn amalgum fillings, vulcanite plates, and retention of teeth which have lost their nerve pulp as dangerous to the integrity of the ears. I have tried to make some clinical observations upon this subject. While I have seen nothing to lead me to accept all Sexton says, I have over and over again seen