

still intact superior laryngeal nerve, the authors endeavoured to produce an experimental paralysis of this nerve, before its passage through the thyro-hyoid membrane, by the subcutaneous injection of an adrenalin-novocaine solution. Should, then, the affected side of the larynx become completely insensitive, the question as to the presence of sensory fibres in the recurrent laryngeal would be decided in the negative. Owing, however, to the impossibility of ensuring that the action of the injected fluid was confined to the desired spot, the experiments led to no definite conclusions.

Great aid, however, towards the solution of the problem was afforded by a case of carcinoma which came under the observation of the writers. The disease involved the left sinus pyriformis and had spread to the lateral wall of the pharynx. Sensation and movement of the larynx were normal. At the operation of partial resection of the pharynx and larynx the left superior laryngeal nerve was divided before its passage through the thyro-hyoid membrane. The result was that the left side of the larynx became completely insensitive, but showed no alteration in its movement, voluntary or involuntary. The authors consider that this result affords very strong confirmation of the opinion to which their examination of patients with recurrent paralysis has led them, namely, that the recurrent laryngeal nerve contains no sensory fibres.

Thomas Guthrie.

NOSE.

Levinger (Münich).—*Pneumocele of the Frontal Sinus*. "Arch. für Laryngol.," vol. xix, Part III.

Hajek and Warren have each reported a case of pneumocele in association with empyema of the frontal sinus, and these the author of this paper believes to be the only examples of the condition hitherto recorded. The following case, therefore, he considers of some interest. A man, aged thirty-six, underwent an operation after the method of Killian for empyema of the left frontal sinus of two years' standing. Healing after the operation was rapid and complete, but about six months later there appeared, on blowing the nose, a large bulging of the frontal sinus region, together with subcutaneous emphysema in the neighbourhood. The swelling and emphysema rapidly subsided, but recurred each time the nose was blown. The nasal cavity was free from pus. An operation was undertaken with the object of producing a firmer scar. What had before been the frontal sinus was again laid open and was found to be occupied by very loose cicatricial tissue. The walls were scraped with a sharp spoon and the inner angle was packed, the rest of the wound being sutured. The patient was warned not to blow his nose forcibly. Three months later there was no trace of bulging, and the cosmetic result was as good as after the first operation.

At the original operation Killian's mucous membrane flap was employed, and thereby the growth of granulations in the region of the fronto-nasal duct was greatly limited. The writer regards it as possible that the resulting weakness of the scar may have been responsible for the later trouble.

Thomas Guthrie.

Denker, A. (Erlangen).—*On the Operative Treatment of Malignant Nasal Growths*. "Arch. für Laryngol.," vol. xix, Part III.

The author of this paper reports two cases of malignant endo-nasal growth, treated by an operation which he has recently devised for disease

of this nature. The method consists essentially in a further extension of the radical operation which he employs for chronic empyema of the antrum. Exposure of the canine fossa is effected by an incision through the mucous membrane and periosteum at the reflection from the cheek to the gum, and this is followed by a somewhat extensive removal of the facial wall of the antrum. The entire mesial wall is then taken away, and free access is thus obtained to the ethmoid cells and the sphenoidal sinus. After removal of the growth the oral wound is closed and subsequent treatment is conducted through the nose.

The first of the two cases was one of malignant endothelioma. The growth was extensive and had produced prominence of the whole left cheek with a fluctuating swelling beneath the inner canthus of the left eye. The hard palate was bulged downwards, and the entire left nasal cavity was filled with growth. At the operation the tumour was found to have arisen from the middle ethmoid cells and to have caused very extensive destruction. A small portion of the dura mater of the anterior fossa, immediately in front of the optic chiasma, was exposed. Recovery was rapid and complete, and no recurrence had taken place seven months after the operation. The microscopic appearances of the growth were those of an endothelioma.

The second case was one of medullary carcinoma. The tumour filled the whole of the right nasal cavity. The facial wall of the antrum was reduced to the thinness of paper and a part of the mesial wall had been destroyed, as had also the bony and a portion of the cartilaginous septum. The growth arose from the posterior ethmoidal region. During the removal of the tumour masses from the roof of the nasal cavity the dura mater of the anterior fossa was torn to an extent of 1 cm. The disease seemed to have been completely extirpated, but death from meningitis took place thirty-six hours after the operation.

The author compares his operation with those which involve skin incisions. He claims that with his method the risk of aspiration pneumonia is diminished and all disfigurement is avoided. The method has also been successfully employed by Professor Manasse, of Strassburg, in two cases of endothelioma.

Thomas Guthrie.

NASO-PHARYNX.

Morse, J. L.—*Diseases of the Naso-pharynx in Infancy.* "Boston Med. and Surg. Journ.," April 18, 1907.

The author's experience leads him to believe that these maladies and the frequency of their occurrence are not appreciated by the general practitioner, that they are often entirely overlooked or improperly treated. The anatomy of the region is shortly recapitulated, and the following conditions are then discussed: acute rhinitis, diphtheritic rhinitis, adenoids, pharyngitis, retro-pharyngeal abscess, and otitis media. The paper is one for general practitioners rather than specialists, and the advice it contains is sound.

Macleod Yearsley.

ACCESSORY SINUSES.

Vernieuwe (Ghent).—*A Contribution to the Study of Closed Ethmoidal Sinusitis.* "La Presse Oto-laryngologique Belge," June, 1907.

The author's observations are based upon the records of two cases. In the first the accumulation of pus in the ethmoidal cells was accom-