

a purulent discharge flowing from the region of the middle meatus in cases in which there is no evidence of disease of the antrum or frontal sinus. In abscess of the sphenoidal sinus the discharge passes into the pharynx and not forwards. There is said also to be pain referred to a deeper seat than is the case in affections of the anterior ethmoidal cells. To open up the anterior ethmoidal cells a steel probe or director should be passed along a line running horizontally through the middle of the middle meatus, and the cells carefully broken down. In order to gain entrance into the sphenoidal sinus the instrument should be passed straight backwards across the middle turbinate body. Where the posterior ethmoidal cells have to be opened they may be reached either by penetrating the anterior cells, or by piercing the wall of the cells upon their orbital aspect.

In empyema of the frontal sinus there is pain in the orbit and tenderness upon percussion over the sinus. There may also be swelling of the superimposed tissues, but this is by no means always the case. In addition there is usually also a purulent discharge from the nose, which runs out when the head is held erect. If the suppuration be acute it may cause necrosis. Resolution may take place or perforation on the face or into the cranium. In order to open the sinus an incision should be made horizontally under the orbital margin, and the bone over the sinus carefully removed until the mucous membrane is in view. This should then be opened and a drainage tube passed down into the interior of the nose. Empyema of the maxillary antrum may result from the presence of carious teeth, from extension of disease from the nose or surrounding bones, from the presence of foreign bodies, from injury, or the irritation of growths. The pus may be situated either within the mucous sac or between the mucous membrane and the bone.

Pain in antral abscess is often severe, but may be slight or even absent. If the cavity be distended one or other of its walls may protrude. There is also a unilateral nasal discharge, increased when the head is held forwards or upon one side. The patient is very conscious of the presence of the discharge, especially when it is foul. The author remarks that the test by transillumination may be useful, but may be illusory. Several cases of antral disease are described. *W. Milligan.*

Lincoln, R. P.—*Removal of a Naso-Pharyngeal Tumour by the Galvano-Cautery Écraseur.* "New York Med. Journ.," May 26, 1894.

THE tumour after removal proved to be a vascular fibroma, and arose from the left half of the pharyngeal vault and the left pterygoid plate. The loop was passed up the left nostril and the mass removed without hæmorrhage. *R. Lake.*

LARYNX.

Gerhardt (Berlin).—*Spasm of the Accessory Nerve combined with Affection of the Vocal Cords.* "Münchener Med. Woch.," 1894, No. 10.

A PATIENT, sixty-two years old, with empyema and bronchitis, had some years ago a traumatic affection, and since that time tremor of the head,

increasing on movement, and continual movement of the occiput. The right shoulder stands higher than the left. The laryngoscope shows the epiglottis to be turned towards the left side. The vocal bands make continual movements during respiration; the right more than the left. If the vocal cords are closed the motion ceases. If the lower part of the thyroid cartilage is touched with the finger, clonic movements of the larynx can be remarked which are not synchronous with the pulse.

This case proves the relation between the accessory nucleus and the laryngeal muscles. The motion only occurring during inspiration proves that the innervation of voice and respiration is different. The symptom can be used diagnostically in affections of the accessory nerve. *Michael.*

Hubbard, D. L.—*An Instrument for Excluding Blood from the Larynx during Throat or Mouth Operations requiring Anæsthesia.* "New York Med. Journ.," June 9, 1894.

THIS instrument consists of a hard rubber O'Dwyer intubation tube of any desired size (a set of three is all that is required), to which is attached a hard rubber tube of the same calibre screwed into the tube by means of a metallic thread. Two slight curves are given to the mouth tube, so that it may not come into the operator's way. The mouth tube acts as the applicator. The instrument is not introduced until the patient is anæsthetized. The anæsthesia may be kept up through the mouth tube when required for a long operation. *W. Milligan.*

Phelps, Charles.—*A Case of Epithelioma of the Larynx.* "New York Med. Journ.," June 23, 1894.

IN this case the patient, a distinguished member of the medical profession, during a paroxysm of coughing, three years before consulting the author, felt a rupture occur in the larynx, and remained aphonic from that moment until the day of his death. When first referred by the author to a laryngologist, the opinion pronounced was that a growth of warty appearance occupied nearly the whole extent of the left vocal cord. The growth was considered to be benign. Two months afterwards, when again seen by the author, he was found physically weak and complaining of laryngeal cough. For some time also there had been considerable difficulty in deglutition. He was now referred to Dr. C. C. Rice, who confirmed the author's suspicion that the growth was malignant. Tracheotomy was advised and was performed almost immediately afterwards. Immediate benefit resulted, but did not continue long on account of the rapid formation of granulation tissue, which protruded through the tracheotomy tube. Two months after this the larynx and trachea were opened externally in the median line, and the tumour, which nearly filled the larynx, was cut away with scissors, its site curetted and carefully cauterized with chromic acid. The operation was performed under cocaine anæsthesia, and but for the occurrence of somewhat troublesome hæmorrhage presented no special difficulties. Towards the end of the second week his strength failed, and he died somewhat suddenly on the seventeenth day after operation. Sections of the tumour showed a stroma of fibrous tissue covered with stratified epithelium, and containing

nests of epithelial cells, many of which included "pearl bodies." It was considered that the process of degeneration had not extended over more than from three to four months. The author remarks, "There seems little doubt that an injury of the vocal cord sustained during a paroxysm of coughing occasioned the benignant growth which later suffered degeneration." The author also remarks that the moral to be derived is that "safety only lies in the earliest possible removal of all tumours, whether benign or malignant." [This case will be read with interest in the light of a recent controversy anent the degeneration of benign into malignant neoplasms.—W. M.] *W. Milligan.*

Stolper.—*Dyspnoea in Chronic Pneumonia and Purulent Bronchitis.* Schlesische Gesellschaft für vaterländische Cultur in Breslau. Meeting, Dec. 8, 1893.

EXHIBITION of specimens from a patient, forty-three years old, who died with marked dyspnoea in chronic pneumonia and purulent bronchitis. There were chronic syphilitic manifestations in the nose, liver and testicles. In the stomach were found five true gummous ulcers situated near the cardiac orifice in the greater curvature. In the *trachea a very severe stenosis*, situated so deeply that it was not possible to see it during life. *Michael.*

E A R S.

McFarlane, Murray (Toronto). — *The Phonograph for Deafness.* "Canada Lancet," May, 1892.

SPECIALLY prepared wax cylinders are used in which depressions have been made at intervals by means of a stylus, the result of each depression being a sound shock of varying intensity according to the depth of the mark made and the number of revolutions made by the cylinder. Thus the sound is intrinsic and not derived from outside sources. It acts by focussing the rhythmic sound-shocks upon the membrana tympani; acting as a massage to the aural conducting apparatus, breaking down recent adhesions. The author quotes several instances in which the use of the phonograph afforded considerable relief. The investigation is, however, still in the experimental stage. *George W. Major.*

Abbot, G. E. — *Ear Cotton (Salmon coloured).* "Med. Rec.," June 23, 1894.

THE author has had made for him by Messrs. Dennison & Co., New York, some salmon-coloured absorbent cotton, which he says is so nearly the colour of the auricle that it is difficult to perceive it in the ear. In cases in which cotton-wool has to be worn so as to protect an exposed mucous membrane, and as a means of absorbing putrid discharges, the author recommends this particular cotton, which he says "comforts the patient who knows that she is not attracting repulsive pity from the public." *W. Milligan.*