

seringue" is employed, as also in the case of the serum injections. He describes a new method of making constant application of drugs to the lumen of the diseased larynx.

The apparatus is essentially an intubation tube, which he covers with a jacket of absorbent wool. This is further enclosed in a sheath of double tarlatan, which is securely fixed to the tube by threads passing through small holes in the latter. The complete instrument is dipped into a solution of menthol and introduced into the anæsthetized larynx. Camphorated naphthol is also used, the tube remaining in the larynx for one or two hours. *Waggett.*

E A R.

Cole.—*Some Observations on the Anatomy and Physiology of the Ear.* "The Laryngoscope," August, 1899.

After a brief description of the evolution of the organ of hearing, the author states his theory with regard to the conduction of sound-vibrations to the internal ear. He believes that sound ordinarily passes not through the ossicles and fenestra ovalis, but through the air of the tympanum and the foramen rotundum. Older physiologists have also taught this view. The writer describes a case in which the ossicles and membrana tympani had disappeared through prolonged otorrhœa. The hearing of the right ear was considerably diminished when the otorrhœa ceased after a mastoid operation. Whilst water remained in the ear after syringing the hearing was much improved, but then suddenly diminished. Cotton-wool, placed in the attic and anterior part of the tympanum, acted as the water had done. He then concluded that the wool, as the water, prevented the dispersion of the sound-waves over the attic and antrum, thus aiding concentration, and he constructed a cone-shaped tube to act similarly. Using the tube, this patient's hearing became normal.

Other cases are briefly described.

The tympanic membrane serves, by vibrating in different segments, to aid the appreciation of a multiplicity of sounds, thus differing from the phonograph, whose metallic diaphragm vibrates as a whole, and not in segments. The ossicles are nothing but a system of levers to regulate the tension of the membrana tympani. The tympanum serves the purpose (as the body of a violin) of intensifying or magnifying sounds.

The writer has failed to obtain results in certain cases where the mucous membrane of the tympanum had been substituted by epidermis, the inner drumhead doubtless being thickened. *R. M. Fenn.*

Dioniso.—*Method of Augmenting the Efficacy of Catheterization and of Facilitating the Injection of Liquids into the Middle Ear.* "Ann. des Mal. de l'Or.," February, 1899.

The writer, deprecating the use of high-pressure injection of air and of fluid in cases of Eustachian stenosis, has arrived at the fact that, when the air-pressure is reduced in the post-nasal space, the orifice of the Eustachian tube closely envelops the tip of the catheter, and so prevents the escape of the fluid or air injected.

His method consists in introducing the catheter and determining its correct introduction by auscultation. He then occludes the patient's nose by digital compression, and directs him to inspire deeply with the mouth shut. At the moment that the aspiration is made, the surgeon makes the injection through the catheter. *Waggett.*

Gaudier.—*Acute Tuberculosis of the Middle Ear.* "L'Écho Médical du Nord," Sept. 24, 1899.

A girl, five years of age, had had acute suppurative median otitis for a month, which had commenced during an attack of tonsillitis. When first seen by Gaudier the condition was the following: Left meatus nearly full of fungating granulation tissue, which bleeds very readily, swelling over mastoid, fever, anorexia, etc.

Operation on the mastoid was performed, the mastoid cells, antrum and tympanum enlarged into one large cavity, a great amount of granulations and friable bone being removed with a sharp spoon. By the tenth day after operation the wound had healed, except where the drainage tube lay. On the twentieth day, on removing the dressing, a fungating mass was found to have reopened and to project beyond the wound. At first the parents refused any further operation, but a few days later consented. By this time the mass was the size of a large orange, and there was a similar growth of smaller size in the meatus. For the next two months similar masses, from the size of a nut to that of a small orange, were removed twice a week. Nothing could check their rapid growth. By the end of this time the child died of exhaustion, and with meningeal and pulmonary symptoms. Examination of the growth and pus for tubercle always gave positive results. On microscopic examination the growth was found to consist of very vascular tissue composed of embryonic cells.

During the next nine months Gaudier paid particular attention to the question of the occurrence of tuberculosis in the ear. Twenty-one cases of otorrhœa with granulations were examined. Of these four occurred in patients otherwise tubercular, but in only one could tubercle be demonstrated either in the pus or in the growths. Of the remaining seventeen cases not one showed any evidence of tubercle. Considering that during the same time fifty-two cases of laryngeal tuberculosis and seven of bucco-pharyngeal tuberculosis came under observation, it is evident that aural tuberculosis is comparatively a rare affection.

Arthur J. Huichison.

Ouspenski.—*Reciprocal Influence of the Affected upon the Normal Ear.* "Ann. des Mal. de l'Or.," January, 1899.

The writer records an instance in which an acute inflammation attacking one ear was followed by bilateral deafness, the watch being heard by the affected ear at 2 centimetres distance, and at 5 centimetres in the healthy ear. A wad of wool was found on the affected side pressing upon the membrane. On removal of this foreign body, the hearing returned to normal on both sides. *Waggett.*

Overacker.—*Multiple Rupture of the Membrana Tympani.*

A man aged thirty-six came to the author's rooms excited and anxious and with the appearance of intoxication. Half an hour before he had received an injury to one ear by the insertion of a julep straw as he turned his head. A loud crashing sound at first, and severe dizziness with staggering gait following, were the symptoms observed.

There were slight laceration of the posterior wall of the canal and three distinct ruptures in the drum from above downwards almost the entire length. The malleus was exposed and pushed downwards. There was very little bleeding. Antiseptics were used, and on the third day the torn part of the membrane was washed out, leaving a circular opening occupying two-thirds of the drum. The perforation was healed on the tenth day. Hearing power at first was absent, but was returning with politizerization till the perforation healed, when the watch was heard on contact only. Inflation was continued for two months.

Eight months later vomiting and dizziness came on, and was relieved on incising the drum, only to return when the incision healed. The symptoms were permanently relieved by incising some cicatricial adhesions between the drum and inner wall of the tympanic cavity, and by following this with inflation. *R. M. Fenn.*

Rimini.—*Cerebellar Abscess.* "Presse Méd.," 1898.

The case of a young man with long-standing otorrhœa, who came complaining of pain of two days' duration. A polypus was removed, and a few days later death suddenly supervened, pain, vomiting, pallor, and cold sweats having in the meantime occurred.

Two abscesses were found in the lateral lobe. Infection had taken place by the internal meatus route, the internal wall of the tympanum being partly destroyed. *Waggett.*

Vacher.—*Treatment of Acute and Chronic Suppurative Otitis with Formol.* "Ann. des Mal. de l'Or.," January, 1899.

The writer extols the use of formol (*i.e.*, the 4 per cent. solution of formic aldehyde) as a decolorant and antiseptic in cases of middle-ear suppuration, which reacts with great rapidity and success. He finds that cocainization can be dispensed with if a 5 per mille solution of formol is used, the solutions double that strength causing considerable pain for two hours. His method is to syringe out with a 5 per cent. solution, and then to apply the 5 per mille solution on a cotton wad, which may be left *in situ* for twenty-four or forty-eight hours. A caution is given with regard to the pain caused by escape of the fluid through the Eustachian tube. *Waggett.*

REVIEW.

Körner, Prof. Dr. Otto (Rostock)—*Die Eitrigen Erkrankungen des Schläfenbeins. Nach Klinischen Erfahrungen dargestellt. Mit 3 Tafeln in Lichtdruck und 20 Textabbildungen. (Purulent Disease of the Temporal Bone, described according to clinical experiences.)* By Prof. Otto Körner, Rostock, with 3 photographic plates and 20 illustrations in the text. Pp. 153.

Professor Körner's well-known work on post-otitic disease of the brain and great vessels has taken such an important position in the literature of otology, that the publication of the present work could not but have excited a considerable amount of interest. Those who have to deal with disease of the temporal bone are constantly striving to learn how "to distinguish the non-dangerous from the dangerous forms