

Schrötter's tube, armed with a dull blade anteriorly to fit into the commissure, was inserted and retained in position for two or three minutes, the operation being repeated at first daily and then at longer intervals. Improvement was constant. Nearly a year had elapsed since the last treatment and the condition now is good. *Price-Brown.*

E.A.R.

Banks Raffle, A.—*Middle-ear Disease as a Complication of Whooping-cough.* "School Hygiene," vol. i, No. 2, February, 1910.

A short note upon a hitherto neglected subject. In 400 cases, 25 children suffered from middle-ear disease. The onset was usually early in the "spasmodic" stage, and marked by very little constitutional disturbance. The complication is probably brought about by the forcing of infective material into the Eustachian tube by the respiratory disturbance of the "spasmodic" stage. *Macleod Yearsley.*

Jacob, Etienne (Paris).—*A Case of Mastoiditis without Perforation of the Membrana Tympani with a Fistula into the External Meatus.* "Rev. Hebd. de Laryngol., d'Otol., et de Rhinol.," January 9, 1909.

A man, aged fifty-eight, consulted the author on account of a purulent discharge from the right ear, when the following condition was found, after removing the pus. The membrane was intact and moved freely with Siegle's speculum. On the posterior wall of the meatus about 1 cm. from the orifice was a small fistula discharging pus, which looked like a furuncle. When the patient inflated his ear by Valsalva's method pus flowed abundantly from this aperture, and when all the liquid had been expelled air came through freely and easily.

About a month before the patient had an attack of influenza, followed by slight pains behind the right ear and diminution of the hearing power. This lasted four days, when the mastoid pain became more intense, and there was some fever. On the eighth day a purulent discharge appeared from the meatus.

Under local anæsthesia the fistula was slit, and the aperture in the bone enlarged slightly. The wound soon healed and the hearing became normal. *Chichele Nourse.*

Leidler, R. (Vienna).—*Carcinoma of the Middle Ear in the Light of the Modern Investigation of Cancer.* "Arch. f. Ohrenheilk.," Bd. 77, Heft 3 and 4, November, 1908, p. 177.

A discussion based upon the course of three cases, details of which are as follows:

CASE 1.—Woman, aged forty-six, who had suffered since childhood from discharge from the right ear. Six months before her first visit to the clinic she was seized with a violent pain in the right ear; at the same time irritation of the region innervated by the lower twigs of the facial nerve was experienced, and two days later facial paralysis was observed.

On examination, a grape-like polypus, greyish-red, ulcerated, vascular and somewhat hard was seen in the meatus. Behind and below the lobule there were a few rounded, hard tumours about the size of peas, and between the mastoid process and the posterior meatal wall a hard resisting tumefaction was perceptible. Submaxillary glands enlarged.

The affected ear was completely deaf; the vestibular tests showed a reduced or obliterated reaction. The polypus proved to be made up of squamous epitheliomatous tissue.

The removal of the growth involved the usual extensive opening up of this region—dura, lateral sinus, carotid artery, digastric groove all being exposed. The cochlea also had been destroyed by the cancer.

Four weeks after the operation a recurrence was found and the patient ultimately died.

CASE 2.—Man, aged nineteen, who also gave a history of long-standing discharge from the left, the affected ear, but about a year before his first appearance the discharge had gradually stopped. Six months later violent pain in the ear was experienced and along with it some bleeding; soon after a painful retro-auricular swelling was observed, which afterwards broke down, discharging foul pus and blood. About the same time vertigo and facial paralysis appeared. Microscopical examination proved the disease to be epithelioma. The operation showed that the growth extended along the Eustachian tube. The after-history of the case is not reported.

CASE 3.—Female, aged forty-six. History of ear-discharge for ten years, with the occurrence of severe mastoid pain at a later date. The radical mastoid operation was performed, but as healing did not take place, a second, and later, a third operation were undertaken. Eventually it was found that the granulations which continued sprouting up from the large cavity were epitheliomatous in character, and that the disease had extended deeply was obvious from the fact that the lateral pharyngeal wall was pushed forward as a conical swelling almost to the middle line in such a way as to block the posterior choana. The after-history is not reported.

The writer comments upon the association of cancer of the ear with suppuration. He suggests that by reason of the extensive bony destruction induced by the disease, an X-ray examination might give early warning of its presence in those cases which are looked upon as simple suppuration.

Dan McKenzie.

Heiman, Theodor (Warsaw).—*Otosclerosis*. "Monats. f. Ohrenheilk.," Year 43, Nos. 10, 11, 12.

This paper was read at the Eighth International Otological Congress held in Budapest, August, 1909. Commencing with an exhaustive historical survey of the work which has been done towards the knowledge of this disease, its ætiology, pathology and treatment are all elaborately discussed, and the author's conclusions finally summarised as follows:

(1) The anatomical basis of the disease consists in a bony ankylosis of the stapedio-vestibular joint, the round window being sooner or later involved as well.

(2) This fixation of the stapes is probably dependent on an inflammatory process *sui generis*, which, perhaps, at first affects the whole or greater portion of the mucous membrane of the middle ear, but is especially localised to the neighbourhood of the oval window.

(3) At present there is not sufficient evidence to suppose that the disease may primarily start in the labyrinth capsule and later spread to the region of the stapedio-vestibular joint, although this possibility cannot be excluded. No explanation can be given for those cases of marked progressive deafness, in which the stapedio-vestibular joint and the nerves of the labyrinth are not also affected.

(4) The main factor in the production of the deafness is the fixation of the stapes, from whatever cause this condition may arise—that is, whether it proceeds from the middle ear, the capsule of the labyrinth, or has a congenital origin.

(5) The cause of the disease is some general disturbance of the nutrition brought about by various agencies.

(6) Heredity, anæmia, syphilis, pregnancy, arthritis all appear to have some causal relation to otosclerosis; it has a certain amount of age-incidence, and the female sex is particularly predisposed to the disease, yet in certain cases no clear reason can be stated for its occurrence.

(7) Accurate and numerous investigations must yet be undertaken in order to determine how far the disease is a local one, and if it is in any way dependent on affections of the nose or naso-pharynx.

(8) Otosclerosis is a local manifestation of some general affection of the nutrition.

(9) The clinical picture of otosclerosis resembles very closely that which occurs in the case of ankylosis of the stapes due to adhesive processes.

(10) A certain amount of improvement may result from general treatment. All local measures in cases of pure primary otosclerosis are useless.

(11) The term "otosclerosis," which neither properly describes the pathology, clinical aspect, nor the cause of the disability, as well as the expression "dry middle-ear catarrh," should be discarded, and "periostitis ossificans stapedio-vestibularis" substituted.

(12) Should further research show that the disease starts primarily in the labyrinth capsule and is of an inflammatory nature, it might then be referred to as "otitis vascularis stapedio-vestibularis."

Possibly the whole article would have been condensed with advantage. As regards the conclusions, some appear redundant and others might well have been omitted. With No. 5 and No. 8, which, after all, embody the essential points of the remainder of Heiman's summary, most will be prepared to agree as to the probable causation of otosclerosis, whilst as far as treatment is concerned No. 10 follows almost as a natural corollary; and except, perhaps, for a record of current opinion, the paper adds nothing of practical worth to our knowledge of the special lesion, since, as far as the aurist is concerned, when once the diagnosis has been established, its treatment still belongs to the domain of general therapeutics.

Alex. R. Tweedie.

Kyle, D. Braden.—*Subjective and Objective Sense of Sound-perception.* "Laryngoscope," January, 1910.

The author distinguishes between *physiological* and *pathological* failure to meet the normal tests for hearing. Whilst the subjective and objective senses of sound-perception may be determined to a large extent by tests, it is not always easy to find out whether a diminution or exaggeration is physiological or pathological, for we certainly do not all hear alike or see alike. Kyle illustrates this by individual tones of voice in singing and speaking, and he thinks that these peculiarities have a great bearing on diagnosis and prognosis in deaf cases. Another peculiarity is that in some individuals there may be a limitation of the field of hearing, corresponding very much with limitations in the field of vision. He suggests that in some there may be a normal subjective and objective sense of sound-perception, in unison and of equal degree, whilst in others

they are not in unison. This is physiological and anatomical, whilst pathological alterations may occur in both normal and abnormal physiological cases, and the latter will not respond to treatment as actively and definitely as will individuals not having these peculiarities.

Macleod Yearsley.

REVIEW.

Diseases of the Nose, Throat, and Ear. By CHARLES HUNTOON KNIGHT, A.M., M.D., and W. SOHIER BRYANT, A.M., M.D. Second edition, revised, with 230 illustrations. Philadelphia: P. Blakiston's Son & Co., 1909.

This handsome volume is the second edition of Dr. Knight's text-book on diseases of the nose and throat, with the addition of a section on diseases of the ear contributed by Dr. Sohier Bryant. The treatise is a condensed, excellent systematic account of the diseases of the parts mentioned. It commences with the description of such points in the anatomy as are of clinical importance, and there is a short account of the physiology of the nose, which contains most of the knowledge the practitioner desires to have. The methods of examination are clearly set forth, but it will be agreed on all hands that a focal distance of sixteen inches is too great for the frontal mirror. Most of the instruments of any use in examination and treatment are described and illustrated, but we do not understand why Woakes' nasal irrigator is drawn upside down. The author describes the various forms of indiarubber and celluloid splints, but adds his belief that "most of these cases do better without such a foreign body in the nose even though it may not be very irritating," an opinion which many of us will share. Dr. Knight is moderate in his views as to the indications for radical operation on the maxillary and frontal sinuses. One of the most complete chapters in the book is that upon deviations of the nasal septum, in which fullest justice is done to various authors; Asch, Roe, Moure, Freer, Ballenger, Killian receive ample justice. A warning is uttered on page 147 against "placing implicit faith in the microscope as a guide in diagnosis, at least as applied to sarcoma." For the removal of hypertrophied tonsils, the author states that "the accepted instrument for use in cutting operations is a modification of Physick's tonsillotome, proposed several years ago by Morell Mackenzie. Many so-called improvements have been suggested which complicate the instrument and add to the difficulty of the operation" (p. 228). He considers that "rightly used in suitable cases it is capable of ablating almost the entire tonsil, and that without endangering the large blood-vessels in the cervical region." His opinion as to the indications for complete tonsillectomy is not very definite, and we venture to think that he has no very strong convictions in favour of its general adoption. Ulcero-membranous or diphtheroid angina due to the fusiform bacillus of Vincent receives due notice (p. 262). The author's views with regard to singer's nodules are not very encouraging. "In most cases the forceps is not available; the use of the cautery demands the utmost skill and delicacy, and is to be thought of only in trained and tolerant subjects; and finally the enforcement of absolute rest, while most essential, is almost impossible" (p. 305). No reference is made to Curtis's special vocal exercise. Very useful indications are given with