

to justify the conclusion that the common ancestor of man and the anthropoid apes possessed these structures in a highly developed form, and made use of them for adding resonance to the voice.

*Thomas Guthrie.*

### E.A.R.

**Langworthy, H. Glover** (Dubuque, Iowa).—*A Case of Hysterical Mastoid Tenderness and Pain without Functional Disturbance.* "Arch. of Otol.," vol. xxxv, No. 5.

There was, in this case, no appearance of disease, and the functional tests indicated a normal condition. The neurologist observed very slight nystagmus, a hyperæsthetic area over the right mastoid, very slight spasm of the right sterno-mastoid muscle. Under psycho-therapeutical treatment the pain and tenderness entirely disappeared. A diagnosis was made on the strength of the predominance of subjective over objective symptoms, the presence of a very slight contracture, the history of nervousness in the patient and the family.

*Dundas Grant.*

**Boenninghaus** (Breslau).—*The Theory of Sound-conduction.* "Arch. of Otol.," vol. xxxv, No. 5.

The author discusses the question as to whether the vibrations of the basilar fibres in the cochlea are set going by the movements of the water column in the labyrinth in mass or molecular movement, his opinion being in favour of the latter, and, in support of it, he quotes the fact that the stapes of the whale is physiologically immobile, in spite of which the animal must probably have extremely delicate hearing, as its sense of smell and touch, which are so highly developed in the fishes, are absent, and the eye in the water can only be of very slight value. He explains the prolonged bone-conduction in obstructions of the sound-conducting apparatus by the whole of the vibrations being transmitted as molecular movement, whereas, when the sound-conducting apparatus is not abnormally tense some of this is lost in setting the conducting apparatus into motion.

*Dundas Grant.*

**Meierhof, E. L.**—*Prognosis of Mastoid Operations in Diabetic Cases.* "Arch. of Otol.," vol. xxxvi, Nos. 1 and 2.

In view of the tendency in any diabetic for acute purulent inflammation of the middle ear to assume a destructive course in the mastoid, the writer advises opening the bone if there is no marked decrease in the secretion of pus after a few days, without waiting for the classical symptoms. He believes that in the future the results of mastoid operations in diabetics will be increasingly satisfactory, even with the presence of a high percentage of sugar in the urine. He quotes the experience of Buch, Eulenstein, Wolf, Schwabach, Moos, Koerner, Muck, Friedrich, Barth, McCuen Smith and others in support of his views.

*Dundas Grant.*

**Schoenborn, S.** (Heidelberg).—*Acute Cerebral Polyneuritis with Involvement of the Acoustic Nerve.* "Münch. med. Woch.," May 14, 1907.

Eight days after exposure to cold, the patient, aged twenty-two, experienced a feeling of vertigo and nausea and soon afterwards immobility of the left side of the face and indistinctness of vision with,

possibly, diplopia on looking to the left. A few days later he observed increasing dulness of hearing of the left ear. The patient could not specify the exact direction of the vertigo. There was no ataxy. When walking with closed eyes he tended to fall to the left side and to walk to the left. Electrical tests showed diminished faradic and increased galvanic reaction of the left facial muscles. Taste was slightly diminished on the front of the left side of the tongue. There was somewhat greater mobility of the posterior part of the left than of the right tympanic membrane under Lieyil, but otherwise no objective change. The tuning-fork on the vertex was heard better in the good ear. On the left side whispers were heard at the distance of between 0.1 and 0.3 meters and "acht-und-achtzig" better than "sieben-und-siebzig." The lower limit of audition was 24 double vibrations and therefore contracted. The upper one was at C<sup>3</sup> for tuning-forks and at 17,000 vibrations for Galton's whistle. Rinne was positive but somewhat shortened. Improvement took place in a few days. The lesion was considered to be in the nerve-trunks rather than in the nuclei or the brain, and was inflammatory rather than apoplectic.

Dundas Grant.

**Takabatake** (Nagasaki, Japan).—*The Changes in the Eye-grounds in Otitic Diseases of the Brain, the Cerebral Membranes, and the Sinuses.* "Arch. of Otol.," vol. xxxv, No. 5.

The author finds the changes in the fundus oculi in otitic suppurations from the skull are more frequently absent than present, in fact, present in only sixteen out of fifty-four cases. With a single intra-cranial complication they were present in six out of thirty-seven cases, and in a combination in ten out of fourteen. As a rule, after evacuation of the pus from the cavity there is a distinct improvement of the optic nerve infection. The more marked development of the changes in the fundus of one side does not prove that the original disease is confined to that side or is more marked on it. As regards prognosis, the changes in the optic nerves appear to furnish no aid.

Dundas Grant.

**Knapp, A.**—*Primary Cavernous Sinus Thrombosis Secondary to Osteomyelitis of the Petrous Pyramid.* "Arch. of Otol.," vol. xxxv, No. 5.

Acute suppurative otitis occurred in an Italian, aged thirty, who suffered from diabetes and ozæna. The left ear was the one affected; paracentesis was performed on two occasions; headache followed on the opposite (the right) half of the head; the right eye began to protrude; the right ear became affected; the left eye began to protrude about ten days later; coma set in and death followed. *Post-mortem* examination revealed an osteo-myelitis of the tip of the petrous bone without any distinct pus but with the presence of granulations and disintegration of bone. The purulent thrombus in the cavernous sinus was secondary to the osteo-myelitic focus at the petrous apex. The condition then extended to the cavernous sinus of the other side, causing exophthalmos, and backward to the jugular bulb and sigmoid sinus of the same side. Symptoms of pyæmia were absent and there was no meningitis. In spite of interference with the intra-orbital circulation there were no changes in the fundus oculi, a point which the author emphasises in agreement with Jansen's experience. The rapid involvement of the temporal bone is explained by the diabetic condition of the patient.

Dundas Grant.

**Lange, W.**—*An Examination of the Auditory Apparatus in a Case Dying from Fracture of the Basis Cranii.* "Zeitsch. f. Ohrenheilk.," vol. liii, Part I, 1907.

The cause of the fracture was through the petrous appearing on the anterior surface in a line in front of and parallel to its superior border. Examination of a series of sections showed in the external auditory canal many fissures running upwards and inwards, its lumen filled with blood-clot and epidermis scales. The membrane torn irregularly in its superior part. Malleus and incus dislocated outwards, but the stapes was intact, as also membrane of the round window. The middle-ear cavity filled with blood-clot and inflammatory exudate. The labyrinth capsule was quite intact, and although the preparations did not show the condition of the membranous labyrinth very well neither in the peri- or endolymphatic spaces was there any free blood. The auditory nerve, cochlear and vestibular branches torn through at the bottom of the internal auditory meatus, the interstices of the torn nerve-bundles being filled with blood-corpuses and round cells. In the region of the tear the nerve-bundles showed no change when compared with those in the intact part of the nerve; somewhat centrally from this was a circumscribed collection of corpora amylacea.

The facial nerve was quite intact, due probably to its being more resistant than the auditory.

The writer regards the presence of the "amylaceous bodies" as the result of some *post-mortem* injury.

Excellent plates of the preparations are given. *Lindley Sewell.*

**Schwartz, H.** (Halle).—*Death from Meningitis following Unsuccessful Attempts to Remove a Stone from the Ear.* "Arch. f. Ohrenheilk.," Bd. 70, Heft 1 and 2, p. 110.

The patient was a healthy child, aged five, who, when playing on the sands, slipped a small pebble into the left ear. A medical man made several attempts at extraction but ultimately sent the child to hospital. On examination Schwartz found the meatus red and swollen, with fetid pus lying in its depths. No perforation-sound could be heard on inflation. Attempts made to dislodge the foreign body by syringing induced violent pain in the ear. After some days the pinna was displaced forward, under an anæsthetic, and the stone removed. The premonitory symptoms of meningitis set in immediately after the operation and the child died ten days later. At the *post-mortem* the cause of death was found to be purulent meningitis. In the affected ear the membrana tympani was torn, the mucous lining of the tympanum inflamed and the membrane of the round window quite destroyed. The cochlea, vestibule, and semicircular canals contained a purulent exudation, and the auditory nerve trunk was infiltrated and invested with pus. Periosteitis and osteitis around the fenestra rotunda were also present. Schwartz ascribes the fatal injury to the vain efforts which had been made to remove the pebble by instruments before he saw the case, and defends his own delay in operating on the ground that no acute or threatening symptoms were discoverable when first the child was brought to him. At the same time he registers a resolution not to wait for such grave signs in the future but to operate at once as soon as pain in the ear is experienced.

*Dan McKenzie.*