old, had since her ninth year a swelling of the left side of her neck. During the last two months the swelling increased to the size of an egg. The skin over the tumour was reddened. The tumour gives the feeling of fluctuation. The left vocal band was paralysed. The diagnosis was struma cystica. On incision there was a discharge of purulent fluid and a quantity of greenish translucent membranes. Extirpation of the wall of the cyst was followed by cure; but the paralysis of the left vocal band persisted. The examination of the discharged membranes showed that it was echinococcus. The author concludes that a differential diagnosis between cystic struma and echinococcus cannot be made by outward examination. It is only by puncture that it is possible to differentiate them.

Michael.

Escherich (Graz).—Case of Infantile Myxadema. Verein der Aerzte in Steiermark, Meeting, Oct., 1894.

A CHILD, seven years old, who was healthy in the first years of her life, had no disease but whooping cough. The intellectual development was very slow, and she began to speak only in her fourth year. The child was very short, but very thick, especially about the cyclids. The panniculus adiposus was very strong over the whole body. She had the intellect of a child of four. No perspiration occurred at all, and there was very little hair on the head. Diagnosis was made of myxredema, and feeding with strumous gland produced improvement. Michael.

Gowan, Campbell (Great Stanmore).—Myxwdema and its Relation to Graves' Disease. "Lancet," Feb., 23, 1895.

THE author refers to the history of the disease, and gives the characteristic symptoms at length, pointing out their similarity to those following total extirpation of the thyroid gland. Two cases are quoted where Graves' disease was followed within three years by myxcedema. The author believes myxcedema may be looked upon as a possible or even a probable result of Graves' disease. In all the cases treatment with the thyroid extract proved most satisfactory.

Dundas Grant (St. George Reid).

EARS.

Grove, H. N. (Birmingham).—An Artificial Ear. "Lancet," Feb. 2, 1895. This was applied in a case of epithelioma of the auricle, which had been removed. It was formed of vulcanite and aluminium, and was fastened on by means of a saturated solution of mastic in absolute alcohol.

Dundas Grant (St. George Reid).

Smith, J. MacCuen.—Furunculosis of the External Auditory Canal. "Med. News," Jan. 19, 1895.

An exhaustive article on the above subject. The author recommends camphor phenol as an antiseptic, and points out the public phonograph as a fruitful source of infection.

Lake.

Park, J. W.—A new and more convenient Instrument than the Politzer Air-Bag for Inflating the Middle Ear. "Annals Ophth. and Otol.," Jan., 1895.

This consists of a conical nose-piece, which is attached to the air-tank. It is capable of overcoming greater resistance, is very easily regulated, admits of no escape of air, and it is cheap—these are the points in its favour adduced by its inventor.

Lake.

Alderton, H. A.—The Influence of Affections of the Upper Air Tract upon the Ear. "Annals Ophth. and Otol.," Jan., 1895.

THE author analyzes about 500 cases of aural disease, and finds, after giving the exact numbers, the following results (here given as positive, negative, and doubtful) as to the influence of disease of the upper air tract on the car:—

	Positive.	Doubtful.		Negative.
Cerumen	40 %(?)	66 %	•••	33 °°
Acute otitis externa	16 %		•••	
Total obstruction		IO 🖔		2 %
Subacute otitis media		26 °,	•••	16 💢
Acute otitis media		10 ,0	•••	6 %
Acute purulent otitis	50 %	21 .5		2 9 🖫
Otitis purulenta recurrens	60 %		•••	
Contagious Diseases—				
Chronic otitis media pur	35 %	24 %	•••	30 °,′
Otitis media pur. residuosa	42 %	29 %		29 %
Otitis media catarrh. chronica	57 %	25 %		18 %
Otitis interna and media	36 %	38 %	•••	26 %
Otitis interna	14 %			25 %
Doubtful is sometimes used as partly.				Lake.

Gradenigo (Turin).—On Monaural Diplacusis. "Arch. of Otol.," Vol. XXIII...

Monaural diplacusis is rare, and is usually harmonic, that is to say, the false tone is separated by a definite harmonious interval from the true, and is in fact one of its overtones, abnormally audible. In a case described it was more distinct as the tone of the tuning-fork with which it was tested became weaker. The phenomenon was perceived by bone- as well as air-conduction, and was due to middle-ear catarrh.

Binaural diplacusis is also sometimes harmonic, and due to catarrh or other abnormality of one middle ear. It is, however, occasionally disharmonic, the false tone being perceived about one-half or one-third tone higher or lower than the true, owing to an affection of the internal ear.

Dundas Grant.

Daae, Hans (Christiania). - On Double Hearing. "Arch. of Otol.," Vol. XXIII., No. 4.

THE writer has a difficulty in ascribing harmonic diplacusis to disease of the internal, and disharmonic to that of the middle ear absolutely. He quotes a case of diplacusis in which the interval between the sounds heard by the two ears respectively was not harmonic, that is to say, the false note was not a harmonic (over-tone) of the true, and in which the symptom disappeared under treatment adapted exclusively to middle-ear disease. He allows that if in a given case the symptoms indicate a middle-ear affection, and double hearing is present for air-conduction but not for bone-conduction, the double hearing may be attributed to an affection of the sound-conducting apparatus. [This paper is of great interest when compared with that of Gradenigo. The discrepancy might perhaps be explained by the possible coexistence of an affection of the internal ear in Daae's case, a condition very difficult to eliminate by tuning-fork or other tests.—D.G.]

Dundas Grant.

Zwaardemaker, H. (Utrecht).—Hearing for Speech and Hearing for Tones in General and the Measurement of the latter by Gradenigo's Auditory Field. "Arch. of Otol.," Vol. XXIII., No. 4.

DIMINUTION of hearing for tones must naturally carry with it diminution of hearing for speech. Hearing for speech is measured by Oscar Wolf's method, noting the

distance a whisper is heard as a numerator, and taking as denominator the distance at which the same word is heard by the normal ear. The accepted normal distance of seventeen metres for whispering is considered by the author as really a maximum far above what is required for ordinary hearing. The estimation of hearing for tones is effected by means of tuning-forks extending over a great range— $C=^2$, $C=^1$, C, C^3 , C^3 , C^4 , C^5 , C^6 —practically there must be tested the lowest boundary tone, the hearing power for C, C^2 , and F^4 , and the upper boundary tone. This can be plotted out on a chart divided into semitones along its base line (abscissa), and into amount (percentage) of hearing power, as compared with the normal on the co-ordinates. By joining these points (which may be further multiplied) a picture of the "field of audition" can be obtained, and the superficial extent of this can be taken as a basis of comparison at different ages and in different diseases of the organs of hearing. It can also be compared with the hearing for speech, In sclerosis hearing for speech is usually less than for tones. *Dundas Grant*.

Highet (Singapore).—Otomycosis. "Brit. Med. Journ.," Mar. 9, 1895.

The author thought this the most frequent affection of the external meatus in Singapore, and was met with oftener than in Europe. It is usually caused by diffuse inflammation of the meatal walls, perforation, and chronic middle-ear discharge. The treatment adopted was cleansing the meatus and soaking the parts with a solution of sublimate in spirits of wine.

11'm. Robertson.

Galloway (Singapore).—Menière's Disease. "Brit. Med. Journ.," Mar. 9, 1895.

The patient, aged sixty, was seized with buzzing in the left ear, giddiness, and, later, vomiting. These attacks occurred three or four times a week. In them she was pale, perspiring, and with eyes cold. The room seemed rushing towards her left side. No unconsciousness. K. Br. and K I did good. During the attacks there was hæmianopsia. In the discussion Dr. Highet (Singapore) referred to a case reported by Gowers, in which air and bone-conduction were good, but where Galton's whistle was found inaudible on one side, showing some damage to nerve endings.

Wm. Robertson.

Bonnier.—The Normal Tension of the Labyrinthine and Cerebro-Spinal Glands. "Med. Week," Jan. 4, 1895.

The ependyma-ventricular, subarachnoid, and perilymphatic receptacles being in communication, the tension is uniform in these. Moreover, the flat form of Reissner's membrane on the one hand, and the necessity of insuring complete inertia of the membrane of the ear on the other hand, tend to prove that under normal conditions the endolymph balances the perilymph. The tension is therefore uniform in all the four receptacles, variations in any one of them involving the rest. This tension must also balance the exterior pressure and vary with the latter. The labyrinth is protected against the injurious influence of changes in the air pressure by the inhibitory apparatus of Weber. The external pressure is counterbalanced behind the tympanic membrane by the tubo-tympanic manœuvre. Labyrinthine and cerebro-spinal regulation is effected by a vaso-motor reflex of labyrinthine origin.

1. Wn. Robertson.

Lake, R. (London).—Abnormality in Course of Chorda Tympani. "Lancet," Jan. 5, 1895.

An interesting abnormality, the chorda passing across the membrane to the lower fourth of the manubrium, visible through the membrane; the nerve then turning upwards and making its exit beneath the tendon of the tensor, through the canal of Huguier.

Koerner, O.—Tuberculosis of the Temporal Bone; Extension of the Tubercular Inflammation to the Base of the Tempero-Sphenoidal Lobe.

THE patient, a Chinese, eighteen years of age, was attacked with acute otitis, which required the mastoid to be opened two months later, when a large cavity was found in the bone. In the ensuing twelve months five operations were undertaken; bone (sequestra) and granulations were removed. Two years after the original attack cough supervened, both apices of the lungs were involved, and he rapidly sank. At the post-morten the temporal bone, where not destroyed, was invaded, and tubercles spread over the brain for some distance; the lateral and petrosal sinuses were thrombosed, and the jugular converted into an abscess in the neck.

Schirmunsky, M. (St. Petersburg.)—Pilocarpin in Diseases of the Middle Ear and Labyrinth. "Monats. für Ohrenheilk.," Feb. 1895.

AFTER a short account of the literature of the subject the author gives his own experience of this treatment of middle-ear and labyrinthine disease. For dry middle-ear catairh he employed subcutaneous injections of pilocarpin on two patients, but neither in one nor the other was any marked improvement in hearing made out. Direct injections of pilocarpin into the tympanum were carried out in more than twenty-five patients, but with no better results than what he obtained in similar cases by the ordinary injections of solutions of caustic potash or soda, bicarbonate of soda, etc. Subcutaneous injections were employed in four cases of secondary disease of the labyrinth. One was a deaf mute who had lost the hearing power after scarlet fever. Bone conduction was partially preserved, as well as hearing for noises and musical tones, and, now and then, words. Pilocarpin had no beneficial effect whatever. In the other three cases no benefit was obtained. In recent affections of the labyrinth the effect was quite different, and improvement was obtained in two cases; one of traumatic effusion into the labyrinth, and the other from syphilis. He comes to the following conclusions: "First, it is only in recent affections of the labyrinth from whatever cause they "arise (syphilitic, traumatic, or secondary) that we can expect beneficial results "from subcutaneous injections of pilocarpin, and this is the more certain the "earlier the treatment is commenced. Second, no good is effected by pilocarpin "either by subcutaneous injections or by the introduction of pilocarpin into the "tympanum in old-standing affections of the labyrinth, and in the so-called dry " middle-ear catarrh, where persistent changes have taken place."

[We cannot but think that these conclusions are those at which otologists in general have now arrived.—Ed.]

Dundas Grant.

Isaïa.—Formulæ for the Treatment of Chronic Otorrhæa in Scrofulous Patients. "Med. Week," Dec. 7, 1894.

The meatus and ear are cleansed and anæsthetized with cocaine, and the drops instilled or inserted on cotton-wool. If excoriations are present in the meatus, irrritation is apt to arise.

Wm. Robertson.

Kutscher (Giessen).—On the Etiology of an Otitis Media following Pharyngeal Diphtheria. "Deutsche Med. Woch.," 1895, No. 10.

In the aural pus the author found true Loefller bacilli, which he looks upon as the cause of the otorrhoea.

Michael.

Gradenigo (Turin).—The Rational Treatment of Acute Otitis Media. "Med. Week," Feb. 9, 1895.

This treatment is described as "rational" because it excludes many routine measures which are injurious (cotton swabs, air douches, etc.). If the patient is seen at the onset of the otitis, then rest in bed, light diet, gargling, and a few drops of—

 B. Carbolic acid
 \$\frac{3}{4}\$ to 1 gramme

 Sod. chlor.
 4 grammes

 Aq. destil.
 50 grammes

slightly warmed. The salt prevents maceration of the epidermis. Gentle irrigation of the nasal cavities can be employed. If this does not abort the attack, and if pain continues or pus forms, then after disinfecting the meatus with sublimate solution, and anaesthetizing with cocaine, paracentesis of the membrana tympana is performed without any other form of interference as air douching, etc. A second incision may be called for. Drainage is secured by a pledget of iodoform gauze, not pushed too far into the meatus, and covered externally by a few layers of the same gauze. Pain continuing, the mastoid may be suspected, and leeches applied over it may abort the mischief. If, after three or four weeks, the acute symptoms disappear without diminution of suppuration, bathe the ear with a I-10,000 sublimate solution (warm).

IVm. Robertson

Galetti, V.—On Sone Cases of Purulent Otitis Media consequent on Plugging the Posterior Nares, and on the Means which may be Employed in lieu of Plugging. "Archiv. Ital. di Otol.," Vol. III., 1895.

A RECORD of four cases where the use of Belloc's sound was followed by purulent otitis media, one of the cases ending fatally. There is no statement of any antiseptic precautions having been used, and the tampons were kept in place for thirty-nine and even forty-seven hours. He concludes by agreeing with Gellé that a consideration of the possible auricular troubles should make us condemn this barbarous method, especially when we are possessed of so many reliable hæmostatic remedies.

St. Clair Thomson.

Park, J. W.—A Case of Acute Purulent Inflammation of the Middle Ear, with Two Attacks of Double Optic Neuritis; no Mastoid Complication; Two Operations and Recovery. "Annals Ophth. and Otol.," Jan., 1895.

The patient developed acute suppurative offices (left), which, after lasting thirty-seven days, became complicated with vertigo, stiffness of neck muscles and tongue, dysphagia, slight left facial paralysis, pain in pharynx and impairment of taste, normal temperature and quick pulse, followed by delirium, and optic neuritis (double) three days later. Two days later the mastoid was drilled on account of continuance of symptoms and excessive pain. No pus was discovered, but a large quantity flowed out of the canal. Recovery was gradual. The patient then had attacks of pain, ending in chronic suppuration.

For the ensuing three months pain was constant and severe, and was followed by optic neuritis, subnormal temperature, and attacks of coma, profuse discharge and diplopia. The ear was now curetted; all contents, including the two large ossicles, were removed. Recovery was gradual, and now cure is complete. Left

ear, hearing distance watch contact, conversation three feet. The author then quotes numerous authorities on the subject of otitis and optic neuritis. Lake,

Collet, F. G .- Auditory Disturbances in Tabes Dorsalis. "La Presse Méd.," Jan. 12, 1895.

REFERENCE is made to the conclusions of Marie and Walton, Gellé, Strümpell, Oppenheim, Siemerling, and Haberman. The author's observations show an anatomical basis for the auditory troubles, viz., atrophy of the nucleus and nerve trunk. They are interesting as affecting the ganglion cells on the nerve, the labyrinth, and resemble histologically the other nerve lesions of tabes. In the middle ear the lesions are a sclerosis of the inner wall and the membrana tympani, except its centre. There are alterations of hearing and frequently subjective sounds. These latter are important in consideration of their bearing on hallucinations. The auditory disturbances may arise either in the sensory or the trophic nerve of the ear. The sclerosis of the middle ear, as well as the lesion in the fifth, which may possibly give rise to it, the affection of the auditory nerve, and the tabes, may all be a para-syphilitic affection.

St. Clair Thomson.

Moos, S. (Heidelberg). -History of a Brain Tumour. "Arch. of Otol.," Vol. XXIII., No. 4.

A MAN, aged twenty-one, gradually developed during a couple of months, after working in a cold store, unsteadiness of gait, to which was superadded left-sided deafness and diplopia (left-sided abducent paralysis). There was total deafness for speech in the left ear, but tuning-forks up to two hundred and fifty-six vibrations, and not higher, could be heard at a distance of a few centimetres. There was also left facial paralysis, pronounced nystagmus, slight anæsthesia of left half of face, staggering gait, cerebellar ataxy, particularly in the left leg, slight comparative feebleness of grasp of left hand, and increase of left tendon-reflex. A diagnosis of an affection of the cerebellum and medulla, probably a tumour (glioma), was made. Ophthalmoscopic examination at first negative, later doubtful, was not allowed at a subsequent stage. Death followed in about a month, and a glio-sarcomatous tumour was found in the left crus of the pons and the outer part of its left half, extending towards the medulla and into the left hemisphere of the cerebellum. The nuclei and root-fibres of the abducent, facial and auditory of the left side had entirely disappeared. There were some small homorrhages and degeneration in the labyrinth, depression of Reissner's membrane towards the ductus cochlearis, and convexity outwards of the membrane of the round window (attributed to increase of intra-cranial pressure). The facial and auditory were almost entirely destroyed by hæmorrhage. Nothnagel's opinion as to the great rarity of disturbances of hearing in cases of tumours of the pons is quoted. Bernhardt found Dundas Grant. them eight times in twenty-seven cases.

REVIEWS.

Baginsky, Adolf (Berlin).—Die Serumtherapie der Diphtherie nach den Beobachtungen im Kaiser und Kaiserin Friedrich Kinderkrankenhause in Berlin. (Serum-therapy in Diphtheria. Observations made in the Kaiser and Kaiserin Friedrich Kinder Hospital in Berlin.) Berlin: Hirschwald. 1895-330 pages.

As the readers of this Journal will have remarked, the question of the value of serum-therapy in diphtheria has been the subject of the greater