DISEASES OF THE EAR.

Vertigo and Disturbance of Equilibrium in Non-suppurative Diseases of the Internal Ear. By Dr. Wittmaack (Archives of Otology, October, 1907).—The clinical observations of aurists, coupled with the advances in operative surgery as applied to the auditory apparatus, have in the main confirmed the experimental investigations of physiologists, and it can be assumed as definite that, when the cochlea is destroyed, complete deafness results, and that injuries and irritation of the semicircular canals always produce distinct disturbance of equilibration.

Short of the disturbances in the semicircular canals of the severe type, spoken of as "Ménière's disease," slighter degrees of functional disturbance may be discovered by careful examination, which, when associated with nerve deafness, may be regarded as definite signs of disease of the labyrinth. The difference in the intensity of the symptoms can be explained by the difference in severity of the fundamental pathological process. The lesions may be in the form of small haemorrhages, or inflammatory exudes within the membranous labyrinth, or serous exudates in the peri-or endo-lymphatic cavities of the entire labyrinth.

The presence of extravasation of blood throughout the entire labyrinth, which was formerly regarded as the cause of Ménière's disease, is only possible, the author thinks, from traumatism, with fracture of the labyrinth capsule. In diagnosing labyrinthine disease, there should be a functional disturbance in sound-perceiving, as well as in the apparatus for preserving the equilibrium.

The diagnosis of an affection of the sound-perceiving apparatus depends on the relatively good perception for deep, decidedly poorer perception for high, tuning-forks by air conduction, good lower-tone limit with marked contraction of the upper limit, diminution of the perception for the tuning-fork by bone conduction, and a positive Rinne.

He thinks that the galvanic reaction of the auditory nerve is useful, and that a positive reaction, with a low-current intensity, confirms the diagnosis of disease of the internal ear.—WALKER DOWNIE.

Serous Mastoiditis. By A. Courtade (Archives Internationales de Laryngologie, d'Otologie et de Rhinologie, September-October, 1907).—Probably most aural surgeons have mentally noted the existence of a serous mastoiditis due to middle-ear suppuration or to a simple catarrh, but the fact, as the writer of the article states, that little or nothing has been written about it, is no doubt due to the difficulty—as is also the case in serous meningitis—of demonstrating the condition. Courtade gives detailed notes of three cases. In two there was acute middle-ear suppuration, in the other there had been an acute middle-ear inflammation, or suppuration, which, however, had not led to perforation. There were in all three the usual signs of mastoid involvement. In one case, operation was several times urged but always refused in spite of the appearance of other grave symptoms—vertigo, vomiting. All the symptoms, however, disappeared by the spontaneous escape from the ear of a quantity of clear, oily-looking fluid, which had probably been dammed back by a small plug of thick pus which escaped at the same time.

The other two cases were not so serious, and the diagnosis was made by the aid of suction with a Siegle speculum. In one case a paracentesis was performed, and, following the rarefaction of the air by the speculum, a flow of clear fluid resulted which almost filled the speculum. This fluid continued to escape for thirty-six hours. In the third case no paracentesis was required as there was already a large perforation, and a result similar to that in the previous cases followed the use of the Siegle speculum.
Courtade gives it as his opinion that serous mastoiditis is more common than is supposed, or than might be inferred from the paucity of the references to it, and with this, as has been said, many will agree. He pleads for the use of aspiration in the treatment of middle-ear suppuration, and, as a matter of fact, this method is already growing in favour. He also states that during the procedure of opening the mastoid he has several times observed an escape of clear liquid, or of liquid only coloured by blood, which observations are of interest in reference to the subject of this communication.

The general conclusion is that operation is not always necessarily called for because signs of mastoid involvement have appeared in the course of a middle-ear suppuration. How often this fact presents itself to us clinically!

—W. S. SYME.

Aseptic Meningeal Effusion with Intact Polynuclears in Suppurative Otitis Media. M. Rist, in the Bulletin de la Soc. Méd. des Hôp., 25th July, states that in a series of examinations of the cerebro-spinal fluid, obtained by lumbar puncture from children suffering from meningitis secondary to chronic otitis media, he found in the majority that microbes were absent, although the fluid was purulent and contained abundant polynuclears, as in typical cerebro-spinal meningitis. In some cases where an autopsy was made, a localised patch of purulent meningitis containing the ordinary bacteria of aural infections was found in the temporal region, while the rest of the cerebro-spinal meninges was in a state of congestion, due, the writer thinks, to the action of toxins.

E. D. Massary and Pierre Weil (Bulletin de la Soc. Méd. des Hôp., 11th October) give the report of a patient with meningeal symptoms. About three weeks after the first symptoms of illness there was a free discharge of pus from one ear. Lumbar puncture repeatedly yielded a puriform liquid, containing almost exclusively intact polynuclears, but in which no bacteria were ever found.—W. W. CHRISTIE.

Affection of the Auditory Apparatus Consecutive to Mumps in an Adult. By Haig (Archives Internationales de Laryngologie, d'Otologie et de Rhinologie, May-June, 1907).—It is well known that deafness is occasionally got as a consequence of mumps, but as this latter disease is, in the main, an affection of childhood, it only rarely happens that the aural complication in the adult can be submitted to careful examination. The present case was that of a woman. On the ninth day of her illness, both sides being affected, she noticed herself getting deaf, and within thirty-six hours she became completely deaf in both ears. The deafness was accompanied by tinnitus, and short attacks of vertigo and pain of short duration. Otoscopic examination showed injection of Shrapnell's membrane, and of the posterosuperior quadrant of the membrana propria on both sides, the left showing the appearances more markedly. Hearing for loud speech was abolished on the left, and almost abolished on the right side.

Tuning-fork tests showed abolition of osseous conduction for all notes. Air conduction was very much diminished for low notes, and not quite so much for high notes. Politzerisation resulted in no improvement, but massage of the tympanum led to a decided increase in the hearing. Progressive improvement followed injections of pilocarpine till, at the end of four weeks, the patient heard ordinary speech at eight yards, and osseous conduction returned, though not to its normal extent. Haig is inclined to give to the pilocarpine the credit for the improvement, though it is evident that a spontaneous cure of an acute affection, even of the internal ear, may occur. At the same time the prognosis of this complication of mumps is not very hopeful.

—W. S. SYME.

Osteomyelitis and Deafness. By Siebenmann (Revue Hebdomadaire de Laryngologie, d'Otologie et de Rhinologie, 13th July, 1907).—This
interesting communication has reference to the onset of deafness in osteomyelitis of other bones than the temporal. As the author says, there are a small number of general infectious diseases which produce deafness without involving the middle ear. This is the case sometimes with osteomyelitis. The deafness is usually bilateral and profound, and though a slight improvement may occur in one or both ears, even this is unusual. The auditory phenomena develop as a rule late in the disease, or during the period of convalescence, and in patients who have been old enough to remark it, tinnitus and vertigo have preceded the deafness. As to the exact pathological condition in the ear, Strinbrügge found, on post-mortem examination, changes in the labyrinth such as one gets in purulent labyrinthitis with meningitis, which, however, may have been secondary to the septic meningitis, and not a true metastasis, as the author suggests. In other cases, no doubt, the aural condition is a neuritis.

Since osteomyelitis is chiefly an affection of childhood, its influence in producing deafness is of interest in relation to acquired deaf-mutism.

—W. S. Syme.

A Case of Acute Labyrinthitis due to Meningitis.—Dr. Yearsley, in the Archives of Otology for October, 1907, reports a case which, he thinks, falls under this category. When two years old the patient (now 24) had a serious illness, accompanied apparently by severe headache. He had made no attempts to speak until he was fully three years of age. Both tympanic membranes were normal, and showed good mobility to the pneumatic speculum, and there were no abnormalities in the upper air-passages. Careful examination showed that he was absolutely deaf on the right side, while with the left ear he heard the voice at a distance of 9 inches; a whisper could not be heard on either side; and by the tuning-fork serious impairment of the left nerve was demonstrated.—Walker Downie.

DISEASES OF CHILDREN.

Sero-Fibrinous Pleurisy in Infants and the Sign of the "Sou." By Dr. J. Brudzinski (Archives de Medicine des Enfants, September, 1907).—In this paper, which deals with the relative frequency of purulent and serous pleural effusions in infants, much space is devoted to the description of a new physical sign called the "Signe du Sou." This sign is elicited in the following manner:—Over the suspected part of the thorax a "sou" is placed, and gently tapped with another, while the physician auscultates at a corresponding level on the opposite side, and appreciates the sound as it is conducted through the thorax. Thus, if one suspects a pleurisy at the right apex in front it is over this one percusses with the coins, and it is over the right apex behind that one auscultates. In examining axillary conditions one auscultates on the same side of the chest and at the same level, but close to the vertebral column, in order to bring as great a thickness of lung as is possible between the point percussed and the point auscultated. The author advises the idle ear of the observer to be closed with the finger so as to make the differences in note more apparent. He also says it is advisable to compare the notes obtained at different levels. In the case of normal lung the note is dull and entirely devoid of all metallic tinkle, but if there is an effusion the note has a distinct metallic tone, and if much fluid be present it is almost silvery in its character. In the case of pulmonary consolidation, on the other hand, the note is even more dull than that found on examining normal lung.

This sign, the author considers, at least in children (adults are not mentioned), pathognomonic of pleural effusion, and more reliable even than exploratory puncture, which, though having the special qualification of differentiating between purulent and serous effusions, may, as is well known, often miss an