EAR.

Bing, Dr. (Vienna).—*On Gellé's Test.* "Monatschrift für Ohrenheilkunde," April, 1899.

Bloch concluded in his examination of this test that any increase of intralabyrinthine pressure was at once counteracted by the escape of liquor Cotunni through the aqueducts; and he also considered that the dying away of the sound of the tuning-fork was due to diminished movement of the conducting chain between the membrana tympani and the fenestra ovalis. Bing disputes both of these conclusions. He believes that when the test is positive there is increased intralabyrinthine pressure, and when it is negative that the increased pressure in the meatus encounters sufficient resistance (at some point) to prevent it from reaching the labyrinth; or else that the whole conducting apparatus is in such a state of tension that no increase is possible under the circumstances. The point in the chain at which the resistance is encountered is not indicated by the test, but the footplate of the stapes is the most frequent situation.

Gellé's and Rinne's tests have this in common: when negative they indicate disease of the conducting mechanism, but when positive they do not exclude it. Rinne's test is much the more delicate and reliable.

In tubal catarrh the membrane and ossicles are very gradually driven in by atmospheric pressure; in Gellé's test the membrane and ossicles are driven in suddenly by the compression of the rubber bag. In tubal catarrh the tuning-fork sound is lateralized to the affected ear, whilst in Gellé's test the sound is diminished. The difference is due to the fact that the increase on pressure is sudden in the latter case, and the intralabyrinthine pressure is raised. *W. Lamb.*

Botey.—*Early Suture of the Retro-auricular Incision after the Mastoid Operation.* "Ann. des Mal. de l'Or.," May, 1899.

The author has frequently seen trouble from want of drainage arise through the immediate closing of the retro-auricular wound. He prefers to leave the central part of the wound unstitched, in order to retain a roll of gauze reaching to the attic during the first eight days, after which a couple of stitches will completely close the wound without resulting scar. He refers to his method ("Arch. für Ohren.," xlv., 1898) of slitting the membranous meatus longitudinally as far as the sulcus between the root of the helix and the tragus, which without loss of the valuable skin of the meatus provides an opening large enough to admit of the end of the index-finger. *Waggett.*

Dana, Charles L. (New York).—*The Common Forms of Meningitis and their Recognition, with special Reference to Serous Meningitis.* "The Journal of Nervous and Mental Disease," vol. xxvi., p. 725.

The author quotes the present classification as found in literature, thus:

A. Pachymeningitis—external: (1) acute and (2) chronic; internal: (3) hemorrhagic, (4) syphilitic, (5) purulent, and (6) serous.

B. Leptomeningitis: (7) acute and (8) chronic simple, (9) acute and (10) chronic syphilitic, (11) acute and (12) chronic epidemic, (13) tubercular, (14) posterior basic.

C. Serous meningitis: (15) acute ventricular, (16) acute general, (17) traumatic, (18) benign, (19) malignant, (20) chronic.

As a result of his analysis of 137 cases of meningitis, out of which nineteen were unclassified, and forty-six were examined post-mortem, he reduces this number to five, of which purulent, tubercular, cerebro-spinal and serous are the principal forms, while pachymeningitis is practically only a chronic syphilitic manifestation. Practically all cases of acute cerebral meningitis are cases of cerebral cerebrospinal meningitis, acute spinal meningitis being a very rare disease of which the writer can find no record, and he has rarely failed to find pus in the spinal canal if it is abundant on the cerebral meninges. Pachy-meningitis, when external, is simply an annex to the mastoid inflam-mation or other osteitis which produces it, non-surgical meningitis being mostly internal, commonly syphilitic, and more rarely hæmor-rhagic. Epidemic cerebrospinal meningitis is known to be due to the *Diplococcus intracellularis meningitidis* or *Micrococcus lanceolatus* distinguished by bacteriological culture, and the fluid withdrawn by lumbar puncture. Simple fibrino-purulent meningitis may be due to almost any pyogenic organism, usually to streptococcus, but not unfrequently to pneumococcus. Tuberculous meningitis is usually accompanied by tuberculous affection elsewhere, and is revealed by lumbar puncture. Serous meningitis may be traumatic, alcoholic (and toxic), or a simple acquired acute hydrocephalus.

1. *Traumatic serous meningitis* results from severe injuries to the head, followed by the typical symptoms of meningitis, which look very threatening for three or four days, when usually the temperature falls, the rigidity passes away, and convalescence is rapidly established, unless pyogenic affection occurs, and purulent meningitis develops.

2. *Alcoholic (and toxic) serous meningitis* is a sequel of profound alcoholic intoxication, the prolonged use of narcotic drugs, or starvation. It may be preceded by delirium tremens. The typical symptoms of meningitis, but without optic neuritis, pass into a semi-coma, and at the end of a fortnight the patient may die or begin to convalesce. Lumbar puncture evacuates sterile serous fluid in abundance.

3. *The serous meningitis of Quinke and Boenninghaus*, an acquired, acute hydrocephalus, occurs oftenest in children. Its type may be benign, malignant, chronic or recurrent. In half the cases it is caused by some form of infective fever, rarely trauma. Otitis media and sepsis are occasionally factors, and we therefore quote the following description of the symptoms: "The disease begins with the usual symptoms of cerebral irritation—headache, delirium, followed by stupor and coma. General convulsions are frequent; rigidity of the neck and limbs, and twitchings are also present. Fever is sometimes present (one-third of the cases), but is not characteristic, neither is the pulse. Headache, however, convulsions, eye palsies and fever are not always present, and it is not often possible to distinguish the disease except by its ultimate favourable course and by lumbar puncture. Even the latter procedure is not certain, because there may be some pus in the brain and none in the cord. In general, therefore, one can only say that if a young child develops symptoms of a meningitis, in the course of the exanthemata or rheumatism, or after an injury, or with an otitis, if these symptoms run a favourable course, and if on puncturing the cord there is only a serous fluid which does not contain albumin and is sterile to culture tests, the case is probably one of acute serous meningitis. If the attack recurs, or if the child continues ill and gradually develops hydrocephalus, it may be con-sidered a chronic serous meningitis. The chronic form sometimes

takes on the symptoms of cerebral tumour. Optic neuritis and atrophy, headache, vomiting, vertigo, convulsions, cranial nerve palsies—all may be present. There may even be weakness and pains in the extremities. The chief distinguishing points are the remissions and intermissions, the increase in the size of the skull, showing hydrocephalus, and the absence of distinct localizing symptoms."

The testimony given by the author as to the value of lumbar puncture as a diagnostic method is very important. *Dundas Grant.*

Ostino.—*A New Method of Auricular Auscultation in the Diagnosis of Central Mastoiditis.* "Ann. des Mal. de l'Or.," March, 1899.

The method is a modification of that of Okuneff. Instead of determining the relative sound-conducting power of the two mastoids by two separate observations, the author does away with at least one of the sources of fallacy in Okuneff's experiments by employing two auscultating tubes, and observing the lateralization of the sound as heard by the observer.

All that is necessary is a couple of auscultating tubes of exactly similar length, calibre and composition, armed at one end with aural specula of equal size. The specula are closely pressed to corresponding points on the two mastoids of the patient, the observer inserting the other ends in his two ears. A vibrating tuning-fork (preferably 256 v. to sec.) is now applied to the centre of the patient's forehead. Under normal conditions no lateralization of the sound will be observed by the experimenter. Certain simple sources of error will readily occur to the reader. Ostino finds that the sound is lateralized towards the affected side:

1. When the external soft parts are intact, while the air-cavities of the mastoid are filled with fluid or granulations. The lateralization is very striking where granulations and pus extend to the dura mater and lateral sinus. The same occurs when communication exists through a large fistula, between the mastoid cells and an external abscess.
2. The least tumefaction of the soft parts may suffice to displace the lateralization to the sound side.
3. Hyperostosis of the apophysis does not cause lateralization.

These conclusions differ substantially from those of Okuneff, but they conform to the physical fact that sound is conducted by solids and liquids better than by gases. *Waggett.*

REVIEWS.

Purulent Nasal Discharges: their Diagnosis and Treatment. By Herbert Tilley, M.D., B.S. Lond., F.R.C.S. Eng. The Medical Publishing Company, Ltd.

Under this title the author gives a clear account of most of the diseases which are characterized by purulent nasal discharges, and he very properly draws attention to the importance of the subject from the point of view of the practitioner as well as of the candidate for medical qualifications. They are grouped in a manner which is eminently practical; thus, we have: (1) Those met with in early infancy; (2) those associated with exanthemata and other acute infectious disorders; (3) those which are nasal manifestations of con-