uneventful. Voice strong but somewhat rough, improvement in general health marked. Eleven months later absolutely no recurrence. It should be noted that, so far as can be gathered from the author's report, the trachea was not examined at all at the first operation; the tracheal growths, therefore, may have been present then.

Arthur J. Hutchison.

EAR.

Braislin, W. (Brooklyn).—A Tumour of the Middle Ear springing from the Inner and Posterior Tympanic Walls simulating Exostosis, but consisting of Calcareous Laminæ. "Arch. of Otol.," vol. xxx., No. 6.

In a case of chronic suppuration of the middle ear there was seen a pinkish-white, glistening excrescence covering almost the whole of the inner wall of the tympanum. It was removed by means of a small gouge, forceps, and curette, and when afterwards put together formed a thin convex shell of bone-like consistency; it was proved to be calcareous degeneration of an inflammatory hyperplastic growth in the tympanum.

Dundas Grant.

Brunel, P.—On Paracentesis of the Membrana Tympani as a means of Diagnosis and Prognosis in Deafness. "Revue Hebdom. de Laryng.," etc., October 26, 1901.

The importance attached by all otologists to the presence or the absence of bone-conduction is not justified. In many cases of otitis media sicca bone-conduction is almost or entirely lost, and the erroneous diagnosis of sclerosing panotitis is made. If, however, aërial conduction is improved by any method of treatment, bone-conduction will reappear and even become excellent. ("Sclerosis," "sclerosing panotitis," and "panotitis" are apparently used by the author as synonymous terms.) The only method of making a sure diagnosis and prognosis is to perform a free paracentesis of the membrane. When this is done the hearing is (1) worse than before, or (2) unaltered, or (3) improved. In the first case there is no room for doubt; the labyrinth is affected, prognosis is bad. In the second case it is almost certain that the deafness is due to fixation of the stapes by fibrous or osseous bands. This can be easily verified. Let a hook be passed round the handle of the malleus and movements of pressure and traction made; if the stapes is not fixed, a special sensation of bubbling (bouillonnement) is produced, accompanied by vertigo and at times syncope; if the stapes is ankylosed, these phenomena do not arise. In the third case the deafness is due entirely to thickening of the membrane, and perhaps a few adhesions, and the deafness can be cured, or at least much improved, by removal of the membrane together with the malleus and incus.

In support of these statements the author quotes three cases. In the first case the history, the appearance of the membranes, and the results of tests by watch and tuning-fork, were all in favour of disease of the labyrinth. Paracentesis of the left membrana was performed, and the hearing-power thereby at once diminished. The diagnosis of panotitis was made. In the other two cases, although the tests of hearing by watch, tuning-fork, etc., were not decisive, the history and the appearance of the membranes (opaque, retracted, etc.) pointed to middle-ear catarrh. Paracentesis improved the hearing-power; ossicu-

lectomy was performed, the subjective noises decreased, and the hearing-power increased to a considerable extent. This improvement was maintained when the patients were seen a year later. The subsequent history of the first case (whose hearing was diminished) is not given, nor are any cases brought forward in illustration of the diagnosis of ankylosis of the stapes by the vertigo- and syncope-producing method. It should also be stated that in the two successful cases ossiculectomy was performed at once, apparently no other simpler treatment having been tried, or, if so, it is not mentioned in the report.

Arthur J. Hutchison.

Knapp, A. (New York).—A Case of Meningitis from Extension of Acute Purulent Otitis Media through Osteomyelitis of the Petrous Bone. Operation. Autopsy. Microscopic Examination. "Arch. o Otol.," vol. xxx., No. 6.

In a very rapid case of acute suppuration of the middle ear, in spite of mastoid operation, which showed undoubted, though not very great, change in the bone, meningitis supervened. The infection of the meninges was found to have taken place through the bone at a point midway between the sigmoid sulcus and the internal auditory meatus, apparently the site of the ductus endolymphaticus, reaching that spot from the tympanum by a track below the fenestra rotunda, extending

in the cancellous bone below the inner tympanic wall.

Dr. Knapp points out that the meningeal infection is almost inevitably beneath the tentorium, extending from the middle or internal ear either along the internal auditory canal or one of the aqueducts. He quotes Hinsberg's examinations of 108 cases, in 43 of which the extension could be determined definitely as follows: 25 along the internal auditory canal, 1 along this canal and the aqueducts, 8 by the aqueduct of the vestibule, 1 by the aqueduct of the cochlea, and 8 by perforations of the vertical semicircular canal. (Dr. Jobson Horne has described the morbid anatomy of a case of infection through the ductus endolymphaticus.—D. G.) Dr. Knapp points out in his case the fact that at the first operation nothing was found; this, he considers, in view of the symptoms, should always be regarded with great distrust. The second operation also failed to reveal the nature of the He draws attention to the absence of any other "labyrinthine disease. symptoms" except the intense deafness of the affected ear. He concludes that if definite signs of labyrinthine involvement and symptoms of beginning meningitis are present, we should not hesitate to explore the labyrinth after exclusion of the more usual forms of extension. (The abstractor has in more than one case found, post-mortem, disease of the petrous bone at the point indicated—namely, on the posterior surface between the groove for the lateral sinus and the internal This could probably only be explored intra vitam auditory meatus. by free exposure of the knee of the sinus and turning this out of the groove, a process, however, which is not very easy of accomplishment, and apt to be accompanied by considerable hemorrhage from small tributary veins, which would be almost invariably ruptured.—D. G.) Dundas Grant.

Schwabach (Berlin).—On the Therapeutic Value of Vibratory Massage of the Drumhead. "Arch. of Otol.," vol. xxx., No. 4.

The author reports that this treatment does very little good in sclerosis of the sound-conducting apparatus as regards hearing-power,

although in 28·3 per cent. the tinnitus was cured. Improvement, both as regards dulness of hearing and tinnitus, was effected in cases of simple chronic middle-ear catarrh, subacute catarrh, acute otitis media caused by influenza, and the sequelæ of chronic purulent otitis. He used the Max Breitung apparatus, and commenced with piston excursions of 2 millimetres, rarely as long as 5 millimetres, and with a frequency of from 600 to 1,200 (? per minute). The duration of the séances was ordinarily one, two, or rarely three minutes.

Dundas Grant.

THERAPEUTICS.

Foote, C. G.—A Painless Method of Skin-grafting. "Med. Record," November 9, 1901.

In connection with the technique of skin-grafting in mastoid operations, the following plan might be adopted, although specially advised by the author for grafting in ordinary cases of ulcer, etc.

The instruments required are a sharp razor, tissue forceps, and an

ordinary hypodermic syringe and needle.

The place from which the graft is to be taken is prepared in as aseptic a manner as possible. An ordinary hypodermic syringe is filled with decinormal salt solution, the needle is inserted under the epidermis, and as much of the salt solution as possible injected into the skin, the injection being made between the cutis vera and epidermis. The needle is inserted three times in this same manner, so as to produce an elevation about one and a quarter inches in length, by half an inch in width. The graft is then very easily removed by a sharp razor.

The advantages claimed by the author for this method are: (1) its painlessness; (2) the ease with which the grafts can be removed.

W. Milligan.

McCardie, W. J.—Some Further Cases of Ethyl-Chloride Narcosis. "Lancet," July 20, 1901.

There was recently published in the Lancet¹ a paper in which the author gave short notes of some cases of ethyl-chloride narcosis, and he now recounts his experience of some more cases in the hope that it may be a help to others who wish to make trial of ethyl chloride as a general anæsthetic. One case is of interest, because the patient died about an hour after the administration; another case because of the development of a rash during anæsthesia; and yet another case because the accompanying muscular excitement made full anæsthesia and operation impossible. The longest operative anæsthesia lasted for from sixteen to seventeen minutes, and the result in every way was excellent, although, according to her medical attendant, the patient had had very serious symptoms when he had once before given her chloroform. The administrations for removal of tonsils and adenoids in many of the selected cases gave excellent results. A list of cases is appended.

In all of the adenoid cases, nitrous oxide, failing ethyl chloride, would have been administered, and the operator in most cases found much advantage in ethyl chloride over nitrous oxide, as giving a much longer anæsthesia, usually lasting from three-quarters of a minute to

¹ Lancet, March 9, 1901, p. 698.