removal of isthmus; atrophy of lateral lobes; cure."* In this case the patient was a labourer, aged eighteen years. The duration of symptoms was for seven or eight years. The patient was quite well in less than two months. Mr. Sydney Jones's brilliant series of cases have shown us that, in the words of Sir William MacCormac, it is "a method of treatment which is comparatively simple, easy of execution, and promises excellent results in suitable cases"; and, further, that where the same symptoms are produced by an innocent enlargement of the thyroid without a hypertrophied isthmus, removal of portions of the lateral lobes encroaching mesially on the trachea may be done quite as safely and with the same beneficial results as in those cases where the isthmus alone is excised.

In all the cases referred to, the author has been unable to find any reference to laryngoscopical examination. The pressure, judging from the speedily successful results, must have respected the recurrent laryngeals and the "scabbard-like" condition of the trachea readily accounted for the whole of the dyspnœa, whereas in this case six months had elapsed before the patient was obviously much better. Nor could we reasonably have expected more speedy results, seeing that laryngoscopically the dyspnœa could be readily explained by pressure on the recurrent laryngeals producing the abductor palsy.

StClair Thomson.

EAR.

Nicoll, James.—*Uncommon Cases of Operation on the Brain.* "Lancet," October 29, 1898.

One of these cases is interesting as showing the origin of a malignant tumour in the middle ear. The symptoms simulated temporo-sphenoidal abscess. An intracranial portion of the tumour was removed, with relief to the pressure symptoms. The patient died 2½ months afterwards. *StClair Thomson.*

Bousfield, E. C.—*Diphtheria Antitoxin in Private Practice.* The "Lancet," December 10, 1898.

This is an earnest appeal to use antitoxin immediately in every clear or doubtful case of diphtheria, as the author feels assured that in no other way is it possible to seriously diminish the mortality. Even the delay of sending the cases into hospital, before administering the serum, leads to a decided increase in the mortality.

StClair Thomson.

Henke, R. (Clausthal).—*Excess-Malformation of the Auricle.* "Monatschrift für Ohrenheilkunde," February, 1899.

In a case described there was an apparent doubling of the upper part. It was in reality a widening of the scaphoid fossa between the helix and the anthelix, and its division into two depressions by an abnormal ridge corresponding to the upper crus of the anthelix, but abnormally wide, and turning backwards to a notch in the helix higher than the Darwinian tubercle. There was also an excessively long lobule, and, curiously, one of the patient's thumbs was double.

Dundas Grant.

* The *Lancet*, November 4, 1883, p. 900.

Burnett, Charles H.—*Further Considerations of the Mechanism of Ear Vertigo, and its Relief by Removal of the Incus.* "American Journal of Medical Sciences," April, 1899.

Ear vertigo may be due to disease in the external, middle, or the internal ear. There is little or no evidence that apoplectiform lesion of the labyrinth ever occurs without previous catarrhal disease in the middle ear. Middle-ear vertigo is due primarily to chronic catarrhal disease in the tympanic cavity, and the consequently altered condition and mechanism of the ossicles. External-ear vertigo is due to disease in the external ear.

All these three forms present very similar symptoms, and the fact that no loss of consciousness occurs in either of them differentiates them from epilepsy, alcoholism, and apoplexy.

Vertigo also comes from a tumour in the tract of the auditory nerve and to traumatism, but it is then more or less constant, and rarely if ever as violent as in the pathognomonic paroxysms of true ear vertigo.

Ear vertigo is due to irritation emanating from some part of the auditory apparatus and conveyed through the ampullæ of the semi-circular canals to the motor filaments of the auditory nerve, the peduncles, and the cerebellum; hence the disturbed coördination called ear vertigo. Such irritation may be excited by undue retraction and impaction of the stapes in the oval window, and consequent compression of the labyrinth fluid and the ampullæ, as in the late stages of chronic catarrhal otitis media. If engorgement of the labyrinth and pressure upon the ampullæ from within the cranium be present, as in parotitic metastasis, such pressure-irritation may be increased at times by sudden retraction and impaction of the chain of ossicles and the footplate of the stapes, as occurs in sudden movements of the head or in an accommodative contraction of the tensor tympani, unnoted by the normal labyrinth, and a paroxysm of ear vertigo takes place. With the labyrinth unduly engorged, as in a case of metastasis, ear vertigo occurs if a sudden increase in the quantity of labyrinth fluid takes place when the stapes is held too firmly in the oval window to yield to this pressure upon its footplate from within. This amounts to the same force as sudden impaction of the stapes, since the labyrinth space is compromised by the failure of the stapes to move outward, and ear vertigo results from pressure-irritation in the ampullæ. The latter process is most likely to take place in the late stages of chronic catarrh of the middle ear; but in both instances the process is essentially a mechanical one—viz., a disturbance in the muscular tension and mobility of the auditory apparatus in the middle ear, and we have therefore to deal with a mechanical disease.

The paroxysmal nature of ear vertigo can be explained only by assuming that it is due to temporary increase in retraction and impaction of the stapes in the oval window, or temporary engorgement of the labyrinth from within, without compensatory yielding of the stapes, and a consequent pressure on the labyrinth water and the ampullæ. That such is the mechanism of ear vertigo is demonstrated by the curative effect of removal of the incus and liberation of the stapes. Why true ear vertigo occurs paroxysmally cannot be easily explained, but Dr. Burnett suggests that it is due to varying degrees of tension in the chain of ossicles or in the labyrinth fluid. The latter, being a part of the lymph system of the subarachnoid space (Hasse), must be subject to varying conditions of tension, as are the ventricles of the brain or the cerebro-spinal fluid. Ordinarily the compensatory yielding of the

fenestræ of the labyrinth toward the drum cavity is sufficient to prevent undue pressure in the ampullæ and vertigo. If, however, these yielding points are stiffened as in chronic middle-ear catarrh, in which there is always more or less retraction and impaction of the stapes and thickening of the membrane of the round window, then either an increased quantity of endolymph or perilymph, or both, emanating from the cranial cavity, or a spasmodic or further retraction of the chain of ossicles and impaction of the stapes from tympanic causes, as occur in chronic aural catarrh, is competent to excite a paroxysm of ear vertigo.

If the liability to these paroxysmal impactions of the stapes can be prevented, and greater freedom given to the movement of the stapes outward when its footplate is pressed upon from within, ear vertigo from the causes mentioned can be prevented. Such immunities can be granted by removal of the incus and consequent liberation of the stapes. In twenty-seven cases of ear vertigo freedom from incapacitating attacks of ear vertigo has followed the operation. This relief has not always come at once, as long a time as six months having elapsed in some instances before entire relief has been obtained; but in some of the worst cases immediate relief has followed the removal of the incus. In a few cases the tinnitus has been entirely relieved, and in the rest of the cases greatly diminished, by the operation. The hearing, uniformly very defective in true ear vertigo, has been uninfluenced by this operation. *B. J. Baron.*

THERAPEUTICS.

Legrand.—*Mixture of Eucain and Cocain.* "Münchener Medicinische Wochenschrift," No. 21, 1899.

He recommends:

Gelatine	2·0
Natr. chlorat.	0·7
Acid. carbol. crud.	0·1
Eucain muriat.	0·7
Cocain muriat.	0·3
Aq. dest.	ad. 100·0

This mixture produces sufficient anæsthesia for every kind of operation. Small quantities should be kept in glass tubes after being sterilized. The gelatine shows at once the presence of infection by becoming opaque; it also reduces absorption, and acts as a hæmostatic. At the ordinary temperature the mixture is gelatinous, but becomes fluid at 20 to 22° C. Dilatation of bloodvessels due to eucain is counteracted by the cocain. *Guild.*