of general wasting (chronic pulmonary tuberculosis, etc.), but the tube was found, at a distance of 40 cm. from the teeth, to strike upon a hard and apparently smooth resistant object, beyond which it could not be pushed. The following conditions were found on *post-mortem* examination :

The seventh and eighth left ribs were thickened at the junction of the cartilage and the bone, through the presence upon each of a hemispherical elevation $1\frac{1}{2}$ cm. in height, which was of bony hardness and extended to the inner surface of the sternum. The cervical spine was moderately lordotic, the thoracic in the middle third kyphotic and slightly bent to the left, especially at the level of the eighth and ninth vertebræ. About $1\frac{1}{2}$ cm. to the right of the middle line of the intervertebral disc, between the ninth and tenth thoracic vertebræ, there was a smooth, greyish-white, cylindrical growth, $1\frac{1}{2}$ cm. in height and 1 cm. in width, with rounded surface and cartilaginous consistency. A similar smaller one grew from the disc between the tenth and eleventh ; the œsophagus lay between the thoracic aorta and the growth, and was bound to these by loose connective tissue. The calibre was slightly widened above but slightly bent at the point of pressure and reduced in diameter. The scoliosis was not tuberculous, and there did not seem any probability of the growths having arisen from syphilis or injury, nor that they were part of multiple congenital ecchondrosis, the thickening of the seventh and eighth left ribs being probably ossified callus resulting from an old fracture. The former case is published in the *Münch. med. Woch.*, 1905, No. 35.

Dundas Grant.

EAR.

Bourguet, Julien.—*Surgery of the Labyrinth.* "Annales des Mal. de l'Oreille, du Larynx, du Nez, et du Pharynx," September, 1905.

In this paper the topographical relations of the aqueductus Fallopii, external semicircular canal, and other structures entering into relation with the outer wall of the vestibule are precisely stated. The methods of opening the labyrinth by Botey, Hinsberg, and Jansen are fully described and criticised, and then the author details his own, which is as follows :

(1) An évidement is performed, fully exposing the inner wall of the tympanum, attic, aditus, and antrum, and the ossicles are all extracted.

(2) The vestibule is first entered superiorly. A specially constructed guard, called a facial protector, is placed in such a manner as to shield the facial canal and so that its hollowed-out upper edge is in relation with the widened orifice of the external semicircular canal. A burr is then worked into the vestibule at this spot, and the ampullary ends of the external and superior canals, together with the upper and posterior parts of the vestibule, are opened up. Attention is then directed a little above the point of first entry into the vestibule, and the inferior extremity of the anterior branch of the vertical canal is trephined. The protector is then withdrawn, and, working from before backwards, the anterior segment of the external canal up to the point of its reflection inwards is laid bare ; finally, the posterior branch of this canal is opened up. A wire, acting as a guide, is passed along it and brought out at the vestibule, after which the bone intervening between it and the operator is broken down. Thus the vestibule is freely opened above and behind.

(3) The vestibule is then attacked inferiorly. The lower frame of

the oval window and the bone situated between it and the round window are removed. During this procedure the guard is again called into requisition to protect the facial canal.

(4) Opening of the cochlea. The promontory is broken down, taking care not to proceed in an upward direction beyond the processus cochleariformis, and to advance with caution in a forward direction, stopping at the tympanic extremity of the tube so as to avoid the carotid canal; in the case of an abnormal encroachment backwards of the latter on to the promontory a flow of venous blood issuing from the carotid sinus, which accompanies the artery in all its bony course, would act as a warning of its presence.

The author considers that to remove more bone is dangerous, and that by the method he adopts a very efficient drainage of the labyrinth is obtained. *H. Clayton Fox.*

Hastings, Hill (Los Angeles).—*A Case of Acute Middle-Ear Suppuration complicated by Labyrinthine Fistula and Paralysis of the Abducens Nerve.* "Archives of Otology," vol. xxxv, No. 1.

Gradenigo is quoted as having arrived at the conclusion that "this syndrome of clinical symptoms is the result of a circumscribed simple serous leptomeningitis localised about the tip of the pyramid and caused by the diffusion of the infection in the tympanum." In the case described the extension of the infection to the nerve-sheath came probably by way of the labyrinth as shown by the rapid subsidence of the paralysis after good drainage of the labyrinth was established. Functional tests showed very slight, if any, hearing in the affected ear, and Weber's test was referred to the normal ear; bone-conduction on the affected side was repeatedly tested and found increased, which was contrary to expectation and is looked upon as inexplicable.

The occurrence of abducens paralysis in acute suppurative otitis media may reasonably be assumed to mean an inward diffusion of the tympanic infection. *Dundas Grant.*

Knapp, Arnold.—*Serous Meningitis.* "Archives of Otology," vol. xxxv, No. 1.

A case is described illustrating the fact that even in the presence of symptoms referable to increased brain-pressure we are sometimes agreeably surprised by recovery from an exceedingly grave condition after an operation which has failed to reveal any lesion of the cerebral structures, and consisting simply in the evacuation of an excessive amount of cerebro-spinal fluid. The patient was a youth aged eighteen, who had had a discharge from the left ear for three weeks and developed such symptoms as slow pulse, retarded cerebration, headache, and optic neuritis, suggesting increased brain-pressure. The mastoid antrum and tympanum were freely exposed by operation and the roof of the tympanum and antrum was removed, but the dura over the temporal lobe was healthy and pulsating. The lateral sinus was then laid bare and the dura above the bend was found to be thickened, discoloured, and readily bleeding. All the main structures were explored with negative result, but when the dura was opened, just posterior to the sinus, a gush of cerebro-spinal fluid took place and this continued in large quantities. Gradually the headache disappeared, and the patient's mental condition became brighter. Another case is narrated in a girl, aged sixteen, suffering from chronic purulent otitis; caries of the labyrinth and numerous intra-cranial com-

plications were present; symptoms of purulent meningitis developed later, and lumbar puncture evacuated a large amount of clouded fluid under pressure. The case, however, recovered as the result of operation on the middle-ear cavities and labyrinth, as well as the release of the cerebro-spinal fluid. *Dundas Grant.*

Scheibe (Munich).—*The Therapeutical Aspect of Acute Inflammations of the Middle Ear, with Reference to their various Etiology.* "Münch. med. Woch.," May 22, 1906.

The writer divides them from the clinical point of view, into "imperforative" and "perforative," the perforation depending on the quantity and consequent pressure of the secretion. He distinguishes from the inflammations the exudation resulting from pure tubal catarrh in which there is indrawing of the membrane and a transparent fluid in the tympanic cavity. The invariable treatment adopted before perforation was the use of the air-douche and in case of any tenderness on the mastoid process the application of the ice-bag. Bodily and mental repose was ordered and alcohol forbidden. As the inflammatory symptoms in the ear were more marked when the head was horizontal, patients were only confined to bed when there was high fever or depressed general condition. The indications for paracentesis were bulging of the membrane, in case of pain, and mastoid tenderness, with lowering of the hearing to something under half a metre for the whisper. Paracentesis was always followed by the air-douche. When discharge was present the meatus was syringed daily with a 4 per cent. boracic solution; Politzer's inflation was then practised and the meatus carefully cleansed with absorbent wool; boracic powder was insufflated, and the meatus loosely closed with cotton-wool; the cotton-wool was renewed whenever it was found to be soaked with pus. (Insistence on the use of the air-douche is remarkable in view of the experiments of Young and Milligan.) In regard to prognosis, cases were divided into two groups, the primary and the secondary, the latter resulting from general constitutional disease and the former independent of such. Out of 272 cases of acute inflammation of the middle ear which came under treatment at an early stage, 98 per cent. resulted in recovery, less than 1 per cent. had a fatal ending, and 0·3 per cent. lapsed into chronicity; complications took place in 5 per cent., in half of which the mastoid had to be chiselled open. Of the primary cases all recovered with normal hearing, none became chronic, and only 3 per cent. experienced complications, the chiselling operation being only necessary in ½ per cent. The secondary cases ran a somewhat less favourable course; only 94 per cent. ended in healing, 2 per cent. in death, of which one was a case of diabetes with meningitis and the other one of scarlet fever with pyæmia; 1 per cent. became chronic or, at all events, had persistent defect of hearing; in 8 per cent. complications came on, and these were of a more serious nature than in the primary cases, so that ten times as many had to be chiselled. In young infants suppuration lasted longer than in older children or in adults, attributable in part to the narrowness of the auditory meatus, perhaps also to the persistence of the embryonic mucous mass in the tympanum. The presence of adenoid vegetations appears to have considerable influence, as otitis media in patients with these growths was followed by perforation of the tympanum more frequently than in others. Scheibe explains this by the interference with the normal ventilation of the middle ear produced by the obstruction to the Eustachian tube caused by the adenoids, through hyperæmia

ex-vacuo, with transudation of serum out of the blood-vessels in the middle ear and at the same time diminished absorption of inflammatory secretions. He thinks that the beneficial effects he attributes to the air-douche are thus explained. *Dundas Grant.*

REVIEW.

The Anæsthetic Technique for Operations on the Nose and Throat. By A. DE PRENDERVILLE, M.R.C.S. Many Illustrations. Demy 8vo, cloth, price 3*s.* 6*d.* London: H. J. Glaisher, 57, Wigmore Street, W. 1906.

This work of eighty pages describes very fully the special duties of the anæsthetist in dealing with throat and nose operations. The writer, after several years of continuous work with a number of throat surgeons, has thoroughly grasped what is required of him in the double *rôle* of administrator and chief assistant. Since it is the duty of the anæsthetist in these cases to keep the air-way free both by the use of the sponge and by the posture of the head and arrangement of the tongue and lower jaw, it is very necessary that he should have definite guiding rules, and these will be found in this book.

After examining the patient and learning the nature of the operation, he should be able to use his own judgment in the selection of the various drugs, mixtures, and sequences, and the anæsthetist who has no special experience in the matter will do well to follow the writer of this work in making his choice. About half of the book is devoted to the subject of administration in the sitting posture. Probably nothing has done more of late years to advance nasal surgery than the adoption of the sitting posture for chloroform narcosis, and yet at many general hospitals it is difficult to obtain the services of an anæsthetist who does not regard it as a somewhat risky experiment. Many rhinologists will, therefore, be glad to have Dr. de Prenderville's book to lend to less experienced anæsthetists with whom they may be officially associated, for it contains a very definite and detailed description of the method, together with a discussion of its advantages and disadvantages in certain cases, and of the precautions which must be observed. After reading this work no professed anæsthetist will care to say that the sitting posture has not long since passed out of the region of experiment, for he cannot fail to recognise that the author is drawing on a prolonged and varied personal experience of his subject. The book is very readable, and the use of leaded type for the cardinal points, besides serving the purpose for which it is intended, gives the surgical reader evidence that the writer has grasped what is essential to a successful administration.

BOOKS RECEIVED.

H. Lambert Lack, M.D. *The Diseases of the Nose and its Accessory Sinuses.* With 124 illustrations. Royal 8vo, price 25*s.* London: Longmans, Green & Co. 1906.

Professor A. Ouodi, M.D., and **Professor A. Rosenberg, M.D.** *Die Behandlung der Krankheiten der Nase und des Nasenrachens.* Illustrated. Price 8 *mk.* 50; bound 10 *mk.* Berlin: Oscar Coblentz. 1906.