nosed by help of the X rays, which show that the upper limiting line of the stomach and intestine undergoes the normal respiratory displacement, that is, descends on inspiration, and rises on expiration, while in a case of diaphragmatic hernia the movements are reversed. Eventratio is much less frequent than hernia: of the former, fifteen cases have been diagnosed during life, and nine others discovered *post-mortem*, while about 500 cases of diaphragmatic hernia are on record. In only one other recorded case of eventratio was there difficulty in swallowing, while in both the author's cases this was the only symptom.

New Methods for the Direct Examination of the Larynx.—Katzenstein (Berlin).—A Whitehead's gag having been placed in position and opened, a bent spiral tube of large calibre is introduced into the larynx under guidance of the mirror. The obturator used for its introduction is then withdrawn, and in its place is passed a short straight tube, and the upper end of the spiral tube is screwed to the upper branch of the gag. The apparatus then lies firmly fixed in position and the interior of the larynx can be inspected with forehead-lamp or reflector. Another form consists of a single tube with three jointed sections at its lower end. The tube is introduced under guidance of the laryngeal mirror with the jointed portion in the form of a curve. A screw mechanism at the upper end of the tube then permits of the curved part being straightened, so as to provide a direct view of the laryngeal cavity. As in the case of the first model, the outer end of the tube is attached to the upper branch of the gag.

Abstracts.

PHARYNX.

Whale, Harold.—The Remote Results of Tonsillotomy and Tonsillectomy. "Lancet," February 15, 1913, p. 444.

An analytical scrutiny of 220 unselected cases. Discussion on tonsillotomy and tonsillectomy has hitherto centred around technique, and we do not yet know if the tonsil is a friend or an enemy. From the author's survey he concludes: (1) That tonsillotomy is disadvantageous because it may initiate an infection or the original trouble may recur. (2) That tonsillectomy is disadvantageous from risk of serious hæmorrhage, risk of later deformity, risk of later voice troubles. Tonsillectomy, however, is more likely to cure the trouble for which advice is sought. *Macleod Yearsley.*

O'Malley, J. F.—The Difficulties of Tonsillectomy and how to Deal with them. "Lancet," July 5, 1913, p. 19.

The author briefly describes his method of operating. The types of tonsil presenting difficulties are: The left tonsil in all cases; the very large tonsil; the "immobile" tonsil; the small, flat, friable tonsil; the "pulpy" tonsil. Other difficulties are—removal of the uvula, button-holing the soft palate, removal of portions of the anterior pillar, tearing of posterior pillar, removal of part of the pharyngeal aponeurosis, tearing the mucous membrane over the point where the soft palate lies in relation to the hamular process, and hæmorrhage. These are dealt with in a lucid manner, and the paper should be read *in extenso* for the method of meeting and avoiding such difficulties. *Macleod Yearsley.*

NOSE.

Lovell, A. G. Haynes.—The Vaccine Treatment of Hay-Fever. "Lancet," December 21, 1912, p. 1716.

A short note of six cases. One, a woman, had suffered from hay-fever for two years, but the ophthalmo-reaction showed her to be insusceptible to 5000 U.P. She was, therefore, not treated. The other five cases were all positive with 150 U.P., and all were benefited by inoculation treatment, but none were cured. *Macleod Yearsley.*

Bowen, H. M.—Two Cases of Air Embolus following Exploratory Puncture of the Antrum of Highmore. "Annals of Otology," vol. xxii, p. 180.

The first case was a woman, who became rigid and cyanotic, and remained unconscious for seventy-two hours. She recovered by the fifth day. The second case, a man, aged twenty-four, was attacked similarly, and died an hour after the puncture. *Macleod Yearsley.*

Kubo, I. (Fukuoka, Japan).—Spheno-choanal Polypi (Kubo). "Archiv für Laryngol.," vol. xxvii, Part II.

In the year 1908 the author published his conclusions as to the origin of the majority of the so-called solitary choanal polypi from the mucous membrane of the maxillary antrum. He has since then met with a number of cases, four of which are reported in this paper, in which a choanal polypus grew from the interior of the sphenoidal sinus, especially from the neighbourhood of the lower margin of its ostium. These polypi remain at first within the cavity of the sinus, but later grow to such a size as to obstruct completely both choanæ. In virtue of their point of attachment and short pedicle they bear a considerable resemblance to naso-pharyngeal fibromata. The opening of the sphenoidal sinus is in these cases unusually large. The author believes that most of the so-called choanal-edge polypi are in reality spheno-choanal polypi. Simple removal with the snare is not sufficient; the sinus itself must receive appropriate treatment. *Thomas Guthrie.*

LARYNX.

Sobernheim and Caro (Berlin).—Recurrent Paralysis in Heart Disease. "Arch. für Laryngol.," vol. xxvii, Part III.

Although disease of the heart has been recognised as a cause of recurrent paralysis for some fifteen years, but few cases of the kind have been recorded, especially in Germany. The author adds four to their number. The first was a boy aged fifteen, with mitral insufficiency and left recurrent paralysis. The case was remarkable in that a considerable improvement of the cardiac condition after three months' treatment was followed by complete disappearance of the paralysis, which had up to the time of writing shown no tendency to return. Both in this case and in the second the paralysis was probably the result of compression of the nerve by an enlarged left auricle. In the third case the paralysis was attributed to pericarditis causing a serous infiltration of the nerve, the result either of the venous obstruction or of an extension of the inflammatory process. In the fourth case marked kypho-scoliosis was present, and *post-mortem* examination showed that the left-sided recurrent paralysis was due to direct pressure on the nerve by the dilated left auricle. *Thomas Guthrie.*

EAR.

Ruttin, Erich.—The Pathology of Labyrinthitis. "Annals of Otology, etc.," xxi, p. 714.

Illustrated by six well-executed micro-photographs. The author states at the outset that he is guided by two fundamentals—(1) Not to destroy a still functionating labyrinth; (2) the simple surgical principle, *ubi pus ibi evacua.* He enumerates the following more or less well-defined clinical pictures for classification: (1) Circumscribed labyrinthitis; (2) diffuse serous secondary labyrinthitis; (3) diffuse serous induced labyrinthitis; (4) diffuse suppurative manifest labyrinthitis; (5) diffuse suppurative latent labyrinthitis; and deals with them in detail. He considers that every suppurative labyrinthitis requires wide opening and drainage, since every patient thus afflicted has meningitis hanging over his head. In the two forms of serous labyrinthitis the radical mastoid operation alone should be performed.

Macleod Yearsley.

Glogan, Otto.—Syphilis of the Inner Ear. "Annals of Otology, etc.," xxi, p. 703.

An excellent *résumé* of the subject. The author recognises (1) labyrinthitis with slow progress; (2) with rapid progress; (3) with apoplectiform onset. In dealing with the acoustic nerve, he enumerates syphilitic processes at the base of the brain or within the petrous bone: (1) primary gummatous neuritis, in the early syphilitic stage; (2) gummata and periostitis of the petrous; (3) basal gummatous meningitis; (4) chronic inflammation of the dura (paralysis by compression); (5) syphilitic affection of the outer cranial periosteum. In conclusion, he points out: (1) In all cases of middle and inner-ear affection the tuning-fork tests should be applied both in dispensary and private practice. Thus in many cases syphilitic aural affections may be diagnosed. (2) All cases of involvement of the labyrinth and of the middle ear, especially of otosclerosis, should be scrutinised for syphilis by investigating the previous history, inspecting the skin and orifices, and by applying the Wassermann test. (3) Early anti-syphilitic treatment may, in some instances, restore the hearing and equilibrium, while in overlooked cases catheterisation and other routine procedures hasten the destructive process.

Macleod Yearsley.

Fowler, E. P.—Report of a Case of Sequestrum of the Semi-circular Canals. "Annals of Otol., Rhinol., and Laryngol.," vol. xxi, p. 312.

Patient, a woman, aged forty-five. History of three months' suppuration in the right ear, following influenza. An extensive mastoidectomy was performed. Three months later, discharge having continued, complete facial paralysis occurred. A secondary operation was done, and a portion of the vestibule with the three semicircular canals was removed intact. *Macleod Yearsley.*

Leidler, R.—The Indications for Labyrinthotomy. 'Arch. f. Ohrenheilk.," Bd. xciii, Heft 1 and 2, p. 73.

This clinical study, which should be read in its entirety, is based upon twenty-seven cases of labyrinth operation in Prof. Alexander's clinic at Vienna from 1907 to 1913. It has been undertaken with the

object of grounding the indications for opening the labyrinth upon a secure foundation.

After a brief summary of the views published by various authorities, the author proceeds to enunciate the lessons derived from an analysis of the cases as follows:

(1) Every diseased labyrinth, originating in purulent otitis, whether acute or chronic, which is associated with a labyrinthogenic intra-cranial complication, must at once be operated on, and undoubted constant headache, localised on the affected side, is to be considered as one of these intra-cranial complications.

(2) Every diseased labyrinth originating in acute or chronic otitis, with the symptoms of acute diffuse labyrinthitis—that is to say, deafness, nystagmus of the third degree to the affected side, and loss of the rotation and caloric reactions—when the temperature is higher than 100·5° F. (38° C.), or when the symptoms persist with at least the same intensity for more than four days, must at once be operated on.

(3) A labyrinth which, as a result of acute or chronic otitis, is functionally destroyed, although it does not come into the categories mentioned in (1) and (2), must be opened when the cortical or radical mastoid operation is performed, *if* (*a*) a pathological breach of the peri- or endo-lymphatic space (fistula, cholesteatoma, sequestrum, tumour, etc.) is evident anywhere on the bony capsule; or (*b*) persistent symptoms of irritation of the static labyrinth exist (vertigo, nystagmus, vomiting).

These three rules have been based upon clinical findings solely, all reference to the still unsettled question of serous or purulent labyrinthitis being ignored.

The allusion to the temperature in the second heading depends upon the fact that in a serous labyrinthitis which only temporarily abolishes labyrinth functions, the temperature is never more than 100·5° F. (38° C.), and a diminution in the intensity of the symptoms is noticeable in, at the longest, four days.

The total mortality of the cases operated on, excluding two deaths in which signs of meningitis were present prior to operation, was 24 per cent.

In several of the fatal cases the onset of the labyrinth symptoms took place shortly after the performance of the simple radical mastoid operation at which granulations or polypi were noted in the neighbourhood of the oval window. Prior to the simple operation the labyrinth reactions were present, and in one of these cases there is a note to the effect that the granulations were left undisturbed. That these post-operative cases are difficult to handle is evident from the fact that in one of them the labyrinth was opened and drained two days after the radical operation, in another the opening was not made until seven days after the radical operation, six days after the first appearance of nystagmus. Yet both of these cases were fatal.

The labyrinth was operated on, in most of the cases, by Alexander's method—that is, from behind after exposing the dura of the middle and posterior cranial fossæ. *Dan McKenzie.*

Macleod Yearsley.—The Prevention of Deaf-mutism. "Annals of Otology, etc.," xxi, p. 585.

The author believes that all otologists should turn their serious attention to the study of deaf-mutism, and obtain a practical knowledge, not only of its causes, but also of the psychic problems presented by the

deaf-mute and of the methods of dealing with him educationally. He gives statistics of 1076 cases under his own charge and discusses the figures briefly, and pleads for the application of eugenic principles to the problem of congenital deafness, for the combating of superstitions about otorrhœa, for better care of the ears during the exanthemata, for honest, consistent and scientific legislation upon syphilis, and for the better and more systematic teaching of the principles of otology in our medical schools. *Author's Summary.*

Frazier, Charles H., M.D. (Philadelphia).—Intracranial Division of the Auditory Nerve for Persistent Tinnitus. "Journ. Amer. Med. Assoc.," August 2, 1913.

This paper is a plea for more frequent resort to surgical measures for the relief of lesions of the eighth or auditory nerve. The indications for section of the eighth nerve are: (1) Aural vertigo, (2) persistent otalgia, and (3) persistent and intractable tinnitus. The appropriate cases are those of labyrinthine disease. The deafness resulting from complete division of the auditory nerve would be an objection to the operation, were it not for the fact that as a rule the patient is already deaf on the affected side.

The operation consists in removing the portion of the occipital bone between the emissary sinus and the median line, and from the level of the lateral sinus downward for 3 cm. On the reflection of a dural flap, the cerebellar hemisphere is very gently raised and pushed backwards by a brain-retractor until the petrous bone is uncovered as far as the internal auditory meatus.

The auditory nerve is then separated from the facial, and divided with alligator scissors and the wound closed.

In the isolation of the auditory from the facial nerve special emphasis is laid on the necessity of patience, artificial illumination and the assistance to be derived from electrical stimulation. *Birkett* (*Rogers*).

Dench, Edward Bradford.—Otitic Meningitis Treated by Drainage of the Cisterna Magna. "Laryngoscope," September, 1913.

A record of three cases treated by the method introduced by Haynes.

(1) A child, aged three and a half, with a history of left otorrhœa for one week, some pyrexia for two days, and pain in the head for twenty-four hours. There was a large perforation in the lower segment of the left membrane with purulent discharge yielding a streptococcus. No mastoid tenderness. Slight rigidity with Kernig sign on right side, absent knee-jerks and flexor plantar reflex. No nystagmus. From the slight degree of fever (101° F.) and elevation of pulse-rate (108) with absence of mastoid tenderness the case was regarded as one of tuberculous meningitis. A radical mastoid operation showed fluid in the mastoid cells and bulging dura in middle and posterior fossæ. Two days later owing to greater rigidity and rising pulse-rate (150) and temperature (103°), the cisterna magna was drained in mid-line. Fluid was under pressure and apparently sterile. Improvement took place for three days, but the child then became worse and died on seventh day after drainage of the cisterna.

(2) Infant, aged five months. A simple mastoid operation was performed for an acute mastoiditis with fever (temperature 105°). Two days later, owing to the onset of convulsions, the cisterna was drained, Improvement took place for two days, the temperature dropping to normal.

but the child then become worse, and died four days after the drainage operation. Streptococci were present in the aural discharge, but the cerebro-spinal fluid, although under tension, was sterile.

(3) Boy, aged eight, who, two days after a radical mastoid operation for chronic suppurative otitis media, developed symptoms of meningitis with pyrexia (105°) and rigidity. Lumbar puncture gave purulent but apparently sterile cerebro-spinal fluid with normal carbohydrate content and an absence of globulins.

Four days after the mastoid operation the cisterna was drained, but death took place four days later without any marked relief of symptoms.

The author is of the opinion that these were very suitable cases in that the cerebro-spinal fluid was sterile. From the experience of these three cases he does not think that the method seems to do much more than drainage by other routes. He found the operation easy to do and did not find it necessary to use other than the ordinary mastoid instruments. It is a pity that apparently *post-mortems* were not performed.

A. J. Wright.

REVIEWS.

Le Affezioni Dell'Orecchio Nell'Adenoidismo (*Aural Complications of Adenoids*). By Dott. R. Vitto-Massei, Estratto dagli Atti della Clinica Oto-rino-laringoiatrica della R. Università di Roma, anno 1912. Jori e C.: Via delle tre Pile, 5, Rome, 1913.

This octavo brochure of 108 pages is a recent addition to a subject which is not yet exhausted. It is welcome as it shows the good work being done in the clinic of oto-laryngology in Rome, where it was inspired by work under Prof. Ferreri; it is, indeed, a reprint from the annual volume of proceedings for the year 1912, published by the Royal University of Rome. It attracts our attention as the work of the son of Prof. Massei, of Naples, the *doyen* of Italian laryngology. Finally it is welcome for its own value, as it not only gives a history of the subject with a most complete bibliography, but the writer's own researches are of much interest.

The introductory chapter shows how long a new discovery may tremble on the verge of revelation until the arrival of an investigator endowed with the necessary imagination and courage. Luschka's tonsil was fully described by Schneider in 1655; it was further studied by Santorini and Haller. Troeltsch nearly discovered the source of many ear troubles when he explicitly gave his opinion that the naso-pharynx represented the point of departure of many aural affections. About 1856 Czermak was the first to see, with the aid of the newly invented laryngoscope, the Luschka tonsil on the roof of the naso-pharynx. But the genius of the discoverer was still wanting. It arrived in the person of Wilhelm Meyer, a Danish surgeon, and the exact date was October 22, 1867. On that very day he was struck with the fact that a young woman suffering from deafness, whom he had treated without relief, always breathed with her mouth open. The idea flashed through his brain of making a digital examination of her naso-pharynx; there his finger encountered the soft growth which we all know so well. He removed it with his ring curette. Thirty-one years afterwards, viz. on October 25, 1898, a monument to the memory of Wilhelm Meyer was unveiled in his native city of Copenhagen. Amongst those present was this peasant woman whose case gave rise to the remark-