

On the Wednesday evening, in the same room, the papers will deal with otological subjects, as follows:

Dr. A. Logan Turner, Edinburgh, "The Application of Skiagraphy to the Mastoid Region and its Use in the Detection of Disease." Discussion by Mr. Sidney Scott, London.

Mr. Hugh E. Jones, Liverpool, "Some Considerations which Determine the Extent of an Operation in Septic Invasion of the Lateral Sinus." Discussion by Mr. Hunter Tod, London.

The London Committee of Arrangements is composed of one representative from each of the hospitals which are co-operating, Sir Rickman J. Godlee, Bt., honorary Chairman, Mr. H. S. Pendlebury and Mr. Herbert Paterson, honorary secretaries. The Secretary-General of the Congress is Dr. Franklin Martin, 1, Wimpole Street, W.

Abstracts.

PHARYNX.

Mayer, E. (New York).—Primary Carcinoma of the Epiglottis, with Report of a Case operated on by means of Suspension Laryngoscopy. "Arch. für Laryngol.," vol. xxvii, Part III.

After referring to the literature of this somewhat rare condition, the writer describes a case in which he met with a very early cylindrical-celled cancer of the laryngeal surface of the epiglottis. That the disease was of recent origin was certain because the writer had examined the patient's throat three weeks previously, and had found it normal. In suspension laryngoscopy under general anæsthesia the epiglottis was seized with catch-forceps and amputated with a knife. There was little bleeding at the time, but a quantity of blood was expectorated twenty-six hours later, the hæmorrhage, however, ceasing on the application of cold. The patient remained well at the time of writing (eight months after the operation). It is claimed that this was the first operation of the kind performed by means of suspension laryngoscopy.

Thomas Guthrie.

Jolly, R. H. H.—A Case of Osteomyelitis of the Sphenoid Bone following Removal of Adenoids. "Lancet," June 21, 1913, p. 1734.

A boy, aged fifteen. Adenoids and tonsils removed seventeen days previously. Considerable hæmorrhage four days later, with slighter loss each succeeding day. Severe headache one week, swelling of eyelids one day. Temperature 102°–105° F. Pulse 140, respirations 56. A rigor occurred shortly after admission, followed by coma and death in four days. There was purulent meningitis, pus in the sella turcica and at the back of both orbits. The entire body of the sphenoid was broken down and caseous, with small foci of pus, a definite connection being traceable to the posterior naso-pharynx. Cavernous sinuses contained purulent thrombi. Tonsillar fossæ fairly normal, but the upper part of the posterior naso-pharynx was full of foul, purulent slough.

Macleod Yearsley.

Wilson, W.—Some Causes of Disappointment following Removal of Tonsils and Adenoids. "Lancet," 1913, vol. ii, p. 1612.

A valuable paper, and one that should be read by all general practitioners who do adenoid operations. Wilson refers to the extensions of the adenoid mass into Rosenmüller's fossæ, and their effect upon the action of the levator and tensor palati and the salpingo-pharyngeus. He also points out the necessity for removal of enlarged posterior ends of inferior turbinals and the importance of careful after-treatment by (1) breathing exercises, (2) Politzerisation, and (3) orthodontal treatment when necessary.

Macleod Yearsley.

Warner, Francis.—Development of the Pharynx by Muscular Exercises after Operation for Adenoids, with Special Reference to Feeble-minded Children. "Lancet," 1913, vol. ii, p. 1758.

The exercises advised are of the pterygoid muscles, for the purpose of developing the bony boundaries of the pharynx. These are combined with special breathing exercises, and require the combined co-operation of the doctor, the teacher, and the drill-instructor. The paper requires to be read *in extenso*.

Macleod Yearsley.

NOSE.

Levinstein, Oswald (Berlin).—Intra-nasal Opening of the Maxillary Antrum. "Zeitschr. f. Laryngol.," Bd. vi, Heft 3.

The author admits that it is impossible to curette out diseased mucous membrane through an intra-nasal opening, and further, that it is impossible to see what one is doing in many cases, so that the operation must be performed by "feel" alone. It is useless to bother about making a flap from the nasal mucous membrane if one only performs the intra-nasal operation on the antrum, because a flap is only of use when the mucosa of the antrum has been removed.

Levinstein defines the objects of intra-nasal opening as (1) drainage, (2) easy access to the antrum for lavage through the antrum. According to the statistics of Claoue, Berens and Myles, about 80 per cent. of cases of antral suppuration are cured by intra-nasal opening.

Various methods have been suggested for intra-nasal operation on the antrum: (a) Gerber and Kubo recommend an opening in the middle meatus, but this route renders subsequent lavage by the patient very difficult. (b) The usual method is to remove the anterior end of the inferior turbinal, and then to bore through the inner wall of the antrum and enlarge the opening with bone-cutting forceps. Levinstein says that after this operation scabs and crusts form on the operated side on account of the tendency to dryness of the nose. Further, the patients often suffer from neuralgic pains for many months.

Hirsch and Ruttin have modified this method in so far that they recommend only a temporary resection of the inferior turbinal. This makes the operation very difficult, especially in narrow noses. (c) Levinstein himself proposes a submucous instead of a transmucous operation, and holds that resection of the inferior turbinal is not necessary.

Dahmer, Roe, Sturmman and Skillern have already described a submucous intra-nasal operation on the antrum. Of these writers the first

two remove the anterior end of the inferior turbinal, while the two latter attack the antrum from the outer bony margin of the pyriform aperture.

The stages of Levinstein's operation are as follows: (1) The nasal mucous membrane is painted with 20 per cent. cocaine with a little adrenalin. (2) Two c.cm. of 1 per cent. novocaine with 15 drops of adrenalin are injected into the mucosa of the outer wall of the inferior meatus and floor of the nose. (3) The mucous membrane of the outer wall is incised with Freer's knife parallel to the anterior end of the inferior turbinal; the cut extends down to the floor of the nose. (4) The muco-periosteum is raised with Freer's elevator from the outer wall of the inferior meatus. (5) The detached muco-periosteum is cut with scissors as near as possible to the attachment of the inferior turbinal and the flap turned back out of the way against the septum. (6) The inner wall of the antrum below the level of the inferior turbinal is now removed with chisel, trephine or forceps. The anterior part of the inner wall of the antrum must be completely removed along with any projecting ledge of bone between the nasal and antral floors (this part of the operation is best performed with a bent gouge). (7) The mucous membrane flap is removed over an area which corresponds to the hole made in the inner wall of the antrum. After-treatment is on the usual lines.

J. S. Fraser.

Luc, H.—Route of Access to the Ethmoidal Labyrinth by Harris Mosher's Method. "Annales des Mal. de l'Oreille, du Larynx, du Nez, et du Pharynx," vol. xxix, No. 6.

The author remarks that, on examining the outer wall of the nasal fossa in a sagittal section, a rounded eminence presents itself immediately in front of the anterior extremities of the superior and middle turbinated bodies, which corresponds to the innermost peri-infundibular cell, or the cell of the agger nasi. This is the situation where Mosher enters the ethmoidal labyrinth. A curette applied at this point with pressure directed outwards will enter a cavity bounded externally by the lachrymal bone, anteriorly by the nasal process of the maxilla, posteriorly by the bulla ethmoidalis, and superiorly by the frontal sinus, which usually opens at its anterior and external part. Mosher's technique is as follows: Complete anæsthesia and ischæmia are effected by cocaine and adrenalin applied locally. The head is then held in a position of hyper-extension, in order to bring the point of attack well into view. The curette is now applied over the agger eminence with pressure directed towards the lachrymal bone. Should the osseous wall yield, one will be in the right direction; if not, the curette must be applied a little higher and more posteriorly. As soon as the bone gives way, the instrument enters a space in which it is freely mobile. The breach is now extended by turning the cutting edge of the curette backwards and working from above downwards and from without inwards; thus the bulla ethmoidalis is opened and the middle turbinated body partially detached. The curette is afterwards directed against the posterior border of the nasal process. An appropriately curved probe can now be passed through the antero-external portion of the roof of the cavity into the frontal sinus, and by substituting a small curette with conveniently curved shank, the fronto-nasal communication can be enlarged at will. In proceeding with the posterior ethmoidal cells and sphenoidal sinus, Mosher recommends that the head be held vertically. The curette is applied along the attachment of the middle turbinal, which serves as an important guide in opening the posterior cells. The author emphasises the danger of entering the cranial

cavity when the operator approaches the neighbourhood of the superior and outer extremity of the hindermost ethmoidal cell, here the party-wall is exceedingly thin, offering little resistance, and still less in cases of prolonged suppuration. For this reason both Mosher and Luc insist on the patient's head being maintained in the vertical position during this stage of the operation. A capacious posterior ethmoidal cell has been mistaken for the sphenoidal sinus; this can be avoided by carefully differentiating the internal portion of the anterior surface of the sphenoid from the outer portion in relation with the ethmoidal labyrinth. The line of demarcation of these areas is clearly defined by the posterior end of insertion of the superior turbinated body. Mosher therefore advises, after complete resection of the middle turbinated body, detachment of the superior close up to the sphenoidal wall, and to break down the latter inwards from the insertion in question, taking as a supplementary landmark the superior border of the choana.

H. Clayton Fox.

LARYNX AND TRACHEA.

MacMahon, Cortlandt.—**Functional Aphonia: A Method of Curative and Preventive Treatment.** "Lancet," March 1, 1913, p. 632.

The method detailed is not intended to take precedence of intra-laryngeal faradism in hysterical and neurotic subjects, but is advocated for stubborn cases which do not yield to ordinary treatment. In dealing with cases of aphonia the first thing to be acquired is the ascent of a definite and adequate air column, which can be passed at will through the larynx, and the author insists upon the careful teaching of marked inferior lateral costal expansion during inspiration, followed by strong and deliberate contraction of the abdominal muscles.

In overcoming and preventing functional aphonia the great essentials to be sought are resonance and freedom from all constriction. These can be acquired by the possession of a definite air column, free lip movement, a low pitch of voice, and a knowledge of the resonator positions.

Macleod Yearsley.

Mygind, S. H. (Copenhagen).—**Acute Rheumatic Arthritis of the Crico-arytænoid Joint and Conditions resembling it from the Clinical Standpoint.** "Archiv. für Laryngol.," vol. xxviii, Part I.

The literature contains very few recorded cases of rheumatic fever complicated by an affection of the crico-arytænoid joint. About twenty-five have been reported, but of these only seventeen are beyond question; the author adds one to their number. For the establishment of such a diagnosis he considers it necessary that there should in the first place be extra-laryngeal symptoms of an acute rheumatic infection, such as fever and affection of other joints, and in the second place there must be evidence of a primary serous synovitis of the crico-arytænoid joint—that is to say, limitation of movement and swelling in the neighbourhood of the joint. It is conceivable, however, that in rare instances the crico-arytænoid may be the only joint affected.

In the case which the writer records a woman suffered from a mild attack of rheumatic fever with multiple joint affection, during the subsidence of which the presence of a laryngeal complication made itself known by the onset of hoarseness, dysphagia, and dyspnoea. Examination

showed great œdema of both arytaenoids, marked limitation of adduction and abduction, especially the latter, tenderness on pressure over the joints, and swelling of the cervical lymph-glands. The symptoms subsided under treatment with sodium salicylate, and there remained six weeks later only slight swelling of the arytaenoid region and a little impaired mobility of the cords, particularly on abduction.

The condition has been met with chiefly in women between the ages of eighteen and forty-five years. Hoarseness and dysphagia are always present; dyspnoea is recorded in about one half of the cases, but tracheotomy has never been required.

Similar conditions are occasionally met with in association with gout, gonorrhœa, chronic rheumatism, and certain of the infective fevers.

Thomas Guthrie.

ŒSOPHAGUS.

Johnston, Richard H.—**The Removal of Foreign Bodies from the Upper End of the Œsophagus.** "Laryngoscope," July, 1913.

This paper advocates the use of short and wide instruments with the head in the "straight" position. It is laid down that while it is possible, with the head in the extended position, to examine the œsophagus, the examination is made more difficult, both by the necessity of having a trained assistant to support the head and by the muscular tension induced. The examination can, however, be easily performed by simply allowing the head to lie straight on the table. The author has used this position with success on children up to eight years of age without an anæsthetic, and has found that with a Jackson's child's speculum, introduced to the cricoid level, a view of the œsophagus down to the level of the clavicle is easily obtained. He advocates local anæsthesia with the sitting position and slight extension of the head for the examination in adults.

A. J. Wright.

E.A.R.

Heschl, Friedrich.—**The Relation of Air- and Bone-Conduction in Obstructive Deafness.** "Monatss. f. Ohrenh.," Year 47, No. 9.

The lengthening of bone-conduction in lesions of this class is, says the author, one of the oldest established facts in the investigation of deafness, and one for which many suggestions have been offered in explanation. Of these, although he is inclined to consider the theory of Mach in part acceptable, yet more research is wanted in this direction. (Mach's theory suggests that the same obstruction which hinders the passage of the sound-waves *via* the middle ear also prevents the dissipation of sound by bone-conduction, so that the effect of the latter on the perceptive apparatus is augmented.)

With this end in view the following examinations and tests were carried out: The fundus was first inspected, and then the range for conversation and whisper ascertained. The difference in point of time between the appreciation of the tuning-fork by the examiner and patient was next noted as "Air-conduction-difference." The "Bone-conduction-difference" was similarly noted, *viz.* Schwabach's test. (Bárány's modification¹ of this was not apparently adopted, nor was

¹ JOURNAL OF LARYNGOL., RHINOL., AND OTOL., p. 611, 1909.

notice taken of Gelle's test.) The results to Rinné's and Weber's tests were also noted. The difference between the bone-conduction of the patient and the air-conduction of a normal ear in addition, as suggested by Frey, was ascertained, as well as the difference of their air-conduction. With these and other data an exhaustive investigation was carried out on three cases of acute middle otitis, nine cases of acute tubo-tympanic catarrh, one case of a traumatic lesion of the inner ear, two cases of impacted cerumen, and, lastly, three normal hearing people, in whom an artificial obstruction had been produced by a plug of wool soaked in oil, the general idea being to obtain a record as regards these functional tests both before and after the varying obstruction was removed.

These results are represented in a series of tables, an example of accuracy, energy and method, and the article concludes with a summary as follows:

(1) In deafness due to obstructive agencies the bone-conduction will always be found lengthened.

(2) After removal of the obstruction in these cases the hearing always improves, but the lengthening of the bone-conduction does not decrease in all cases.

(3) The effect on the bone-conduction varies as to whether the obstruction is in the outer ear passage or middle ear. If the obstruction be in the outer ear passage its removal produces an improvement in hearing and a corresponding decrease in the lengthening of the bone-conduction. If, however, the obstruction be in the middle ear its disappearance may indeed mean a marked improvement in hearing, but the lengthening of the bone-conduction may be only slightly affected. After the affection has subsided the air-conduction may become almost entirely as good as formerly, but the lengthening of the bone-conduction may remain.

(4) Inflation produces its greatest result at the first sitting; the improvement at subsequent inflations is more gradual.

(5) The power of perception by normal people varies: a fact that must be noted in distinguishing pathological and physiological conditions.

(6) There is sometimes a marked disagreement between the improvement of the range of hearing for speech and the increase in the air-conduction.

From these conclusions, therefore, Heschl does not consider that Mach's theory satisfactory for all instances of obstructive deafness, since, according to this, removal of the obstruction should be followed by restoration to a normal bone-conduction, which latter, as he claims to have shown, only occurs in cases where the obstruction was located in the outer ear passage. Middle-ear affections, he contends, must be associated with other changes which commence in the course of the affection—as is demonstrated by certain cases in which the lengthening of the bone-conduction increases during the subsidence of the attack—and lead to conditions that accentuate the force of the sound by cranial conduction.

Alex. R. Tweedie.

Jaehne, A.—The Clinical Aspect of Herpes Zoster Oticus. "Arch. f. Ohrenheilk.," Bd. 93, Heft. 3 and 4.

A case of herpes zoster oticus is reported and the literature analysed.

The patient was a male, aged twenty. In the course of a general infection characterised by fever, depression and jaundice, a herpetic rash broke out on the concavity of the right auricle and inside the external

meatus. The tympanic membrane was reddened, but there was no bulging. A few days later, severe pain in the right ear came on, with headache, vertigo, nausea and deafness, and the right side of the face became completely paralysed.

After a few days the general symptoms began to disappear. The temperature fell to normal and the jaundice cleared away, while at the same time the vertigo gradually became less troublesome, although the patient still fell (towards the right) when standing up. The deafness, however, which was very severe, persisted and the facial paralysis showed no improvement. The caloric reaction was absent from the right ear and present in the left. Wassermann negative.

Six, even eleven months after the onset of the disease no alteration had taken place in the face or in the hearing, and it is noted that the sense of taste for salt, acid, sweet and bitter, was absent from the right side of the tongue.

In comparing this case with the others which appear in the literature, the author observes that persistence of the paralytic phenomena is unusual, although, in point of fact, complete recovery also seems to be exceptional. In most of the cases some amount of improvement took place.

Dan McKenzie.

Cavanaugh, John A.—*Topography of the Tympanic Cavity.* "Annals of Otolaryngology," xxii, p. 699.

A useful paper, illustrated by four plates, which requires to be read in its entirety.

Macleod Yearsley.

REVIEW.

Geschichte der Ohrenheilkunde (History of Otolaryngology). By Dr. ADAM POLITZER (Emeritus Professor of Otolaryngology in the University of Vienna, Emeritus Director of the University-Aural Clinic in the General Hospital of Vienna, Royal and Imperial Court Councillor). In two volumes. Second volume from 1850 to 1911; with the co-operation of well-known colleagues. 29 illustrations on 29 plates. 474 pages. Stuttgart: Ferdinand Enke, 1913.

The first volume of this valuable work brought us from the times of the ancient peoples of the East up to the middle of the Nineteenth Century. The second volume, though limited in its scope to little over sixty years, occupies as many pages as the first, and if less stimulating to the historical sense is imbued with at least quite as much practical interest. So great is the amount of material for recording during these active years that the author apologises because in order not to overstep such limits of space as render the whole survey difficult he has had to confine himself to the most important features alone. The selection of the subjects according to their importance has been carried out with such judgment and such complete knowledge that a good historical account is given within modern compass and without any sacrifice of readability.

The author's high estimation of Toynbee's work would almost justify us in dividing the history of Otolaryngology into two eras—the præ-Toynbeeian and the Toynbeeian, and it is with the latter that the second volume is concerned.

The first half of this volume is arranged on the basis of a "subject" classification, with such chapter headings as "The Investigations in the