Mr MACDONALD (in reply) said that, so far as he knew, the mastoid condition four years ago had not been preceded by any labyrinthine storm. The illness had been acute, and the operation almost immediate. The facial paralysis had begun only a year ago, with epiphora of the eye and inability to close it. She had had no further symptom of facial paralysis until seven days before readmission to hospital this year, and then she had noticed that she was biting her lower lip on the left side. When admitted, she had complete facial paralysis on that side, and, so far, there had not been any improvement.

Mr JENKINS (President) said that the absence of a labyrinthine storm seemed to confirm the idea that the destruction of the labyrinth occurred in early life.

ABSTRACTS

THE EAR

Schaefer-Galton Whistle. Dr ROBERT SONNENSCHEIN, Chicago. (*Annals of Otology, Rhinology, and Laryngology*, September 1925.)

In this short notice attention is drawn to a modification of the Edelmann-Galton Whistle which Professor Karl Schaefer of Berlin has recently brought out. Its advantages are stated to be (1) a fixed mouthpiece, (2) manipulation with one hand, (3) a constant forceful air pressure is obtained by a double bulb, (4) the price is somewhat cheaper than the Edelmann-Galton Whistle. NICOL RANKIN.

Roentgenography of the Orbit and Petrous Pyramid and its Clinical Value. HARRY A. GOALWIN (New York). (*Journal of Ophthalmology, Otology, and Laryngology*, January 1926.)

The complete X-ray examination of the orbit requires at least seven different roentgenograms, according to Dr Goalwin, who in a long article with twelve illustrations shows some of the results which can be obtained by modern technique, such as the demonstration of a fracture of the optic canal with displacement of fragment towards the sphenoidal fissure. By a modification of the Mayer technique he is able to bring out the external auditory canal, recessus epitympanicus, antrum, middle ear, air cells and sigmoid groove. In views from other angles he is able to show the semicircular canals with remarkable clarity. He gives nineteen references to articles, mainly in the German language, on advances in radiography of the skull contributed within the past few years. WM. OLIVER LODGE.

Abstracts

New Artificial Drum. O. G. KESSEL. (*Archiv für Ohren-, Nasen-, und Kehlkopfheilkunde*, Band cxiv., Heft 3/4, February 1926.)

This is a favourable report on the new prothesis now on the market under the name of "Krusophone," consisting of a hollow conical appliance of soft rubber, the extremity of which is introduced into the tympanic defect. WM. OLIVER LODGE.

Ether Treatment of Chronic Suppurative Otitis Media. T. HUBBARD. (*Laryngoscope*, Vol. xxxiv., No. 12, p. 941.)

This treatment has been used for from four to five years and has given so much satisfaction that it can be recommended as a safe and easy method. The ear is syringed before the treatment commences, but not again. The patient is placed in the recumbent position and the external auditory canal filled with anæsthetic ether. As ether boils at 95 degrees Fahrenheit, it soon begins to boil gently, owing to the body heat, and in ten to fifteen minutes it has evaporated. The ear is then cleaned out with cotton-wool, and the patient can do this for himself.

What pain there is, is of short duration, and subsides long before the ether has entirely evaporated.

The author has used this method during the last four to five years before recommending a radical mastoid operation. In favourable cases, there is considerable improvement within a week or a fortnight. If there is no improvement in two or three weeks, then it is time to advise operation. ANDREW CAMPBELL.

Trigeminal Neuralgia in Certain Forms of Mastoiditis in Children. H. ALOIN, Lyons. (*Revue de Laryngologie*, December 1925.)

The writer draws attention to a class of case in which persistent and severe inferior dental neuralgia occurs as a sequela of mastoiditis, which he regards as being specially common in children. The pain comes on in attacks, worse at night, often entirely remitting in the day-time. Two cases recorded in detail were characterised by widespread inflammation of the bone, trophic sores on the scalp, and extreme indolence of repair in the mastoid wound. The patients were 7 and 8 years old respectively. Their resistance had been broken down, in the one case by influenza, in the other by whooping-cough. The writer believes that the 5th nerve neuralgia was directly due to a pachymeningitis in the neighbourhood of the Gasserian ganglion, which, in turn, was due to a smouldering osteomyelitis of the petrous pyramid.

The condition is one especially associated with low general resistance, and the treatment should be directed to restoring the general health.

G. WILKINSON.

The Nose and Accessory Sinuses

THE NOSE AND ACCESSORY SINUSES

Gangrene of the Nose due to Diabetes Mellitus. K. ARDESHIR. (*Lancet*, 1926, Vol. i., p. 1256.)

The author reports this condition in an Indian girl, aged 8. The points of interest are: 1. The diabetic gangrene of nose in a child: 2. Rapid recovery under insulin: 3. The possibility of use of insulin in private practice without having facilities for examination of blood-sugar: 4. Difficulty of keeping in touch with patients in India to observe effects of after-treatment: 5. Absence of any provision for the supply of insulin in India free of charge to the poorest patients.

MACLEOD YEARSLEY.

Hæmatologic Researches in Ozæna. A. TRIMARCHI. (*Arch. Ital. di Otol.*, April 1925, Vol. xxxvi., p. 223.)

The author refers to a previous paper in which he had studied the leucocyte formula in ozæna patients and found constantly a lymphocytosis and sometimes an eosinophilia. In the present paper the researches have been extended to include the relatives of the patients to see if there was possibly some hereditary condition. Nineteen families of ozæna patients were examined.

Trimarchi states that he has discovered a constant type; lymphatic individuals, scrofulous and emaciated and with a hereditary syphilitic or tuberculous taint. Lymphocytosis is constant and in the ozænatous patients eosinophilia is also found. He thinks there is a special predisposition to the disease in ozæna families, such as poor general condition, tendency to atrophic mucosa and very wide nasal cavities. He concludes that ozæna is a manifestation of a general lymphatic or toxic state, which is favourable to the development of biochemical processes in the nose. The researches on the blood show that in the families of those with ozæna the lymphatic state exists normally.

J. K. M. DICKIE.

The Atrophic Rhinitis of Hereditary Syphilis. By E. ESCAT. (*L'Oto-Rhino-Laryngologie Internat.*, May 1926, p. 193.)

Atrophic rhinitis should be regarded as a syndrome and not as a disease. Any condition which causes a prolonged suppurative inflammation of the mucous membrane in childhood may produce the condition. As a result of a careful study of individual cases and their relations, he has come to the conclusion that hereditary syphilis is responsible for more than half the cases of so-called ozæna. The atrophy, which is the essential cause, is due to a suppurative rhinitis in the secondary stage of syphilis in infancy, and this fact explains its differentiation from the gummatous ulceration of tertiary syphilis. It seems possible that some

strains of syphilis have a predilection for affecting the nasal mucosa, and this may account for the frequent absence of other syphilitic stigmata in cases of atrophic rhinitis. The Wassermann reaction is frequently negative in these cases, the active stage of the syphilitic disease being over. Labyrinthine changes and laryngo-tracheitis are more common in cases of atrophic rhinitis due to hereditary syphilis than in other varieties. A. J. M. WRIGHT.

Contributions to the Study of the Spheno-palatine Ganglion. By S. L. RUSKIN. (*Laryngoscope*, Vol. xxxv., No. 2, p. 87.)

The anatomy of the spheno-palatine ganglion and its connections are considered in detail. Clinically, cases group themselves under four headings:—

1. Spheno-palatine maxillary neuralgia.
2. Spheno-palatine facial neuralgia, corresponding to the distribution of the seventh nerve.
3. Spheno-palatine sympathetic neuralgia.
4. Spheno-palatine ganglion-cell neuralgia.

We must, however, consider spheno-palatine ganglion disturbance, not as an entity, but rather as a combination of the above four syndromes. In disease of the sphenoid, ethmoid, and antrum, we often find all three giving the same symptomatology; it is now obvious that all three will produce their symptoms through the same ganglion and thus give clinically the same picture. For surgical purposes, we may consider the ganglion as a sensory unit supplying to a large extent the sensation of the nose, the sinuses, the roof of the mouth, tonsils, and part of the pharynx. Near it lies the maxillary nerve and the two together supply the integument of the cheek, the fore part of the temple, the lower eyelid, the side of the nose and upper lips, the lining membrane of the upper part of the pharynx, of the antrum and posterior ethmoidal cells, the soft palate, tonsil and uvula, and the glandular and mucous structures of the roof of the mouth.

Injection of the spheno-palatine ganglion is best carried out by way of the posterior palatine canal through the roof of the mouth. It is the only route in constant relationship to the ganglion. A 22 gauge, 45 mm. long platinum needle, mounted on a syringe at an angle of 45 degrees, is employed. The patient is in the supine position and the posterior palatine foramen is located by palpating the edge of the hard palate and inserting the needle 5 mm. anteriorly and about 0.75 c.m. medial to the second molar tooth. The needle is inserted through the posterior palatine foramen into the canal to a depth of 3.5 to 4 c.m., and will then appear opposite to the spheno-palatine foramen and directly in the ganglion. By advancing the needle 5 mm. deeper, the point comes to lie medial to the maxillary nerve, which can then be injected if

necessary. This route may be employed to anæsthetise the nose and also for surgery of the tonsils.

The paper is well illustrated with photographs of anatomical sections of the area involved. ANDREW CAMPBELL.

Contribution to the Roentgenography of the Nasal Accessory Cavities. H. RICHTER (Frankfort-on-Main). (*Zeits. für Hals-, Nasen-, und Ohrenheilk.*, Vol. xiii., Part II., p. 192.)

Richter recommends for the sphenoidal sinus the palato-parietal position with the head thrown back 60 degrees, the tube directed into the roof of the open mouth and projected 5 degrees upwards. The central ray is directed mesially in the neighbourhood of the second molars. For the frontal sinuses the head is similarly inclined but the tube is projected up through 10 degrees and the central ray directed about a finger's breadth above the root of the nose. For the maxillary antrum the face is turned downwards for 45 degrees on to the plate, taking as the horizontal (when upright) the zygoma. The tube is not projected up but is directed horizontally, and in this cervico-frontal line passes through the coronoid process of the mandible (or the palpebral fissure). A number of illustrations are given. JAMES DUNDAS-GRANT.

Observations on the Frontal Sinus. WM. OLIVER LODGE. (*Brit. Med. Journ.*, 3rd April 1926.)

A series of cases is recorded exemplifying various affections of the frontal sinus. Case I. was the common catarrhal type which subsided with conservative treatment. Case II. was a case of mucocele with prominent swelling and persistent frontal headache. An external operation was performed and a flap of mucous membrane was turned down to line the communication between the sinus and the nasal cavity. Case III. was a traumatic case, suppuration of both frontal sinuses following a kick on the head. There was acute osteomyelitis of the frontal bone and a localised purulent leptomeningitis. The patient died the day after operation. Case IV. was one of acute frontal sinusitis following influenza. Killian's operation was performed and progress was good for thirty-four days, when it was found that the nasal opening was closed by exuberant granulations. It appeared that pus had been draining into the antrum and this was obviated by inserting a silver tube into the fronto-nasal communication. Case V. was a chronic case with a fistula on the forehead. The whole forehead was tender. A coronal incision in the hair-line allowed of the skin of the forehead being turned down. A large erosion in the bone was present; sequestra were removed, and the carious anterior walls of both sinuses excised. A silver drainage tube was again used. Case VI. had already had a dozen operations on her frontal sinuses and the

author contented himself with providing a suitable bougie for daily introduction through the nose. In Case VII. periostitis of the frontal bone with obliteration of the left frontal sinus was associated with a positive Wassermann reaction and the condition subsided under treatment. T. RITCHIE RODGER.

THE LARYNX.

A Contribution to the Study of Galvanocauterisation in Tuberculosis of the Larynx. L. DE REYNIER (Leysin, Switzerland). (*Presse Médicale*, 10th March 1926.)

The author describes three cases of tuberculosis in which one or more applications, never many, of the galvanocautery produced a remarkably rapid improvement, even a cure, healing taking place at the same time that the lesions in the lungs, more or less profound, were actually becoming worse. In two of the cases, a lesion of the lip in the one, and of the tongue in the other, showed the same rapid change for the better, and early cure. He discusses the mechanism whereby this effect is produced, and concludes that an active local immunity is induced in the neighbouring tissues, quite independent of the degree of general immunity to tubercle possessed by the patient, and resulting in the destruction of the bacilli and the complete and rapid elimination of the areas invaded, which are replaced by dense scar tissue. Two references are given to previous publications by the author on the same subject. F. J. CLEMINSON.

On the Removal of the Tuberculous Epiglottis. E. BÜCH (Essen). (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Bd. xiii., No. 3, p. 342.)

This is advisable in cases in which there is tuberculosis limited to the epiglottis with only slight involvement of the lung, a condition which is unfortunately very uncommon. It need not, however, be limited to such cases, as in closed or cirrhotic tuberculosis of the lung good results may be obtained, but the general power of resistance of the organism has to be taken into consideration. Even in unfavourable conditions of the lungs and larynx, the removal of the epiglottis is sometimes indicated for the purpose of relieving the terrible dysphagia. Büch has seen many cases in which the pain and regurgitation existing before the removal, disappeared completely after it, and he finds that regurgitation as a result of the operation is extremely rare. He advises the induction of "twilight sleep" by means of scopolamin and morphia. If possible, the operation should be carried out with simple depression

of the tongue, but sometimes a throat mirror is required. He employs a punch forceps designed by Professor Muck (Pfau, Berlin); he quotes a case of recovery after five years' duration.

JAMES DUNDAS-GRANT.

The Exposure of the Superior Laryngeal Nerve for Resection. F. BOCK (Rostock). (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band xi., Part 4, p. 541.)

The artery is not a good guide to the nerve as the former sometimes enters the larynx through a foramen in the thyroid cartilage considerably below the level of the nerve, the latter always lying half-way between the great cornu of the hyoid and the "tubercle" of the thyroid cartilage (upper extremity of the oblique muscular ridge). The incision begins about a centimetre in front of the anterior border of the sterno-mastoid, forming with it an acute angle and running from the level of the great cornu of the hyoid to the middle of the thyroid cartilage. After section of the skin, platysma, and fascia the omohyoid and thyrohyoid muscles are exposed. The lateral margin of the latter runs over the tubercle of the thyroid. The nerve is now to be sought about 2 cm. above this tubercle at the edge of the thyrohyoid muscle, about midway between the tubercle and the great cornu on the thyrohyoid membrane.

JAMES DUNDAS-GRANT.

Artificial Pneumothorax in the Treatment of Pulmonary Tuberculosis and its Effects on the Larynx. By JULIUS DWORETZKY (Liberty, N.Y.). (*Annals of Otology, Rhinology, and Laryngology*, March 1926.)

From a study of 500 cases of pulmonary tuberculosis the author concludes that 25.6 per cent. of all cases have laryngeal complication. In going over his records of patients treated by artificial pneumothorax, he found that not in a single instance where treatment was successfully carried out, had laryngeal tuberculosis occurred as a complication. He has never seen the complication arise subsequently in a patient cured, or in whom the disease was arrested by artificial pneumothorax.

Cases presenting a co-existent laryngeal lesion showed definite improvement in the larynx, especially the subacute type. Under treatment, infiltrations of the larynx were absorbed, granulations disappeared, and ulcerations healed. In the author's experience of pulmonary tuberculosis, artificial pneumothorax successfully carried out in suitable cases, is a positive way to prevent laryngeal complications, and where the laryngeal lesion exists the treatment exerts a beneficial influence on its course and often cures it entirely.

Statistics made from the work of nine other authors would show

that out of 1592 cases treated by this method only four developed tuberculous laryngitis. A second table of statistics is given showing that out of 32 cases complicated by laryngitis 26 were either cured or showed definite improvement in the laryngeal lesion, 4 remained stationary, 2 died.

The administration of artificial pneumothorax is described in detail. Seven cases are reported with X-ray pictures of the thorax and drawings of the larynx before and after treatment. NICOL RANKIN.

A Criticism and a Recommendation of Payr's Plastic Operation on the Larynx in cases of Recurrent Paralysis. V. SCHMIEDEN. (*Münch. Med. Wochenschrift*, Nr. 14, S. 558, Jahr. 73.)

From adequate practical experience of Payr's operation the writer warmly recommends it in suitable selected cases in preference to nerve anastomosis or suture, paraffin injection, or other operation designed to approximate the paralysed to the active cord. The operation is indicated in acquired (post-operative) paralysis as soon as a sufficient observation period has elapsed to enable us to decide that, unaided, the functional loss will be permanent. To credit the operation with success, it must be observed that when examined laryngoscopically before operation the affected cord assumes the cadaveric position, and that when re-examined subsequent to operation and the restoration of function, the cord on the affected side still remains totally immobile with good or normal phonation. It is advisable to precede the operation by an adequate course of instruction in voice production and, in case of failure, to repeat this subsequent to operation and thereby enhance the result.

Payr's operation is briefly described. The framework of the larynx is laid bare by a transverse incision in the soft parts. A horizontal incision in the perichondrium is made 16-17 mm. from the upper border of the thyroid ala. A right-angled cartilaginous flap about 17-18 mm. in length is mapped out. This has its base anteriorly about 8-9 mm. from the mid-line, and reaches to within $\frac{3}{4}$ cm. of the posterior border of the ala. The circumscribed cartilage is now incised obliquely, in such a manner that the flap is broader on its laryngeal face. If carefully carried out it is easy to avoid injury to the laryngeal mucosa. The flap having been mobilised with an elevator is depressed from 2-3 mm. The voice of the patient immediately becomes normal. The upper and lower edges of the alar defect are approximated by rather strong catgut passed towards their posterior aspects. This procedure is adequate for ensuring the retention of the cartilaginous flap in its new adducted position. Though transient œdema may impair the voice during the first days, respiratory distress need not be feared.

J. B. HORGAN.