trachea, and are found especially in men of all ages after the age of puberty ("persistent fistula-voice"). If the voice is too high (eunuch-, fistula-, or falsetto-voice), or if it is "uebersehnappend"—that is, springing momentarily and involuntarily from the normal chest-register to the falsetto-voice—Bresgen let the patient recite loudly, slowly, and distinctly, pressing at the same time with his thumb on the patient's larynx on a level with pomum Adami in a direction straight backwards. Schech, with the point of his index in the incisura thyreoideæ superior, pressed the patient's larynx downwards, the chin being lowered towards sternum. By this pressure the crico-thyreoidei muscles and the vocal cords are relaxed, the voice grows deep, and the forming of the fistula-voice (which is due to too strong contraction of crico-thyreoidei and the vocal cords) is rendered impossible.

As a rule, one succeeds in the first sitting in five to ten minutes by this simple manipulation in procuring a permanently normal voice to the patient with the often unhappy and depressing fistula-voice (patients at the age of eighteen to fifty).

If the voice is too deep—which occurs very rarely—Bresgen pressed together with his thumb and his index finger both the thyroid plates. Schech pressed with his thumb from the inferior border of the thyroid cartilage the larynx upwards, the patient stretching his neck and raising his chin. The voice then grows higher, the crico-thyreoidei and the vocal cords being strongly extended.

Professor Uchermann had occasionally used this grasp, but only as an introduction to methodical exercises in singing and speaking in deep tones. He could hardly conceive of a lasting effect without such exercises following, especially in old cases.

Abstracts.

PHARYNX.

Closier, L.—Ulceration of Pharynx in Diphtheria. "Proceeds. Paris Soc. of Laryngol., Otol., and Rhinol.," December 9, 1911.

The patient, aged twenty, who, after a severe attack of diphtheria, which commenced in the nasal fossæ and extended to the bronchi, presented a perforation of the septum and loss of substance of the left border of the epiglottis; the latter was bound down by cicatricial adhesions to the lateral wall of the pharynx. Wassermann's reaction was negative. *H. Clayton Fox.*

Cornet, P.—Large Adenoma of the Superior Surface of the Soft Palate undergoing Epitheliomatous Degeneration. Extirpation. "Proceeds. Paris Soc. of Laryngol., Otol., and Rhinol.," December 9, 1911.

The growth was removed from a woman, aged twenty-seven, in June, 1910. The history of this tumour presents some interesting features from clinical, anatomical, and operative points of view.

On May 31, 1910, the patient related the following history: During a violent fit of coughing, accompanied by nausea, a large fleshy mass suddenly appeared in the mouth. The coughing subsided, and the mass returned into the throat; but since then the patient was continually

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troubled by nausea, and each time the growth projected into the buccal cavity. The patient had enjoyed excellent health up to the present. For nine or ten months, however, she had breathed badly by the nose, but the obstruction had never seriously troubled her. She also expectorated a little blood in the morning. Examination of the oro-pharynx showed the presence of a large tumour which hung behind the free border of the soft palate. It was irregularly rounded, multilobate, cauliflower-like, and in colour raspberry-red. In width it extended from the right posterior pillar to half the distance separating the uvula from the left posterior pillar. Vertically it extended downwards to the base of the tongue. It was firm in consistence, and did not bleed when touched. If nausea were induced, the growth became evaginated from the naso-pharynx and swinging from behind forwards, was propelled into the mouth. During this movement it kept the soft palate in the position which obtains by using a palate retractor (Moritz Schmidt's).

Digital examination of the cavum showed that the tumour rested on the right half of the palate. The left side of the naso-pharynx was free. On passing the finger to the left of the tumour, one came upon the left choana without encountering any obstacle. In front the growth did not reach the right choana; a space the width of the index-finger intervened. Above it touched the vault of the pharynx, but only behind. Its anterior extremity scarcely reached as high as the posterior extremity of the inferior turbinated body. It was inserted by its anterior extremity on a small area of the velum to the right of the median line, behind the choana, almost as high as the tubal orifice. The growth had developed in the naso-pharynx, and attained to the size of a small hen's egg without the patient noticing it and without causing any nasal obstruction. The reason being, that in retro-nasal obstruction the size of the obstructing mass is not everything. The position occupied by the mass is a factor no less important. It is a daily observation that it is not the largest mass of adenoids which always determines the greatest obstruction to respiration. Small vegetations, but implanted around the choanæ, obstruct the nose much more completely than a large mass placed a little behind the nasal fossæ. In the case of this patient, it is probable that the tumour before prolapsing into the oro-pharynx was more or less fixed behind the right choana, and that the left half of the cavum was unobstructed. Thus the nasal obstruction was unilateral, and with unilateral obstruction breathing is easily effected. Provided that the unobstructed nasal fossa be free, the amount of air inspired through a nasal fossa of normal patency suffices to assure hæmatosis.

According to the histological diagnosis, the tumour was an adenoma in a state of epitheliomatous degeneration. In most cases of palatine adenomata the growths originate on the anterior surface of that structure, and are consequently buccal tumours. Here, on the contrary, the adenoma was implanted on the superior surface, and had evolved in the cavum. On the other hand, the great majority of naso-pharyngeal tumours, fibromata, fibro-myxomatous polypi, cysts, etc., have their starting-point in the sphenoid or the posterior portion of the ethmoid.

The removal of the growth was effected through the mouth without difficulty. The nature of the tumour was discovered on histological examination. *H. Clayton Fox.*

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NOSE.

Milligan, Sir Wm.—Rhinophyma: its Etiology, Pathology, and Treatment. "Lancet," September 18, 1915, p. 643.

Describes a case. It is difficult to assign a cause to the condition. A relationship to chronic alcoholism has not been definitely proved; but it presents a marked similarity to aggravated "acne rosacea." Pathologically there is marked thickening of the connective tissue of the corium, with hyperplasia and cystic dilatation of its sebaceous glands, and small deposits of fat between the various hypertrophied areas. The best treatment is to remove by careful dissection, followed by primary skin grafting.

Macleod Yearsley.

Wray, Charles.—Bony Growth in Frontal Sinus. "Proceedings of Royal Society of Medicine," Section of Ophthalmology, p. 126.

The exhibitor said that bony tumours generally began in the frontal sinus, and if a skiagram were taken of the specimen now shown it would be very apparent. The growth was the size of a bean. The peculiarity of the growth was that on one side it was hollow and entered into the nose. It did not present in the orbit.

The exhibitor said that he would not call his case one of osteoma. He thought the explanation was that the patient had had a chronic inflammation of the sinus, and it had led to a considerable thickening of bone, so that in some places it had reached a diameter of $\frac{1}{4}$ in.

The condition was only discovered *post-mortem.* *Archer Ryland.*

LARYNX AND TRACHEA.

Riddel, D. F.—Complete Occlusion of the Trachea due to Injury to the Cricoid Cartilage after Intubation and Tracheotomy—Operation and Recovery. "Brit. Journ. of Children's Diseases," No. 131, vol. xi, November, 1914.

The case record of a boy aged two and a half years admitted to hospital suffering from diphtheria. The implication of the larynx necessitated intubation, and finally, owing to the failure of the latter, a hurried tracheotomy, in which the cricoid was divided. As this subsequently led to complete stenosis of the larynx, and rendered re-intubation impossible, a low tracheotomy was performed, and the trachea then reopened at the site of the old tracheotomy wound. A dense cartilaginous mass was found at the level of the cricoid, which completely closed the lumen of the trachea. This mass, which appeared to be partly collapsed cricoid and partly new growth, was divided by two cross incisions, and a portion removed from the centre. The external wound was then sutured and the child intubated, the tracheotomy tube being left in. The latter was removed five days later, but the intubation tube was not finally dispensed with until seven months had elapsed.

When discharged, the child was well and strong, voice slightly husky but strong, and stridor only present to a slight extent when the child got excited. The use of the intubation tube after the operation was purely mechanical, and served to prevent collapse of the trachea and keep the stricture patent. In the later stages it served to dilate the latter.

J. B. Horgan.

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EAR.

Closier, L.—Bilateral Deafness after "606." "Proceeds. Paris Soc. of Laryngol., Otol., and Rhinol.," December 9, 1911.

On October 9, 1911, a man aged forty-one presented himself at St. Joseph's Hospital complaining of deafness which supervened after the injection of "606." Nothing was found of interest in the history from an aural point of view. During his military service in Senegal he had suffered slight attacks of malarial fever, and since his return to France he had suffered every year at the same periods—May, July, and August. In July, 1910, he had a chancre, which he treated himself with boric acid lotion and applications of powdered calomel. Having a slight attack of fever, he entered hospital in May, 1911. There the surgeon noticed the syphilitic lesion, and, after disappearance of the fever, administered five injections of "606" in five days. Unfortunately, the dose was not discovered. Two or three days after the last injection the patient found that his hearing was failing. This loss of power was progressive, and especially on the left side. Now the patient complained of total deafness on the left side and very marked diminution of auditory acuity on the right side. At the onset he had marked tinnitus of the left ear; but it is now more intense on the right. He is sometimes seized with sudden crises of tinnitus whilst at work; his vision is affected; he sees objects revolve, and there is a tendency to be carried towards the right side. The patient likewise complained of progressive failure of vision; but an ophthalmoscopic examination did not reveal any lesion of the fundus; the troubles were the result of hypermetropia.

Examination of the ears and the auditory and equilibratory functions gave us the following results:

Right Ear.		Left Ear.
White, slightly retracted, mobile.	Membrane	White, slightly retracted, mobile.
←——	Weber	
+	Rinné	False Negative Rinné.
8″	Schwabach (128° d.v.)	0
0·10 m.	Whispered voice.	0
0·70 m.	Loud voice.	0

The test of walking with a smart turn about at the word of command induced vertigo and very decided staggering when the patient turned round to the right side.

Romberg's test and those of Von Stein were positive. Spontaneous nystagmus in both directions; but the twitches were more rapid and accentuated when the eyes were directed towards the left side. Injection of cold water (20° C.) into the left auditory meatus induced no change in the spontaneous nystagmus, neither did it occasion vertigo. By treating the right meatus in a similar manner, vertigo was only induced after two and a half minutes. The patient entered hospital. An injection of Hyd. Biniodid was administered daily for fifteen days. Fresh examination October 25. The patient now heard conversation easily; there was no necessity to shout. He heard whispering at 1 m. on the right side, and at 0·05 m. on the left side. But it was easy to satisfy oneself that the voice was only heard in the right ear.

Lucæ-Dennerts' test demonstrated that auditory perception was absent on the left side. Moreover, Weber's test was lateralised to the

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right, and Bárány's deafener showed a false negative Rinné on the left side. The patient no longer had tinnitus, staggering, or vertigo.

H. Clayton Fox.

Adam, James.—Infection of the Middle Ear with Vincent's Organisms.[1] "Brit. Journ. of Children's Diseases," No. 134, vol. xii, February, 1915.

An analysis of seven cases seen by the writer in a comparatively brief space of time. The infection, though often present, is missed, owing to the failure of the organisms to grow on ordinary culture media, though they may be readily detected in smear preparations. The positive features common to these cases are: the constant presence of Vincent's organisms, the frequency of the pneumococcus as compared with other bacteria, chronicity, stinking and profuse discharge, masses of profuse and very vascular granulations in the more pronounced cases, slight tendency to the formation of membrane (this is probably always present at some stage, but is rendered obscure by the anatomy of the parts and the predominance of granulations), erosion of the external parts of the ear and slight glandular enlargement. The negative features are: absence of marked disturbance of general health, absence of pyrexia, absence of any history of throat infection, absence of special organisms on throat swabs, and absence of special infectivity.

The affection is usually amenable to local treatment, which consists in painting the eroded surfaces with 5 per cent. silver nitrate in spt. æth. nitr., cleansing, instillation of iodine tinct. and especially with instillation of ethyl-violet and brilliant-green, each in 0·1 per cent. watery solution. As in the pharynx, diphtheria has generally to be excluded in making the diagnosis. The affection appears to be a graft on another infection, generally pneumococcal, and to occur in cases that are grossly neglected. The coincident and constant occurrence of spirillar and fusiform bacilli has led the author to believe that this infection is less likely to be a symbiosis of two entirely different organisms than different life-stage forms of one organism.

J. B. Horgan.

MISCELLANEOUS.

Barton, E. A.—The Condition of the Larynx and Trachea in the Still-born Infant, and its bearing on Artificial Respiration. "Proceedings of Royal Society of Medicine," Obstetrical and Gynæcological Section, p. 106.

The author draws attention to one or two points, the recognition of which appears to be of prime importance in the resuscitation of the apparently still-born living child.

On examination of a number of still-born children in whom no air had passed the glottis, the author found, in the majority of cases, the following condition: For about $\frac{1}{3}$ in. below the glottis, which is invariably closed, the trachea is open, narrowing like a funnel from above down till the point is reached where the lumen is entirely obliterated by the folding in of the ends of the cartilaginous rings behind. The trachea is now flattened from before back, and where the posterior part of the rings meet one another on the dorsal surface is a vertical groove. The muscular posterior wall of the trachea is folded in such a manner that by its contraction the infolded cartilage ends would be separated and an actual lumen be formed from a potential one.

[1] See Journ. of Laryngol., Rhinol., and Otol., December, 1915, p. 472.

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The first inspiration of life, therefore, is a very complicated process: the glottis must be opened, the posterior wall of the trachea must contract, and by its contraction unfold the curled cartilages, converting a closed into an open tube.

The bearing of these points on the judicious use of artificial respiration is obvious. The glottis must be opened, the tracheal surfaces separated, and then only is artificial respiration possible by methods like Silvester's. *Archer Ryland.*

Hektoen, L., and Rappaport, B. (Chicago).—The Use of Kaolin to remove Bacteria from the Throat and Nose. "Journ. Amer. Med. Assoc.," June 12, 1915.

From investigations made with kaolin in the Durand Hospital for Infectious Diseases, Drs. Hektoen and Rappaport found that when applied in the form of a dry powder kaolin removes not only diphtheria bacilli, but practically all bacteria from the nose and throat in the course of three to four days. The success of this treatment is due to the great absorptive power of kaolin and appears to depend largely on the free and thorough distribution of kaolin over the mucous surfaces. For this purpose the kaolin is blown into the nose six or seven times a day at two hour intervals, and for application to the throat the patient is instructed to swallow as slowly possible one third teaspoonful of kaolin four or five times an hour during the day. Kaolin is not irritative, and when taken into the mouth it gives rise to a feeling of grittiness. *Birkett (Rogers).*

McIntyre, Donald.—The Vaccine Treatment of Scarlet Fever. "Brit. Journ. of Children's Diseases," No. 131, vol. xi, November, 1914.

A statistical record of a number of cases, including those complicated by nasal and aural discharges. In most cases no attempt was made to isolate all the organisms present. The cultures were made on ordinary agar and incubated for twenty-four hours. The organisms were then suspended in normal saline to which 0·5 per cent. carbolic acid had been added, and afterwards heated in a bath at 60° C. for an hour.

An initial dose of 100 millions was given; this was repeated at intervals of five days, the number of organisms being increased at each successive injection, until a maximum of 1600 millions was reached.

The author is of opinion that the success of vaccine treatment in scarlatinal cases with nasal and aural discharges is difficult to prove; but from his experience he is led to the conclusion that, with regard to nasal discharges, a cure is accelerated by vaccine treatment. Its comparative failure in aural cases he attributes to the multiplicity of organisms—especially diphtheroid organisms—often present in the discharge.

J. B. Horgan.

NOTES AND QUERIES.

The Managers of the Royal Infirmary, Glasgow, have appointed Dr. Peter Napier Grant, Glasgow, Surgeon to the Out-patient Department for Diseases of the Throat and Nose.

Bismuth in Œsophageal Therapeutics.

"I have noticed that patients suffering from ulcerating cancers or from ulcers resulting from the impaction of foreign bodies or from injuries, and from other forms of acute œsophagitis, have been relieved by the swallowing of bismuth paste which has been given in connection with a radiographic examination. Bismuth emulsion or bismuth made into a paste with a little water is therefore the ideal medium or base for the administration of analgesic powders."—Dr. Wm. Hill.

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