author considers this protection under the heads of (1) structure of Eustachian tube, and (2) influence of normal respiration. Describing the normal respiratory movements which take place in the Eustachian tubes, he points out that continuous nasal respiration is essential to the preservation of proper nasal passages, and that the time to cure chronic middle-ear catarrh is in early life, by restoring the movements of the Eustachian tubes. In removing adenoids it is of the highest importance that the fossæ of Rosenmüller should be cleared efficiently, and operation is practically useless without this precaution. In later life, also, the freedom of the Eustachian lip for its movements in respiration is essential in treating catarrhal deafness. We cannot, however, go so far as to believe, as Leland suggests, that oto-sclerosis may be prevented by these measures. *Macleod Yearsley.*

LARYNX.

Kessel, O. G. (Stuttgart).—*Contusion of the Larynx; ? Dislocation of the Left Arytænoid Cartilage.* "Medicin. Corresp-Blatt des Württem. ärztlich. Landesvereins," October 9, 1909.

A labourer, aged forty-two, sustained a severe blow on the head from a mass of earth which fell on him, whilst at work, from a height of two metres. He was knocked down, and as he fell the handle of a tool which he was using struck him on the throat and chin. He was able to rise at once, but directly he spoke it was noticed that his voice, which before had always been clear and resonant, was now husky; otherwise he had no difficulty in breathing and did not cough up any blood. About three hours after the accident he applied for treatment, when the following conditions were observed: He complained only of the hoarseness of his voice and very slight pain and difficulty in swallowing. There was a flesh wound on the chin 5 cm. long and a small excoriation over the larynx. The hyoid bone and thyroid cartilage were not tender nor was any crepitus to be detected, but the upper portion of the larynx at the side was sensitive on pressure. On examination of the nose and naso-pharynx no abnormality was noted. The upper opening of the larynx was normal in contour and in its movements during phonation, but at the base of the tongue was a patch of submucous hæmorrhage especially marked on the left side, and in addition the left pharyngo-epiglottic fold was also injected. The ary-epiglottic folds were also swollen, the left being more affected than the right, and the left arytænoid cartilage itself was œdematous. The left vocal cord lay in the middle line perfectly motionless, as was also the left arytænoid cartilage. The left ventricular band was much swollen and injected, but still allowed this latter condition to be recognised. Both vocal cords were white but traversed by distended vessels. The movements of the right vocal cord were normal. The examination of the trachea by the direct method revealed nothing abnormal (a procedure which under the circumstances it would have surely seemed well to postpone), that is to say, the appearances apart from the general swelling and injection were those which obtain in the condition of complete recurrent palsy on one side.

The patient at his own wish returned home and no further complications ensued. The swelling subsided in three weeks, but the left cord still remained immovable although the voice improved somewhat. He returned to his work in five weeks from the date of the accident. Four months later an examination showed that the left cord was yet unable to

be moved but the voice was considerably better, and the patient only complained of a pricking pain occasionally when swallowing.

Kessel regards the condition as a traumatic subluxation of the left crico-arytænoid joint, perpetuated by the organisation of the inflammatory exudate which took place immediately after the accident. He discusses the differential diagnosis between this and recurrent palsy, and remarks on the extreme rarity of a dislocation in this situation.

From the account of the case, however, it would seem difficult to support the view that the lesion in question might not have been the result of paralysis of the inferior laryngeal nerve.

No further report is given as to the subsequent course of the case.

Alex. R. Tweedie.

EAR.

Urbantschitsch, Dr. Ernest.—*Purulent Conditions of the Eustachian Tubes.* "Monatss. f. Ohrenh.," Year 43, No. 7.

Too little attention, the author writes in his opening remarks, has always been given to this particular subject by all writers on otological matters, diseases and affections of the Eustachian tubes being treated only in conjunction with inflammatory conditions of the middle ear.

It is usual, he states, to regard chronic purulent conditions of the middle ear as falling into two main groups: the one, which owing to involvement of the adjacent bone is characterised by a perforation situated at the margin of the tympanic membrane (antral or attic disease), and the other in which the perforation is found more towards the centre and is dependent on some disease of the mucous membrane of the tympanic cavity proper.

To these two groups the author would like to add a third, in which the chronic purulent middle otitis is due to chronic inflammatory conditions of the Eustachian tube. The special features which characterise this group are as follows: a large perforation, most often situate in the lower and anterior quadrant of the membrane, more or less injection of the mucous membrane, a non-fœtid secretion which is more often purulent than muco-purulent, no great amount of granulations or polypus formation, and lastly, as a special pathognomonic sign, a spontaneous passage of fluids down the tube.

This latter sign can be demonstrated objectively, the author states, by the instillation of coloured drops, *e.g.* methylene blue, which can be recognised generally in less than one minute at the pharyngeal orifice of the tube, or if drops containing alcohol are used the patient will feel a burning sensation in the throat.

Such cases Urbantschitsch contends are best treated by irrigation of the tube through a catheter, and subsequently, if necessary, by massage of the tube by means of a bougie, in order to restore the tone of its lining membrane and reduce thereby the abnormal patency of the lumen.

He concludes by summarising his views in the following manner:

(1) Those forms of chronic middle-ear discharge which have hitherto been usually regarded as due to inflammatory conditions around the tympanic orifice of the Eustachian tube or to affections of the naso-pharynx are really dependent on a chronic suppurative process in the tube itself. Thus it would be more correct to allude to such cases as "tuborrhœa" rather than "otorrhœa."