operation to that recommended by himself upon the maxillary antrum; in other words, free removal of one wall of the sinus and curettage of the cavity through the opening so made. He removes the floor of the frontal sinus and thoroughly clears out the ethmoidal region, and so provides free drainage into the nose. He performs the operation, as a rule, under local anæsthesia, first introducing cocaine into the nose on mops in the usual way; he injects the line of incision with 1 per cent. novocaine and then passes the needle deeper down to the periosteum and region of the nasal nerve. Following Sieur, he opens the frontal sinus at the upper and inner angle of the orbit and investigates it with a probe. He does not remove the anterior wall nor does he follow up a large orbital extension if such exists, but removes freely the frontal processes of the superior maxilla. Before curetting the sinus he places a pledget of cotton-wool soaked in cocaine in the cavity and leaves it for five minutes; the curetting of the cavity is of course performed "blind." If the sinus is small the incision is entirely closed, but if it extends out to the external angle of the orbit Luc may put in a drain here for a short time. If the frontal extension of the sinus be high Luc performs Killian's operation, as we know it, making a vertical section incision if necessary in addition to the usual curved one. He cleans out the cavity with peroxide and then paints it with tincture of iodine, and finally insufflates iodoform powder, but puts in no packing. If all goes well the nose is not dressed for nine or ten days. If, however, pus appears in the nose he passes a curved cotton-tipped probe into the sinus and mops out the cavity with peroxide, and if the pus persists he washes out the sinus with saline. In this way he has operated upon ten cases since 1907. In all of these cases the antrum on the same side was affected. He operated on the antrum first, and then, at the same sitting, on the frontal. In three of the ten cases the frontal wound had to be reopened on account of retention of pus. In one of these the second operation took place three years after the first, and the cavity was found to be filled with connective tissue; the suppuration had only recurred in the infundibulum. In cases in which the bony wall of the cavity is definitely diseased the external wound should not be closed at the time of the operation. Luc confesses that, in omitting in many cases the removal of the anterior wall, he is thinking of the æsthetic result, especially in the case of young women. *J. S. Fraser.*

LARYNX AND TRACHEA.

Legillon.—Abscess of the Larynx. "Arch. Internat. de Laryng.," etc., September–October, 1911.

This may occur as a sequela to traumatism of the larynx of staphylococcic, streptococcic or pneumococcic origin, or it may occur secondarily to pre-existing laryngeal infections, tubercle, cancer, etc. At other times it arises from a direct spread of infection from the neighbouring parts, for example, in quinsy. Zymotic diseases are less frequently causes of this condition, if one excepts influenza, which is often accompanied by laryngeal involvement. The condition frequently goes on to abscess-formation, and is more common in adults. A predisposing cause is cold. The whole of the larynx may be affected, but particularly the lateral aspects. The disease is sometimes localised to the ventricular bands, the vocal cords and the sub-glottic region, but the ventricular bands are most frequently affected. Septic infiltration is more prominent in the laryngeal cellular tissue, the ary-epiglottic folds, epiglottis and

ventricular bands. When it occurs sub-glottically it may extend to the trachea. The mucous membrane is red or reddish-grey. Lesions of the cartilage are rare. Clinically the symptoms are objective and subjective. At the prodromal period there is general malaise and pain on swallowing, with moderate fever. Laryngoscopically at this period there may be only redness. When the condition is well established there is progressive dyspnœa, crises and suffocation going on actually to stenosis, dysphagia and lancinating pain referred to the larynx, with rapid alteration of the voice, which becomes rough and even aphonic. If the abscess bursts there is an escape of fœtid pus and the condition clears up. At other times the pus evacuated from the abscess may penetrate the bronchi and set up septic pneumonia. Abscess of the larynx should be distinguished from acute œdema, erysipelas, tuberculosis, asthma, croup, stridulous laryngitis, cancer, polypi of the larynx and retropharyngeal abscess.

Treatment.—At first symptomatic to relieve the dyspnœa and dysphagia. Fomentations or ice-bags round the neck, and the local applications of cocaine and adrenalin for the dyspnœa. It may be necessary to incise the abscess. This should only be done under control of the vision. Tracheotomy should be reserved for serious cases where there are crises, suffocation or asphyxia. *J. D. Lithgow.*

Hughes, W. Kent (Melbourne, Victoria).—Infiltration of Laryngeal Mucosa: an Early Sign of Phthisis. "Australian Med. Journ.," March 29, 1913.

The author is of opinion that the larynx can be infected by tubercle prior to, or apart from, the lung. The mucosa, which is devoid of cilia on the posterior wall of the larynx, is most prone to early infection. He is of opinion that all cases of pulmonary phthisis show some laryngeal involvement—healed or otherwise.

The earliest signs of tubercle in the larynx consist of slight to definite infiltration of the mucous membrane of the interarytenoid space.

A. J. Brady.

Jackson, Chevalier.—The Dilatation of Bronchial Strictures. "Journ. Amer. Med. Assoc.," September 21, 1912.

The chief causes of cicatricial bronchial stenosis are traumatism, syphilis and tuberculosis. The dilatation of a cicatricial stenosis may sometimes be required to secure adequate drainage of the infra-strictural bronchiectatic cavity and thus relieve the distressing symptoms.

Syphilitic strictures may sometimes require prolonged intubation with bronchial intubation tubes put in place with the aid of the bronchoscope, whereas tuberculous strictures seldom require local treatment because the tuberculous process is of such slow progress that the lung accommodates itself to the altered conditions. Traumatic cicatricial stenoses due to the prolonged sojourn of a foreign body in the bronchus are best treated by the Jackson divulsors, after which the foreign body may be reached and removed. Prolonged dilatation of the stricture after removal of the foreign body should be deferred until such after-dilatation is indicated by absence of improvement in symptoms, physical signs and radiographic signs after a number of months.

The method of dilatation by divulsion possesses the following advantages:

(1) It is safe because under the guidance of the eye and trained touch.

(2) It does not require tracheotomy in any case.
(3) There is no danger of pushing the foreign body downward.
(4) It is much safer and simpler than tent dilatation or prolonged intubation, and better adapted to foreign body cases.

Birkett (*Rogers*).

Hughes, W. Kent.—Notes on Four Cases of Foreign Body in the Trachea. "Australian Med. Journ.," March 15, 1913.

(1) A child, aged three. A rabbit-bone could be seen in the larynx, below vocal cords, by means of the bronchoscope. X rays showed nothing. Bone removed through high tracheotomy wound. Recovery.
(2) Child, aged two. Piece of bone impacted below vocal cords. Removed with difficulty through high tracheotomy wound. Recovery.
(3) Child, aged four, swallowed a halfpenny six months before. X rays showed coin between œsophagus and trachea. Œsophagoscope showed granulations in the œsophagus about level of second dorsal vertebra. A large osteoplastic flap was turned up, the clavicle, first rib and manubrium sterni being cut through. The coin was found in a large abscess-cavity behind the œsophagus. The patient died seven days later, owing to sloughing of the flap and a sharp piece of bone having torn the pleural cavity.
(4) Child, aged eleven months. Dyspnœa after eating piece of bread. Collapsed on examination with bronchoscope. The trachea was opened with a single cut. A quarter of a plum-stone was jammed in the larynx. Foreign body removed through wound. Recovery. *A. J. Brady.*

Hunt, John G.—Report of a Case of Aspiration of Silver Tracheotomy Cannula and Removal by Lower Bronchoscopy. "Annals of Otol., Rhinol., and Laryngol.," vol. xxi, p. 355.

Female patient, aged thirty-six, who had worn a tracheal tube for six years. On withdrawing the cannula one day the collar became detached, so that the former receded into the trachea, and disappeared after a spasm and deep inspiratory movements. A skiagraph located it in the left lower quadrant of the heart shadow. The tracheal wound was enlarged under infiltration anæsthesia and the trachea cocainised (20 per cent. solution). A 7 mm. Jackson bronchoscope was introduced and the cannula removed with ease, although the mucosa was already overlapping it from œdema. *Macleod Yearsley.*

THYROID GLAND.

Crane, J. W. (Wallacetown, Ont.).—Graves's Disease. "Canadian Practitioner," July, 1912.

MacDonald, W. J. (St. Catharine's, Ont.).—Hyperthyroidism. "Canadian Practitioner," August, 1912.

These two papers, dealing with the same subject and appearing in successive numbers of the same journal, may be noted together.

The first consists of the history of a series of four cases, in all of which tachycardia was the most prominent symptom, the pulses running all the way up from 100 to 160 per minute. Goitre was present in two on the right side, in the other two on both. Exophthalmia was absent in two of the cases, only moderate in the third, but very pronounced in the fourth. In all muscular tremors were marked. The last men-