breathing was good, while phonation had improved since the vocal cords had re-formed.

Indications and Results.—The procedure is recommended (1) in external laryngo-tracheal stenosis, (2) in superior laryngeal and tracheal stenosis, and (3) in diseases of the trachea.

External laryngo-tracheal stenoses are manifold. Of particular importance is compression of the air-way by enlarged thyroid or thymus gland. Laryngostomy is applicable to recurrent papilloma when attempts to remove the growths in other ways fail or when they recur.

(*To be continued.*)

Abstracts.

ŒSOPHAGUS.

Tanturri, Dr. D. (Naples).—*Two Cases of Œsophageal Spasm Diagnosed and Cured by Œsophagoscopy.* "Archiv. Ital. di Laring.," 1909, p. 160.

The author describes two cases of men suffering from marked dysphagia. Œsophagoscopy showed no mechanical or organic obstruction: the use of a medium-sized Killian's tube followed by bougies for a few days appears to have effected a cure. *James Donelan.*

Strazza, Prof. G. (Genoa).—*Impacted Bone that could not be Removed by Œsophagoscopy.* "Archiv. Ital. di Laring.," Naples, July, 1910, p. 97.

The author reports the case of a woman, aged thirty-five, in whose œsophagus a large cubical piece of bone had become impacted at 18 or 19 cm. from the dental arch. Œsophagoscopy was easily carried out, but though the bone was several times firmly caught in forceps, it could not be extracted without grave danger of laceration, nor could it be forced downwards. Attempts were made on two occasions, but had to be abandoned because of exhaustion of the patient, overheating of the tube, and also, on the second occasion, an abundant hæmorrhage. External operation under chloroform was then performed. Guided by v. Hacker's minimal measurements in females (22 to 27 cm.), it was hoped the incision close to the clavicle would lead almost directly to the foreign body impacted at 19 cm. The operator was surprised to find it some 8 cm. lower, "fixed chiefly to the left side and covered with a soft mass." On attempting to insinuate the finger between the œsophagus and the bone, the latter was suddenly set free and passed into the stomach. Owing to an oversight it was not looked for in the evacuations. The patient made a good recovery. The author gives a short account of a very similar case, in which a bone could not be extracted by œsophagoscopy, but was easily forced into the stomach. He considers that, notwithstanding the large mortality (20 per cent. according to Cohn and others) and "the increasing number of *virtuosi* in œsophagoscopy," external œsophagostomy will always be indicated in a limited number of

cases in which extraction by the natural passage proves impossible. He suggests that the statistics of the external operation are too pessimistic, as they must include many cases in which the operation was performed in the presence of grave œsophageal and mediastinal complications, or as a last resource after repeated failures to extract by means of œsophagoscopy. The author warns against being too strictly guided by the œsophageal measurements given in various tables. In this case there was apparently a discrepancy of 8 cm. between the common site of impaction (aorto-tracheal constriction) where the body was found and the minimal distance of this point in women, according to v. Hacker, from the dental arch. Prof. Strazza attributes the discrepancy to v. Hacker's figures being based on the measurements of the taller women of the north and not including a sufficient proportion of women of short stature, such as Italians. *James Donelan.*

Guisez, J.—*Further Cases of Tuberculosis of the Œsophagus.* "Archives Internat. de Laryngol., etc.," March–April, 1910, p. 406.

In the cases now reported the symptom which attracted notice was severe pain on swallowing, giving rise to suspicions of laryngeal tuberculosis in one case and of malignant disease of the œsophagus in another. Œsophagoscopy, however, cleared up the diagnosis by revealing the presence of tuberculous ulcers in the upper part of the gullet, the superior constriction of which was in a state of spasmodic contraction. In two of the cases the ulcers were cured after several applications of lactic acid.

As a result of present and past experience the author distinguishes three varieties of tuberculous disease of the œsophagus.

(1) Superficial ulceration with severe pain on swallowing and emaciation from inability to take food. In such cases examination by the endoscope must be carried out with great care.

(2) Tuberculosis of the œsophagus "due to propagation." In this form the disease it situated in the tracheo-bronchial region and is due to extension of tuberculosis from adjoining structures. The œsophageal lumen is seen to be encroached upon by an irregular or lop-sided infiltration of the mucosa, which is sometimes stiff and hard, sometimes œdematous and translucent.

(3) In sclerotic tuberculosis—the rarest form—there may be some obstruction to swallowing, but there is no pain. On examination the narrowing of the passage is seen to be occasioned by concentric stenosis from infiltration, which on probing is felt to be tough and cicatricial.

In the "propagated" and sclerotic types the diagnosis may be doubtful for a time as the appearances presented resemble those of simple or syphilitic cicatricial contraction. Cancer, however, can be excluded because the infiltration is more extensive in malignant disease, the ulceration is deeper, and there is a greater tendency to hæmorrhage. Moreover, microscopic examination of a piece of the diseased tissue will generally prevent a mistake being made.

The prognosis of tuberculosis of the œsophagus is not good. In some cases, however, especially of the sclerotic type, the application of lactic acid followed after a time by cautious dilatation of the constriction will bring about a cure. *Dan McKenzie.*