stigmata; the author came to the conclusion that he had to deal with cases of spongification of the frontal sinuses. Resection of the middle turbinal did good for a time, but the pain returned. In six of the seven cases Preysing did not feel justified in operating, but in the seventh he found on exploration a spongification of the frontal bone, which was blueish-red and bled freely, as in cases of mastoid spongification. The pain, which was absent for a time after this operation, returned later on. All the cases occurred in females, and Preysing is of opinion that puberty may have some connection with the condition. It is interesting to note that in one of the cases the patient also suffered from otosclerosis. J. S. Fraser.

Hoffmann, R.—The Pathology of Maxillary Cysts. "Zeitschr. f. Laryngol.," Bd. iii, Heft 5.

Dental cysts are divided into (1) follicular and (2) periodontal. The former are due to faulty development of the tooth-follicle, while the latter, the more common variety, are caused by inflammation of the root of a tooth. The wall of a follicular cyst is composed of a thick fibrous layer lined by cubical or cylindrical epithelium, and the cyst-cavity contains the more or less developed tooth which is, of course, absent from the row. The wall of a periodontal cyst is made up of a dense connective tissue, which, at the root of the tooth, passes into granulation-tissue. The root itself projects into the cyst from below. The cavity of the cyst is lined by stratified squamous epithelium, derived from the embryological epithelial cells normally found in the periodontium. As the cyst grows there is resorption of bone in the outer layer of the cyst-wall, while new bone is produced in the deep layer of the periosteum beneath the mucous membrane of the antrum. If the contents of the cyst become purulent the epithelium may disappear. In one case Hoffmann found that the cyst was lined by ciliated epithelium.

Dental cysts may rupture into the mouth, inferior meatus of the nose, into the antrum, or through the skin of the face. The author records a rare case in which a cyst burst into the middle meatus. Finally, Hoffmann states that he has a rare specimen of an inner maxillary cyst. He has nothing new to say in regard to treatment.

J. S. Fraser.

MOUTH AND PHARYNX.

Bertein, P., and Gellé, E. (Lille).—Solid Thyroid Tumours at the Base of the Tongue. "Gazette des Hopitaux," February 21, 1911.

The authors remark that these growths were first described by Wolf in 1882, and subsequently by Chevalier, Le Dentu and Delbet, Makins, Berard, and Stirling. They originate in His's tract, and may be looked upon as aberrant goitres. Cysts occasionally arise in the same structure, but are rarer. The two following cases are recorded: (1) A woman, aged eighteen, was seized with bleeding from the mouth. A buccal examination revealed no breach of surface, but a swelling the size of a large nut was noticed in the region of the foramen cæcum. The mucosa covering it was traversed by a venous plexus. On palpation it was hard and resistant. General health good. Some slight trouble in swallowing. Cervical thyroid normal. The growth was removed by the buccal route, and recovery ensued in a fortnight. Examination after removal showed that

it consisted of two unequal lobes, separated by a connective-tissue septum. The larger consisted of proliferated glandular tissue. Thyroid structure was difficult to find, only vaguely outlined vesicles, very small, and containing a trace of colloid material being present. The other lobe was clearly thyroid tissue. (2) A woman had suffered for some weeks from attacks of suffocation. When seen she was pallid, her lips were cyanosed, and respiration was difficult and noisy. Pulse 110, temperature 38.5°C. On auscultation, râles were audible all over the chest. Examination of the mouth revealed a swelling the size of a large mandarin orange at the base of the tongue, almost completely filling the oro-pharvnx; the mucosa covering it was smooth and rose-coloured; to the touch it was hard and resistant. Deglutition was but little interfered with. Tracheotomy was performed forty-eight hours after the patient presented herself. Respiration and pulse gradually became normal, but the bronchitis persisted. As soon as the chest trouble had cleared up the growth was removed. A Trendelenburg's tampon cannula having been substituted for the tracheotomy tube, chloroform was administered. The soft tissues were then divided by an incision from the symphysis mentis to the upper border of the thyroid cartilage, the hyoid bone was divided and the two seg-After a tedious dissection, removal was effected ments held apart. without injuring the lingual mucosa covering the growth. Hæmorrhage was free. Sutures and drainage. Result good. The growth removed appeared to consist of two zones of different consistence; one resembled thyroid tissue, the other was studded with calcareous deposits. Details of the histological examination are fully recorded.

The writers observe that lingual goitres occur at all ages, but especially at puberty. They are more frequently met with in females. Hickmann and Meixner observed two cases in new-born infants; both rapidly succumbed from asphyxia. Usually the growths are insidious in their development, only being incidentally discovered during a laryngeal examination, or when, as in the author's case, such symptoms as hæmorrhage or dyspnœa supervene. The neoplasm may exist a life-time unnoticed. Growth is slow, but sometimes a rapid but temporary development occurs at the commencement of menstruation (Leullier), and at the onset of influenza (Collins Warren), or whooping-cough (Wolf). In the writers' second case bronchitis appears to have exercised a similar influence. With regard to the method of operating, the writers are not in favour of a preliminary tracheotomy in all cases, believing that Rose's position is a sufficient safeguard against the entry of blood into the trachea; they would reserve such practice for cases where suffocation appeared imminent. Tracheotomy would, however, confer one advantage, in that through the neck incision one might determine the presence or absence of the thyroid In any case search should be made for the latter, seeing that the lingual neoplasm may be the sole representative of both lateral lobes and isthmus of the thyroid gland (Soulić and Verdun), and therefore its removal would be followed by myxædema. In cases of doubt as to the presence of the thyroid the writers would abstain from operative interference, unless from its size and symptoms the neoplasm became troublesome. They would then only practice a partial excision, taking care to leave sufficient tissue to provide against secretory insufficiency. When the tumour is large and extends far backwards and deeply, extirpation by the buccal route would be difficult, and the supra-hyoid route would be preferable. Removal by the trans-hyoid route, a method adopted in the writer's second case, has its indications. The technique of the several operations is described in detail. H. Clayton Fox.

Williams (New York).—The Vaccine Treatment of Pyorrhœa Alveolaris. "Amer. Journ. Med. Sci.," May, 1911.

The cases treated by the writer fall into two groups, of which the first includes eight cases, which received autogenous vaccines. In all of these the disease was of long standing, and had been carefully treated by dentists. The improvement following vaccine treatment was rapid, and in almost all of them an apparently complete cure had taken place. The injections were not controlled by estimation of the opsonic index. The second group consisted of thirteen patients who were treated with stock vaccine. In spite of the fact that none of these patients received any dental treatment the results were very encouraging, although not sufficiently conclusive to justify the writer in formulating an opinion as to the limitations and possibilities of stock vaccines. The improvement in the general health of many of the patients was remarkable.

Thomas Guthrie.

Lautmann, Dr. (Paris). — Anæsthesia during Removal of Adenoids. "Zeitsch. f. Laryngol., Rhinol., etc.," Bd. iii, Heft 4.

Up to the age of four years children can be so firmly held that "adenoids" may be removed without narcosis. After this age the operation may have to be repeated if performed without an anæsthetic. The objections to anæsthesia are (1) loss of time; (2) danger. As a matter of fact the assistants in large clinics get accustomed to operate without anæsthesia, and object to use it. Lautmann says that most cases of hæmorrhage occur when the operation has been performed without narcosis. Ruprecht has recommended local anæsthesia, and Lautmann has tried the effect of painting with 20 per cent. alypin; he operates fifteen minutes after the application. Symptoms of poisoning were present in several of his cases. Lautmann is pleased with ethyl chloride anæsthesia administered in the apparatus of Camus.

J. S. Fraser.

LARYNX.

Fetterolf and Norris (Philadelphia).—The Anatomical Explanation of the Paralysis of the Left Recurrent Laryngeal Nerve found in certain cases of Mitral Stenosis. "Amer. Journ. Med. Sci.," May, 1911.

During the past thirteen years thirty-seven cases have been reported in which paralysis of the left recurrent laryngeal nerve was associated with mitral stenosis. The writers have analysed all these cases, and have carefully examined sections and dissections of hardened thoraces with a view to determining the cause of the association. In their opinion the two factors producing pressure on the nerve are increase in size of the surrounding structures, and alteration of position, both dependent on narrowing of the mitral orifice.

The obstruction to the blood-current results first in a dilatation of the left auricle and its appendix. Rise of pressure in this chamber is followed by the same condition in the pulmonary veins, and this in time dams back the blood in the lungs and tends to cause its stagnation in the pulmonary artery and right heart. In consequence there is always present a dilatation of the left auricle and of the pulmonary arteries and veins, which gives rise to a crowding of the mediastinal structures at the base