his opinion leucoma might represent an arthritic diathesis, or be merely due to mechanical irritation.

Histological Investigation of Laryngeal Polypus.

M. Brindel (Bordeaux) gives statistics of thirty-three benign laryngeal tumours examined during two years.

Singing Lessons for Deaf Mutes with some Remnants of Hearing.

M. HOMONDE FONGERAL, after seven months' trial, finds these a considerable aid towards the acquirement of speech.

## ABSTRACTS.

## MOUTH, &c.

Bernhardt (Berlin).—Rhythmical Contractions of the Velum Palati. "Deutsche Med. Woch.," July 28, 1898.

BERNHARDT showed a woman, thirty years of age, to the Society for Internal Medicine in Berlin. She had for several weeks had contractions of the whole velum palati, the palato-glossal and palato-pharyngeal arch, the posterior pharyngeal wall, and the base of the tongue. The contractions were one hundred to one hundred and twenty per minute, usually regular, but occasionally ceasing temporarily. She complained also of dull pain on the vertex and occipital region, with pains and noises in both ears. At one to two feet distant from the patient a fine crackling is heard like the noise made by rubbing the finger nails against each other. This noise sometimes stops for a few minutes. There is no contraction of the facial muscles. The larynx is slightly raised by contractions of the muscles attached to the hyoid bone. Pressure on the base of the tongue and on the velum palatic causes the contractions to cease for a few minutes. The vocal cords showed no involuntary movements.

Sturman made a posterior rhinoscopic examination, and made out movement of the right tubal orifice as well as twitching of the arytenoids. There was no movement of the tympanic membrane. Nasal mucous membrane is healthy, there is no anæsthesia of the pharynx. Palate moves normally on phonation. Voice, deglutition, and electrical reactions are also normal. Patient is otherwise healthy, without any neurotic symptoms.

Guild.

Crouzillac.—Phlegmonous Inflammation of the Lingual Tonsil. "Rev. Hebd. de Laryn.," Mar. 26, 1898.

THE case of a man of seventy-six, who had not suffered previously with the throat. When first seen the patient was pale and ill, with a temperature 37.5°, and pulse of 85. The lymphatic glands of the subhyoid region were swollen moderately, and a sharp pain was experienced on external palpation about the cornua of the hyoid bone. Shooting pain was complained of in the left half of the tongue and left ear. There was a sensation of foreign body in the throat, with a slight dyspnœa. The voice had a nasal timbre, and speech was difficult.

On examination the tongue was found to be swollen and furred. The left anterior pillar was red, and both this and the uvula were redematous, while both palatine

tor.sils were somewhat inflamed. Traction on the tongue being impossible, Escat's tongue depressor was employed for laryngoscopy. The mirrors showed the base of the tongue to be thickly coated with pultaceous secretion, while the glosso-epiglottic fossæ were obliterated by swelling. The neighbouring parts were bright red. By palpation the region of the lingual tonsil was ascertained to be brawny, but no actual tumour could be made out. The diagnosis of acute catarrh of the lingual tonsil was made and general and local treatment instituted. When next seen, four days later, the hyoid region of the neck presented considerable external swelling on both sides. Much the same appearance existed in the pharynx as on the previous visit, but a distinct swelling, the size of a filbert, was detected by the finger in the right basal region of the tongue. Deglutition had become decidedly difficult, while the dyspnæa had increased. On the following day fluctuation was made out in the swollen lingual tonsil and the symptoms had assumed a grave aspect. Incision was now made with a guarded bistoury on the left side and about a soup-spoonful of blood-stained pus was evacuated. No pus was found on incision of the right side, but shortly after the attempt a quantity of pus was brought up. The symp-Waggett. toms speedily subsided and convalescence was uninterrupted.

Pluder, F. (Hamburg).—On the Place of the Tonsil in the Organism. "Monats. für Ohrenheilk.," April, 1898.

- 1. As part of the hæmopoietic system, they form young leucocytes (daughter cells of the follicles), most of which pass into the circulation; but some escape on to the free epithelial surface, where they may, perhaps, exercise some protective action.
- 2. They excrete old leucocytes, which probably carry off with them effete products.

Their period of chief activity is in childhood and youth, when all the lymphatic organs are specially active, and when the thymus—a large, blood-forming gland—is disappearing.

With regard to the protective (phagocytic) action of the tonsils, which Gulland alleges is increased by hypertrophy, Pluder maintains that, while the whole mucous membrane has protective powers, the tonsils are its weakest point, and cannot even protect themselves, as shown by their liability to inflammation. Fraenkel's observation that children with enlarged tonsils enjoy a certain immunity rom diphtheria is not generally confirmed.

The anti-toxic (or alexive) action of the organism is specially connected with the blood and the leucocytes. Immunity is not simply a question of phagocytosis, for it is certain that the vitality of the microbes must be first reduced before phagocytosis comes in.

Pluder finds adenoids most frequent in children of the middle and better classes; and he also observes that mentally deficient and backward children seldom show greatly enlarged tonsils.

The lubricating and absorptive functions of the tonsils are subordinate.

William Lamb.

Somers, Lewis (Philadelphia). — Rheumatic Pharyngitis. "Med. News," July 16, 1898.

DEALS with the question of the connection between rheumatism and tonsillitis, and refers to a case of very acute tonsillitis, with rheumatic enlargement of the joints, where the symptoms rapidly subsided under anti-rheumatic treatment. The author considers that it may be accepted as proven that the rheumatic affection may be the cause of the tonsillitis; or, on the other hand, articular rheumatism may result from affection through the tonsils. This, he points out, necessitates the recognition of the bacteriological origin of the disease, and refers to a case reported

by Wagner, where the throat symptoms were followed by rheumatism of the knee, and bacteriological investigation revealed the presence of the same micro-organism in both localities, thus proving the identity of the affection (?). He concludes by referring to the protean character of rheumatic affections of the oro-pharynx and the difficulty of a prompt diagnosis.

St George Reid.

Walsham, Hugh.—The Occurrence of Cartilaginous and Bony Nodules in the Tonsil. "Lancet," Aug. 13, 1898.

In the course of other researches on the tonsil, the author came across scattered masses of cartilage in certain cases, and in others small masses of bone, in the form of trabeculæ, rings, and solid nodules. At first he thought that he had to do with an enchondroma of the tonsil—a rare condition, but one that has been described. But, on thinking over the matter, he came to the conclusion that this supposition was untenable, as the cartilage and bone trabeculæ occurred on both sides. On reflection, it appeared that there was a close analogy between these cartilaginous masses in the tonsils and those small cartilaginous growths which develop in the lines of the branchial clefts, and which are found in the neighbourhood of the ear or lower down in the neck, sometimes only on one side, but more rarely symmetrically placed on both, or enclosed in the so-called branchial cysts, and also to the masses of cartilage that are found in the parotid gland.

The tonsil, according to Prof. His, is developed very early in intra-uterine life—about the fourth month—by a simple folding in of the mucous membrane at a spot situated between the second and third branchial arches, and the remains of which are visible in the adult tonsil as a fold—the plica triangularis. As development proceeds, this primary infolding of the mucous membrane or primary crypt splits up at its base into numerous secondary crypts; and, by the swelling of the meso-blastic tissue lining the invagination, and by the early appearance of lymphoid follicles, the rudimentary tonsil is formed. Remembering, then, the position in which the tonsil is developed, the author thinks we may assume that these cartilaginous nodules are of feetal origin—that is, they are cartilaginous rests derived from the second branchial arch.

In the author's opinion there can be no doubt that the enchondromata that have been described as occurring in the tonsil must have their origin in these cartilaginous rests, which, from some unexplained reason, begin to grow and proliferate. Clinically, it is important to remember that this condition may occur in the tonsil as a congenital peculiarity. The bony trabeculæ, it will be observed, were principally found in persons of advanced age; and, at first, one would be disposed to look upon the presence of bone as a mere senile change; but it was also found to a less extent in the younger persons. It is probable that these centres of ossification may be present from the first, as a small amount of bony material was found in the tonsils of the child, aged two years, observed by Prof. Roth.

Prof. Kanthack, to whom the microscopical specimens were shown, dissents altogether from the above theory. His view is that in these cases there is no embryonic inclusion, but merely a metaplasia of fibrous tissue into bone or cartilage.

There are references to other cases in literature; and the article is illustrated by three sections.

StClair Thomson.

1 "Anatomie der Menschlichen Embryonen, dritte Partie," p. 82.

Witherby & Co., Printers, 326, High Holborn, W.C.