diphtheria and in persons recently cured of diphtheria. It cannot be transformed into the genuine diphtheria bacillus, though Roux and Yersin believe this transformation to be possible.

3. Diphtheria caused by Cocci, sometimes designated Pseudo-Diphtheria. Baginsky obtained a pure culture of the Loeffler bacillus in 118 out of 154 cases of diphtheria examined by him. In the remaining thirty-six cases only cocci were found, and thirty-two of them recovered in a few days without complication. Four died—two with empyema, one with pneumonia and measles, and the other had severe paralysis. The milder form of the disease is, according to Baginsky, caused by the staphylococcus and streptococcus. Paralysis is not liable to occur after these cases. Both forms of inflammation (the Loeffler bacillus and the coccus) are accompanied by fever, swelling of lymphatics, and prostration.

In twenty-four cases of supposed diphtheria Prudden found no trace of the Loeffler bacillus, but the streptococcus was the most common, and in others the staphylococcus pyogenes aureus or albus was also met with. It bore no relation to the extent of the pseudo-membrane, and had a closer relation to the catarrhal than the pseudo-membranous inflammation. Nearly all these cases, however, had recently had scarlatina or measles.

Martin (Ann. de l'Inst. Pasteur, May, 1892) analysed two hundred cases supposed to be diphtheritic. In seventy-two cases (of which twenty-nine were croupous) the Loeffler bacillus was absent. Exposure to scarlatina and measles had occurred in some of these cases. The mortality was largest in cases of true diphtheria, *i.e.*, when the Klebs-Loeffler bacillus is present.

A pseudo-membranous inflammation appears possible when only cocci are present, when no toxine like that produced by the true Loeffler bacillus exists.

It is difficult to make a differential diagnosis of scarlatinal necrosis from diphtheria. It is commonly considered in Paris to be diphtheritic, but should, according to Sevestre, be distinguished from this. Henoch, Wurtz, and Bourges regarded the scarlatinal necrosis as due to the intensity of the inflammation. When it is truly diphtheritic it occurs late in scarlet fever. The streptococcus, the supposed agent of pseudo-diphtheria, is present in scarlatinal necrosis, and the Loeffler bacillus is found in some cases, but apparently only a small proportion.

R. Norris Wolfenden.

## MOUTH, TONGUE, PHARYNX, &c.

Thornbury (Buffalo).—The Bacteria of the Mouth—of interest to Dentists and others. "Buffalo Med. and Surg. Journ.," July, 1892.

THE author mentions that leptothrix innominata is the direct cause of many diseases of the buccal cavity, and has been known to penetrate the lungs, stomach, and other structures. It occurs in long, thin threads, and is found in soft, white deposits on the teeth in every mouth. It stains

readily with iodine and iodide of potassium. Several other bacilli and fungi are also described. The substances that may be a nidus for these germs are the normal saliva, the buccal mucus, dead epithelium, dental tissue softened by acids, exposed pulp, tartar and exudations on the gums, accumulations of food.

Several "pathogenic bacteria" have been isolated, and are said to be capable of producing disease in lung, peritoneum, and other parts when inoculated. Human saliva possesses energetic toxic properties, and will kill small animals speedily when injected.

B. J. Baron.

Elliott.—Some Observations upon the Mouth and Teeth during Pregnancy. "The Birmingham Med. Rev.," July, 1892.

- 1. The condition of the gums. Their margins in some cases are thin, pale, and somewhat shrivelled in appearance, and apparently withdrawn from the necks of the teeth; in other cases they are separated from their attachments to the neck of the teeth, and a thin fluid will ooze on pressing them. This is alleged to be due to impeded circulation.
- 2. The secretions. The changes in these are said to be a potent cause of caries. Salivation is often considerable, and may cease at the third or fourth month. This saliva is acid, ptyalin is absent, and both its organic and inorganic constituents are lessened in amount.
- 3. Caries. "Brown" caries and "white" caries (the latter associated with anæmic gum) are seen. The teeth may become soft without decay, get sensitive to touch, heat, and cold, and are loose in their sockets from absorption of the alveolus. The peridental membrane is anæmic. Pain is often reflex in pregnant women, and must not be ascribed to hysteria.

B. J. Baron.

Ritter (Berlin).—On Syphilitic Affections of the Mouth and Syphilitic Infections from Operations in the Mouth and Teeth. "Deutsche Monats. Zahnheilk.," 1892, Nos. 2 and 3.

DESCRIPTION of the syphilitic primary affections of the mouth written for dentists, for whom the knowledge of these affections is of great importance, in consequence of the ease with which specific affections can be propagated by instruments.

Michael.

Paget, Stephen (London).—Malformations of the Lower Lip. "Lancet," Aug. 27, 1892.

- 1. Median Cleft. In one (Hamilton's) case the fissure differed from median hare-lip of the upper lip in not presenting the tubercles usually present in that rare condition. In another (Bland Sutton's) there was a dermoid growth between the edges.
- 2. Hypertrophy. (A) Of the mucous membrane only is generally a long fold enclosing glands, behind the true lip. (B) Of the whole lip is very rare.
- 3. Sinuses. In Trelat's case there were sinuses on each side of the middle line, in Arbuthnot Lane's two slits on the front of the lower lip, leading into two saccules under the mucous membrane on the inner aspect. (Both these patients had hare-lip.) Jardine Murray's case presented two crescentic openings near the free edge, admitting a large

probe for half an inch. (The father had double hare-lip, and other members of the family were malformed.) Dépaul, Madeluny, and Demarquay reported similar cases. Mr. Paget attributes them to upgrowths on the lower lip, fitting originally into the clefts in the upper one, and subsequently persisting or retracting, and remaining as papillæ lying in pits, or, finally, by the same process carried still further, forming sinuses. Analogously along the lines of the branchial clefts one case may present an outgrowth, another a sinus, or a mere pit in the skin.

Dundas Grant.

Altmann (Kopycrynce).—Soor in a Woman Sixty years old. "Internat. Klin. Rundschau," 1892, No. 34.

THE patient had a soor following upon croupous pneumonia. The affection lasted eight days, and was cured by brushing with sublimate.

Michael.

Garrigues, H. J. (New York).—Stomatitis due to the Irritation of Epithelial Pearls in the Mouths of New-born Children. "Med. News," Oct. 1, 1892.

An epidemic of sore mouths occurred in the children at the Maternity Hospital last spring. Two typical cases are detailed. In one, a white spot appeared on the second day after birth at the junction of the soft and hard palate. In three days it covered the palate. There was a superficial ulcer covered with yellow film, and bounded by a red line; it was symmetrical, there was no fever and no diphtheria. It was a local infection cured with acetic acid and borax in glycerine. The second case, immediately after birth, presented a white spot at the junction of the right tonsil and palate over the situation of the hamular process, which is likely to become the seat of ulceration (Bednar's aphthæ). A triangular ulceration of the left side of the palate and palatine arches afterwards appeared, without fever or enlarged glands. A similar spot formed on the right side on the seventh day. On the twenty-third day the mouth was nearly healed.

Fifty-two babies were examined, and nearly all had one or more white nodules on the palate at birth. The first twenty-seven of these children had their mouths washed out immediately after birth, and after each nursing with a saturated solution of boric acid. Twelve of these had sore mouths. The last twenty-five had no washing out, only the mother's nipple and milk entering the mouth, and not one of these babies had sore mouth.

The pearls were found in all of the fifty-two but three. They are small white globules of the size of a pin's head or millet seed, situated in the raphé and preferably at the junction of the hard and soft palate. There are from one to five; the outer side is hard, the inner soft. They are embedded in the mucous membrane, even reaching the periosteum. Most have a connective tissue covering, and some form a white line along the raphé. Microscopically they are masses of epithelial cells, the outer layers being the most recent. Such pearls are also found on the alveolar process, especially near the posterior extremity.

Some authors have thought them to be retention cysts, but Epstein

proved them not to have anything to do with glands. They occur as early as the eighth week of fœtal life. They are transient, and disappear at the end of the second month. They may be found a whole year in children, but after the fifth month are found embedded in the mucous membrane. They are due to an invagination of the epithelium. The author found in his cases that if the pearls did not give rise to stomatitis they disappeared within a week or two.

They are diagnosed by their definite locality and regular globular shape. Bednar's ulcer always develops laterally, generally bilaterally, over the hamular process. They do not call for treatment, but should not be injured. If they are mistaken for "sprue" (which forms irregular less elevated white spots, never congenital, and found in any part of the buccal membrane, and not symmetrically), and rubbed off, mischief follows. If foreign matter is in the mouth of the child (liq. amnii, blood, etc.), it may be washed with plain water, and very superficially.

Water acidulated with acetic acid, followed by painting with one part of borax in eight of glycerine, is the best treatment for stomatitis.

R. Norris Wolfenden.

Killian (Worms).—Diagnosis of Certain Early Forms of Pemphigus Mucosa. "Monats. für Ohrenheilk.," 1892, No. 6.

In a patient, thirty-three years old, affected with difficulty in speaking and swallowing, the author remarked a white exudation on one spot of the tongue and on the under lip. Some time later universal pemphigus appeared. The author believes that it is possible to recognize this disease quite early, and before any eruption on the skin arises, because the first symptoms of the disease are often localized on the mucous membranes.

Michael.

Hahn (Pyritz).—On Möller's Glossitis Suferficialis. "Deutsche Med. Zeit.," 1892, No. 65.

A PATIENT, twenty-five years old, for one and a half years had pains in the tongue. The arcus palato-glossus and the papillæ circumvallatæ were red, the vessels injected, the papillæ swollen. One spot of the tongue was more red than normal. The pharynx was inflamed. Improvement followed by brushing with menthol.

Michael.

Heymann, Paul.—Symptomatology of Tuberculosis. "Berliner Med. Gesellschaft," Feb. 17, 1892.

DEMONSTRATION of a patient affected with tuberculous ulcers of the mucous membrane of the mouth.

Michael.

Morrison, Rutherford (Newcastle-on-Tyne).—Ichthyosis of Tongue, etc. "Brit. Med. Journ.," Feb. 20, 1892.

A MAN, aged seventy-three, had ichthyosis of the tongue for fifteen years, and for fifteen months suffered from pain and salivation. Recently a tender, indurated nodule, evidently of a malignant nature, had appeared. Under the same date comes another interesting tongue case, reported by Mr. Barling (Birmingham), in a man, aged forty-five, an epileptic, who

had bitten his tongue frequently, giving rise to an ulcer, one inch by one inch, with hard margins, which, however, showed no epithelial ingrowth. Iodide of potassium in large doses producing no effect, and the posterior sterno-mastoid glands becoming full, the half of the tongue was excised. The microscope showed thickening of the epithelium only, which was supposed to indicate a pre-cancerous state.

Wm. Robertson.

Tilnig.—A Calculus of the Submaxillary Gland. Deutscher Aerztlicher Verein zu St. Petersburg. Meeting, Dec. 16, 1892.

THE patient suddenly presented a swelling of the region of the lower jaw. By pressure the author removed through the ductus Whartonianus a quantity of pus, to which followed a stone of the length of three centimètres. In the stone a hair was included.

Dr. Selenkow also showed some stones removed from the submaxillary gland. In the centre of the concrement were masses of leptothrix.

Michael

Thorington, J.—A Calculus in Wharton's Duct. "Med. News," Aug. 13, 1892.

THERE was a prominence on the floor of the mouth, a small whitish opening, probing which a hard grating body could be found; a hard elongated tumour could be felt under the left side of the jaw. Through an incision the calculus was removed by forceps, the cavity was cleansed with a ten volume solution of peroxide of hydrogen, and swabbed out with iodide of potash and iodine in glycerine and water. The surface of the calculus was rough, and it weighed twenty-one grains, consisting of carbonate and phosphate of lime. A point of interest in the case was a history of sudden onset, suggesting the strong probability of the nucleus of the calculus originating in the submaxillary gland, and not in the duct, to which it was washed forward by the salivary secretion.

R. Norris Wolfenden.

Newcomb, J. E. (New York).—Syphilis of the Lingual Tonsil. "Med. News," July 2, 1892.

THE tonsil is often the seat of secondary trouble, more rarely of gumma, with subsequent breaking down. It is more common in men addicted to tobacco and alcohol or to prolonged straining of the voice. The condition is often overlooked. There is the feeling of a foreign body and some dysphagia, and the appearances described by Moure and Raulin as typical, viz., (1) nipple-shaped, frayed protuberances, separated by furrows, ulcerated on the summits, and presenting a typical plaque clearly differentiated from the surroundings; (2) a median or lateral single protuberance, covered with mucous plaques and ulcerated, the mass being large and the tissues between the follicles infiltrated. A patient presented lesions of the first variety, notes of whose case are given.

Tertiary lesions are, according to Natier, more uncommon. Snow-white deposits with zones of intense redness occur along the base of the tongue in patients under inunction treatment, according to Schumacher, with cervical and submaxillary gland swellings. In gumma there is an

indurated edge with cone-shaped ulcer in the centre. Carcinoma, chronic abscess, and diphtheria may be attended with radiating pains as in lingual amygdalitis.

R. Norris Wolfenden.

Thorner (Cincinnati). -Soor of the Nose and Pharynx of an Adult. "New York Med. Monats.," 1892.

In a patient, seventeen years old, the author saw this affection following upon influenza. Treatment with soda bicarbonate. Cure. *Michael*.

Hall, Haviland (London).—Erysipelas of the Pharynx and Larynx. "Brit. Med. Journ.," Feb. 27, 1892.

In an interesting and exhaustive paper on the above subject, in which the opinions of Ryland, of Birmingham (1837), Massei, Moritz Schmidt, Gerhardt, etc., are duly considered, the author details illustrative cases (three private, fatal; three hospital, recovery) where in some the general symptoms were most prominent, in others the local; high pyrexia and a sudden onset being characteristic. The rapid development, tendency to wander, in the course of lymphatics especially, the fever, and the discovery (Cardone) of the streptococcus of Fehleisen all go to confirm the true character of the disease, and which may have for its starting-point small epithelial lesions (Massei and Gerhardt) at the base of the tongue or over the tonsils, from which the cocci (erysipelas) may spread from within outwards by various paths, or internally as here. As in external erysipelas we have two forms, cutaneous and phlegmonous, so, according to Semon, there may be varying degrees of severity in the affection thus developed internally-erysipelas, phlegmonous pharyngitis, angina Ludovici being only modifications of the same process, only varying in the degree of their severity. The prognosis is often grave, and the onset sudden in pronounced cases. The treatment adopted by the author comprehends the use of ice externally and internally, along with cocaine twenty per cent. solution to larynx. If no progress is noticed, scarification of œdematous tissue is indicated. Strong mustard plasters to the back have given in some hands good results, as also has croton oil to the front of the neck. Tracheotomy is spoken of with caution as temporarily remedial only. Wm. Robertson.

Beck (New York).—Foreign Body in the Œsophagus. "New York Med. Woch.," 1892, No. 4.

A GIRL, eighteen years old, swallowed a quarter-dollar piece. Extraction by the "Münzenfänger," with some remarks on the different methods of operation for the foreign bodies.

Michael.

Morrison, A. C. (Hartlepool).—Œsophageal Stricture—Gastrostomy. "Brit. Med. Journ.," Feb. 6, 1892.

A MAN, aged fifty, had gastrostomy complete, October 24th; December 21st he had gained two stones in weight; died from influenza. Specimen showed malignant stricture closing entirely the cardiac orifice.

Wm. Robertson.