

the tooth often lead to serious consequences,—retraction of the gum, abscess, etc. The production of this change is variable. The presence of tartar unquestionably assists its production. M. Magitot at the same meeting contested the opinion of M. Cras as to the seat of the deposit, asserting that it is placed invariably in the deeper layers of the epithelium of the gum, adjacent to the Malpighian layer of the mucous membrane, not in the capillary network; and urged that the deposit depends on the elimination of the lead by the saliva, and was precipitated by the effect of the sulphur in the tartar of the teeth.*

Osteo-Gingivitis Gangrænosa Neonatorum.—Klementowsky describes under this name three very similar cases, the first he ever met with during twenty years' practice among children in the Foundling Hospital at Moscow. *Case I.* A boy aged six days, well nourished, healthy, was taken ill, with high fever and an erysipelatous flush on the right cheek. The following day the latter had disappeared, but an œdematous dark swelling had appeared on the gums of the right upper jaw. Toward night two teeth broke through the swelling and fell out; the swelling diminished in size; ulceration set in four days later, and the child died. At the necropsy gangrene of the upper jaw and pyæmia were found. *Case II.* A girl aged one month and a half, badly nourished, had high temperature and a small gangrenous abscess on the gums of the upper jaw on the left side. On the second day a tooth broke through the abscess and fell out, the swelling diminished, the temperature rose, and a gangrenous abscess formed on the right side of the upper jaw. On the fourth day it began to heal; on the fifth peritonitis set in; and on the sixth the child died. The necropsy revealed purulent gingivitis, with ulcerations and diffuse purulent peritonitis. *Case III.* A boy aged thirty-eight days, well nourished, had gastric catarrh a short time ago. There was high temperature, with a purple swelling of the size of a nut on the gums, corresponding to the right upper eye-tooth. On the second day a tooth pierced the tumor and fell out; it was replaced by a dentiform granulation surrounded by necrotic tissue. On the third day the swelling and granulation diminished and suppuration set in. The wound healed during the following days; but on the fourth the temperature again rose, and a hard reddish swelling appeared on the left side of the gums, corresponding to the upper molar teeth. No pus escaped on incision. During the following days necrosis set in, the swelling beginning from the edges of the incision, gradually exposing the tooth and the bone in the alveolus. There were fetid suppuration and a gangrenous perforating abscess of the left cheek. Death occurred on the forty-seventh day. At the necropsy it was found that the two posterior thirds of the left half of the upper jaw had become one gangrenous cavity, the periosteum was detached from the zygomatic arch, and the latter was necrotic.†

* London Lancet.

† London Medical Record.

Gingivitis in Pregnancy.—Since the publication of former editions of this work, it has come in the way of the author to see several remarkable illustrations in this direction. That inflammation of the gums is not an infrequent associate of pregnancy is a familiar fact to every practising physician. It is not so familiar, however, that epulis growths, bearing close likeness to cancerous tumors, occasionally start with and continue throughout the whole period of utero-gestation. In one such case the disappearance alone of the growth after birth of the child served to satisfy that the condition was not malignant. In the particular instance alluded to a fungous mass quite the size of a hickory-nut occupied the right side of the upper jaw, giving much pain, and bleeding at the slightest touch. Another case presented a tumor, fibro-cellular in appearance, occupying a space on the gums of the left upper jaw, extending from the cuspid tooth to the molar. These tumefactions are most likely to be met with in women whose health is not very robust. They appear most commonly from the fourth to the sixth month of pregnancy, and disappear from the second to the fourth after delivery. As an application, nothing as a palliative has as yet been found better than the following formula:

R.—Zinci sulphatis, gr. xii;
Chloral hydratis, gr. xv;
Aquæ, ℥iv. M.

The part to be touched three times daily by means of a camel-hair brush.

As a radical application, a preparation consisting of equal parts of caustic soda and quick-lime may be employed; this is used by mixing the powder into paste form with alcohol or water; a portion laid against the tumor will quickly slough it away. Upon return of the growth the cauterant is to be reapplied.

Gangrene of Gums following the Exanthems and other Diseases.—Any acute disease tending to impair the general health may be followed by, or have associated with it, ulceration or gangrene of the gums. Measles is the most common condition. The incipient ulcer expresses markedly the degenerative condition, the bottom of it being dirty and pasty looking. The treatment required pertains both to the constitution at large and to the immediate locality. Acid tonics commonly act admirably. The bowels are to be kept soluble, the skin clean and in a stimulated condition. Exercise in the open air, either passive or active, is to be insisted on. The sleeping room is to be kept well ventilated; the bed is not to be of feathers; the covering not too abundant.*

A medicament of valuable tonic import in all such cases is prepared as follows: Take of red Peruvian bark one ounce, of Virginia snake-root half

* A mineral-water that acts admirably as an aperient is to be made as follows: Take of sulphate of magnesia, ℥iiss; of aromatic sulphuric acid, ℥ij; of sulphate of iron, gr. xv; of water, ℥vii. Of this combination put a tablespoonful in a goblet of water and drink half an hour before breakfast.

an ounce; put these into one and one-half pints of warm water, simmer to one pint, when cold strain and add one pint of Lisbon wine. The dose for a child is a tablespoonful three times a day; for an adult double this quantity. As a local remedy reliance is to be placed on the aromatic sulphuric acid diluted and used as a general mouth-wash, or applied, by means of a brush, full strength, to the ulcers.

Tincture of calendula, made stimulating by the addition of compound tincture of capsicum, furnishes an admirable wash when diluted one-half with water. Tar water, to which has been added indicated proportion of carbolic acid, is a trustworthy agent.*

Oidium Albicans.—Upon most sores in the mouths of ill-nourished subjects are to be found cryptogamic spores shooting out thread-like plants. These spores are not the disease, but parasites finding habitation among the sores. To destroy them creasote or chloride of zinc, diluted, or in full strength, as indicated, may be employed. Cleanliness is a necessity. Phénol sodiqué mixed with the water used to wash the parts is found of profit. (See *Oidium, Aphthæ.*)

Calcified Dentinal Tubules.—A cause of chronic ulitis not yet mentioned lies in that calcification of the tubular material of one or more teeth by which equipoise of vital relation is interfered with. In this condition the tooth structure is found so solidified as to have its circulation disturbed to an extent which makes of it a foreign body. The receding and atrophied gum is expressive of nature's attempt at elimination. There is no cure outside of extraction. The common practice is to let such teeth alone until they drop out of themselves or become a source of discomfort.

* Tar water, one pint; fluid carbolic acid, one drachm.

CHAPTER XXXIII.

THE APHTHÆ.

APHTHÆ is a term which every reader must have remarked to be associated (like the word *epulis*) with some degree of confusion.

In the Greek, from which the name is derived, there are two verbs with the same spelling,—*ἄπτω*. The meaning of the one is "to set on fire;" that of the other, to "bind to" or to "fasten upon."

The mouth presents ulcers, or sores, of various signification,—some are characterized by pain of a burning, inflammatory character; others, chronic, or cold in nature, furnish an inviting soil to a very persistent and almost omnipresent parasite,—the oidium,—this fungus fastening upon and binding such sores in its necklace-like embrace. It has thus very naturally occurred that pathologists, seeking an expressive term by which to designate these varying conditions, differently employed the common name as it happened to them to observe or adopt the one or the other of the roots from which the nomenclature is derived. That such uses of the dissimilar verbs on the part of various authors must have been made, is necessary to be inferred to explain the differences which distinguish descriptions.

With such examples of liberty, intentional or unintentional, the author is to be excused in presenting to his readers the subject after his own manner and views.

For the reasons of the double derivation, and for others which will be presented, the term *aphthæ* cannot, in justice and pathological signification, be applied to a particular species of sore, but must, as a noun of multitude, apply to a class,—which class has many species. Thus we accept, as explained and dismissed, the various questions of ulceration and non-ulceration, exudation or non-exudation, the oidium or no fungi.

The type of the *aphthæ* is as follows: An *aphtha* or *aphthous* patch is a degenerate sore, to be seen, under varying circumstances, upon the mucous surface of the mouth, the fauces, the œsophagus, and, quite likely, upon any part of the alimentary canal, and perhaps also upon the respiratory tract. The most common seat of this patch is the uvula; next to this the lower lip; next the tongue. The sore varies in size, from the smallest point to a confluent mass which may cover a large surface; looks pasty or exudative, is generally oblong in shape, and varies in color from the misty white of hoarfrost to the dirty yellow of serofulous pus. As most frequently seen, such a patch is one of several similar sores.