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STRUCTURE AND DISEASES OF THE TEETH.

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DECIDUOUS OR TEMPORARY TEETH.

THE TEETH are not only among the most useful organs of the human system, but they are the most liable to disease of all the bones. Besides being ornamental they preserve the symmetry of the face, assist in articulation, and above all other duties they aid in masticating the food, which is the first of the three processes of digestion which it undergoes. They are firmly inserted in the alveolar cavities of the upper and under jaws by the portion called the root or fang. Another portion of the tooth, that covered by the fleshy gum, is called the neck. The crown is that portion seen above the gum, and is covered by a thin, dense, hard substance called the enamel. The enamel is the hardest substance found entering into the composition of the human body. The inner portion of the tooth, and its fangs, except a central canal, called the nerve cavity, is composed of two kinds of substance, one called the cortical, the other the ivory. There is a delicate membrane covering the fang called the periosteum, and it is often the seat of very acute pain.

Nature has provided man with two successions of teeth: the first is called the infant, temporary, deciduous, or milk teeth; and the second is known as the permanent or adult. The early development of the teeth is a subject only likely to interest the anatomist, and perhaps may be deemed out of place here. The papillæ of the teeth, we may however remark, undergo many curious changes during their transition state, or from the time the first ossific deposit commences in the cartilaginous portions contained in the membranous sacs in which the teeth are formed, till birth.

At birth the jaws contain the rudiments of fifty-two teeth,—twenty of these are temporary, and thirty two are permanent. The first teeth to make their appearance are the two central incisors of the under jaw; and in the course of four or five weeks the central incisors of the upper jaw. In the course of a few weeks more the lateral incisors of the under, then the upper jaw, make their appearance. From the fourteenth to the eighteenth month the lower first molars appear, and are soon followed by those of the upper jaw. After these the cuspidati soon appear, two in each jaw, situated just in front of the first molars. The second molars do not appear till the child is two

years or two years and a half old. Thus the whole number (twenty) of the deciduous sets is completed—ten in each jaw. Altho' this is the natural order and time in which the teeth appear,—yet often many irregularities occur as to the time, number, and even the shape of the teeth.

The durability of the teeth depends greatly upon their solidity and the materials entering into their composition. That a child's teeth and bones may be properly developed care should be taken that it has proper nourishment and exercise. Milk seems to be the nutriment designed by the Creator as best adapted to strengthen the bones,—for, by observing, we see how complete are those of the animal kingdom that live upon no other food. Children, then, should have that kind of food which gives strength to the bones, and should by no means be fed exclusively upon arrowroot and such things as merely produce fat without contributing a corresponding amount of earthy substance to the bones. The period of dentition or what is commonly called "cutting the teeth" is one of great hazard to the child; and not infrequently some one of the many diseases common to this period sweeps the little one into an untimely grave. As the constitution of a child at this age is very delicate and unusually susceptible, and easily acted upon by any of the many irritating causes which is brought to bear upon it, mothers should be unusually careful, as whatever is wrong in their diet will affect the child in a corresponding degree. Sometimes nature makes a salutary effort to lessen the febrile symptoms attendant upon this period of a child's life which should not be meddled with or suddenly checked, unless too severe. It is too often a mistaken idea of parents that as the temporary teeth are to be shed and another and stronger set supply their places there is no particular need of taking care of them or trying to prevent disease from attacking them. This, however is a great mistake. It is a well established fact among physiologists and others that as the rudiments of the permanent teeth already exist in the jaws at the eruption of the temporary ones, the former are very often seriously affected by the diseases of the latter. There are many causes which lead to the decay of the deciduous teeth. When a child has been salivated the teeth will often commence to decay as soon as they come through the gums. Children are allowed such a superabundance of sweets now-a-days that it is a wonder that more do not become diseased and die. Yet it is no uncommon thing to hear parents making enquiries as to the cause of the diseased state of their children's teeth.

Too much care cannot be bestowed by parents upon the teeth of their children from first to last. The teeth should be cleansed with a brush every day, as much as though they were the permanent teeth; and every care should be taken as to diet and cleanliness whereby disease may be ward off. Should caries attack a tooth the decay should be at once cut out or the tooth should be filled so that the disease may not spread to other teeth that are healthy. The temporary teeth should, if possible, be preserved till the proper time of shedding. Excessive pain should be the only excuse, as a general rule, for extracting. Much mischief may be done by extracting the teeth too soon, as from this cause the pulps of the permanent teeth are often exposed before they are sufficiently ossified to protect themselves from injury. On the other hand, the milk teeth should be removed as soon as the others begin to make their appearance and in no case should the new teeth be allowed to come down on the inside or the outside of the old ones; for by so doing they take a false position which is very liable to injure their appearance for all time to come. Should not the extraction of one temporary tooth be sufficient, enough should be extracted to admit of the new ones coming down or up uniformly and evenly.

Those who have the management of children's teeth never err more than when they consult the wishes or adhere to the child's opinion concerning its teeth. As a child is perfectly ignorant of the importance of preserving the teeth those who have the care of them should take the responsibility upon themselves and should enforce strict obedience in matters concerning the welfare of the teeth. Many persons neglect the teeth of their children because the little ones do not like to go to the dentist. Some urge that thousands of children grow up with healthy teeth who never see or who have never seen a dentist. We may say that we do not speak of those children blessed with healthy teeth, but those who are not. It would be much better both for the health of the child and for the reputation of the dentist that the teeth of the former have early and careful attention. Often the last thing done, which should be the first, by parents, when disease attacks the teeth of their children, is to consult a dentist. Here is a case, and not an uncommon one to illustrate our meaning. A child is brought to a dentist to have its teeth "looked at," and when he examines the mouth he finds that the child's teeth are in such a decayed and filthy state that he hardly knows where to commence operations. Upon closer examination, how-