

health; but at two years of age she must have been the subject of a brief, but severe illness. The mother confirmed our opinion, by saying her daughter had generally been healthy, with the exception of the time we mentioned, when she was attacked with measles, and was for some time considered dangerously ill. Cases of this description are of the most common occurrence.

The different phenomena exhibited in the formation of dental organism, are as variable as the degrees of health in the systems that produces them.

A good innate constitution, sustained by blood containing a proper proportion of the different materials that enter into the structures of the teeth, will produce these organs of a medium size, of a dense structure, perfect in form, and slightly tinged with yellow; while another state of the blood, in which serum preponderates, and which is always accompanied by a weak constitution, produces teeth of a delicate form, smaller in diameter, and more pointed than those of a healthy formation, of a blueish or pearly tint, and readily acted upon by external agents. These teeth are generally beautiful and regular, and are credulously looked upon by some as indications of a predisposition to pulmonary disease. Another state of the blood, in which calcarious matter and gelatine are produced in abundance, but of a poorer quality, exhibit teeth of a soft texture, and, like the others, readily acted upon by corrosive agents: they are also characterised by a chalky appearance, and an enamel full of small indentations. These teeth are very often, but not always, larger than those produced by a more healthy action. They are usually found covered with green tartar, a combination of the earthy portions of the enamel, with ceptic acid (ceptate of lime). This shows their inability to resist corrosive agents, to which they generally fall victims.

The calcarious portion of dental structure, is deposited from crassamentum, or red part of the blood, while the gelatine is derived from serum, or white part of the blood; and the earthy and animal matter contained in a tooth, bear about the same proportions to each other that the red and white portions of the blood do, from which the tooth was formed.

In good constitutions, the blood is composed of about four parts clot to one of serum; and dental bone, deposited from such blood, contains about three parts calcarious matter to one of gelatine. Now, it is evident, that any change in the proportions that the red and white blood naturally bear to each other, must produce a corresponding change in the ingredients of which dental bone is composed. Disease tends to increase the white, or serous part of the blood, and decrease the red. Con-

sequently, those teeth which were progressing in their formation at the time the blood was under the influence of disease, will be composed of too large a proportion of gelatine; hence their liability to become diseased. Such teeth, for the want of a larger proportion of calcarious matter, are softer, and much more sensitive, than those formed under more favourable circumstances.

In short, teeth are met with of every degree of perfection, in form, colour, density, and capability of resisting the ravages of disease; and in all cases they are a correct indication of the state of the innate constitution.

The result of local irritation upon the producing of organism, is less remarkable, inasmuch as the quality of the blood remains the same; and the secreting organs are only effected by becoming more or less involved in the disease, and, as a general thing, its pathological indications are merely a more rapid deposit of dental structure, with occasionally an opaque spot upon the enamel, and, in some more rare instances, an entire destruction of the dental germ. Several cases, exhibiting these effects, have come under our notice, some of which we shall give.

In the summer of 1840, Mr. C., then a resident of Plattsburgh, New York, called on us with his daughter, a little girl about five years of age, for the purpose of obtaining our advice. Mr. C. stated, that about a month before we saw him, his daughter had had a temporary tooth extracted, and that the gums, instead of getting well, had been growing worse ever since. On examination, we found the gums on the left side of the lower jaw in a high state of inflammation, swollen, and of course sensitive; the second temporary molar had been extracted, and the alveolus remained open, from which there was a discharge of pus. On introducing a probe, we found that the alveolus had been fractured from the first temporary molar to the posterior angle of the first permanent molar. This bit of bone, about three quarters of an inch in length, being loose, we removed it; and on cutting away the lacerated portions of gum, we exposed the lingual surface of the first permanent molar, the eruption of which, by the natural process, would have occurred in the course of a few months. We sent our little patient away, with directions to have her mouth cleansed occasionally with tincture of myrrh. In a few days, however, she again made her appearance, complaining of pain and soreness. At this time, we found the crown of the first half-formed permanent molar, entirely through the gum, which was in a high state of inflammation about the tooth. As the inflammation had already destroyed the vitality of this tooth, thereby rendering it a source of irritation, we thought best to extract it, and accordingly did so. From that