

time the inflammation gradually subsided, though not until it had destroyed the germ of the second molar; and consequently the third molar, or *dens sapientiæ*, for the want of a parent sac, will never be formed.

In this case it may be seen, that the removal of a temporary tooth in an improper manner, cost the patient three large permanent grinders.

The second bicuspid on the same side, made its appearance more than a year earlier than these teeth usually do, and in all respects perfect in its formation. At the time the accident occurred, this tooth was deeply seated under the temporary one which occasioned all the mischief. Yet it had in no way been affected by the previous inflammation, other than that its formation and eruption was completed in a much shorter time than that of other teeth of the same class, that were more distantly situated from the seat of the disease.

We have seen many cases of local irritation, with like results to the teeth of replacement, which we think warrant us in believing that an increase of circulation will produce a corresponding increase in the action of the secreting organs.

Premising that the innate constitution be good, and that the blood bear a proper proportion of the earthy salts and gelatine of the teeth, may it not be fair to suppose, that if a greater amount of osseous structure be brought to the secretory organs through the circulation, that they, in obedience to this impulse, will be stimulated to greater activity, and thereby advance the natural formation and eruption of the teeth.

During the fall of 1844, Mrs. G. called on us with her little daughter, who was suffering from alveolar abscess over the root of the right superior central incisor of the temporary set. The crown of this tooth was entirely destroyed by caries, and the root was rendered so sensitive by the existing periodontitis, that we were unable to effect its removal in its present state. We therefore scarified the gum, and sent her away with directions to call again when the inflammation had subsided. This, however, she neglected to do for more than a year, during which time she had several attacks of periosteal inflammation; and when she did call, absorption of the gum had taken place to such an extent that the fang was exposed its whole length. We removed it, and on finding the left central incisor loose, we removed that also, and to our surprise we found that the root of this tooth was entirely absorbed, while the root of the diseased tooth was whole. In a few weeks after, the right central incisor of replacement cut the gum, and when we last saw our little patient, the crown of this tooth was entirely through, beautifully and perfectly formed; but the

eruption of the left permanent incisor had not then taken place.

Now, if the case of which we have just given a brief history, were an unusual one, it would mean nothing, but as all the circumstances connected with it are of the most common occurrence, we may safely draw from it the following inferences:

1st. That an increased but healthy deposit of dental structure may be produced by local irritation.

2nd. That there are absorbents expressly for the purpose of removing the roots of the temporary teeth, and that the action of these vessels may be increased by local irritation.

And lastly,—If the absorbents become too deeply involved in the disease, their operations will be entirely interrupted, and the root which it is their office to remove, will remain whole.

We have mentioned this case, because we think it goes far in explanation of the mysterious phenomenon of the shedding of the temporary teeth. There is no subject connected with our own branch of the healing art upon which writers differ so widely as upon this; even Professor Harris, to whose pen the literature of dental science is more deeply indebted than to that of any other author, leaves the matter still in doubt as to the manner in which this peculiar process is carried on. In offering our own views upon this subject, we are aware that we shall differ with men for whose opinions we have ever entertained the highest respect. We shall therefore submit them with some hesitation, yet with a firm conviction of their truth.

Mr. Bell calls the shedding of temporary teeth a process of anticipation, and believes that it is carried on independently of the necessities of the object for which the change is effected; or, in other words, that it is not the pushing forward of the permanent tooth, that causes the removal of the temporary root, but merely its presence is sufficient to produce it; but at the same time admits, that "it is not until the permanent tooth can no longer be retained in its own alveolus that the process of absorption commences to open the required space." Now, if this process be independent of the necessities of the permanent tooth, why does it, under ordinary circumstances, always commence at that moment when more room is required?—why is it carried on in the direction in which the tooth is inclined to grow, and why does it always cease with the growth of the tooth?

These facts certainly favour the argument that absorption is to a very great degree dependent upon the advancement of the permanent tooth. We have in our possession the inferior jaw of an adult which has the two wisdom teeth fully developed in its structure. These