at other times are of little advantage, and in ſome inſtances create great pain. Gum-maſtich or bees-wax are frequent­ly employed, and can be made to fill the cavity of the tooth ſtill better than metalline ſubſtances. When ſtuffing is to be employed, it ought to be done in the intervals of the fits of toothach, otherwiſe it will give great uneasineſs. When it is to be uſed, the whole cavity of the tooth ſhould be fill­ed ; and this is to be done with the inſtruments, fig. 52. n⁰ 1, 2, 3.

When the remedies made uſe oſ for the removal oſ toothach have failed in their effect, and it is found that the com­plaint ſtill continues, it will be neceſſary to extract the tooth. In doing this, it may be obſerved, that all the teeth may be pulled to either ſide, excepting the dentes sapientiæ of the lower jaw, which ought to be pulled outwards, other­wiſe the jaw may be ſplintered. As ſoon as the ſocket is cleared of blood, if the tooth be not much ſpoiled, it may be immediately replaced, when it will become as uſeful as before. It is difficult, however, to replace the large grin­ders, on account of their diverging roots. The more per­pendicularly the teeth are pulled, the leſs contuſion and in­jury will be done to the jaws and alveoli. But as no inſtrument has been yet invented capable of effecting this properly, ſurgeons are obliged to be contented with an inſtrument which acts in a lateral direction. One of the beſt is that (fig. 53.) in form of a key, with a claw and fulcrum. Previous to the operation, this ſhould be covered with a linen rag, to prevent the gum from ſuffering. After dividing the gum, or separating it from the tooth, the claw, is to be fixed as deep between the teeth and gum as poſſible. Then the fulcrum is to be applied on the oppoſite ſide. The ſurgeon may now, with one turn of the handle of the inſtrument, pull the tooth out at once. But the turn ſhould not be effected by a ſudden jerk, but in the moſt cautious and slow manner. When it happens to be one of the great molares, whoſe roots diverge very much, and when they are firmly fixed, after only looſing it with the firſt pull, the claw of the inſtrument is to be applied to the other ſide of the tooth, and the turn given in a contrary direction to the first. After it has been ſufficiently looſened in this manner, it is to be laid hold of by a common teeth forceps (fig. 54.), and extracted in the eaſieſt manner. Up­on extraction of the tooth, any detached ſplinters occur­ring are to be immediately removed. Should any conſider­able hemorrhagy take place, the patient may take ſome cold water, vinegar, or ſpirit of wine into his mouth, and doſſils **of** lint may be introduced into the ſocket. After all theſe fail, recourſe muſt be had to the actual cautery.

When ſtumps occur from caries, or when the teeth have broken in time of the extracting, the common key will ſometimes remove them ; if that fail, the punch (fig. 55.) is to be uſed. The operator, having this inſtrument in one hand, is to place the fore finger of the other, with a piece of cloth wrapped round it, upon the inside of the jaw oppo­ſite to the ſtump, to protect the neighbouring parts.

Teeth can never be transplanted with propriety in child­hood or in old age. The conſtitution muſt be free from thoſe diſeaſes which affect the gums. The tooth to be tranſplanted muſt be taken from a perſon of a sound con­ſtitution, otherwiſe it will convey infection. To guard as much as poſſible againſt infection, it ſhould be immerſed for a few minutes in lukewarm water, and then well dried and cleaned. It ought to fit the ſocket exactly ; if it be too large, it may be filed down, avoiding the enamel as much as poſſible. The ſurface of it ſhould be at firſt on a level with the reſt, or rather a little more depreſſed, that it may be as ſecure as poſſible in its place. If the tooth fit the ſocket properly, there will be no occaſion for uſing a ligature to fix it ; but if a ligature be found necessary, it may be made of threads of fine ſilk properly waxed. Af­ter the operation is finiſhed, the patient ought to avoid whatever may be in danger of ſhaking the tooth, and this is to be attended to till the tooth is perfectly firm. He ſhould alſo guard againſt cold and moiſt air, and live upon ſpoon-meat.

Sect. V. *Of Boils and Excreſcences of the Gums,*

Gum boils may arise from cold or from external violence, &c. but moſt frequently they are the conſequence of toothach. The complaint begins with pain attending a tumor on the parts affected ; by degrees the ſide of the fact ſwells considerably ; the tumor of the gum now begins to point ; and if it be not opened, it burſts and gives the patient im­mediate relief. When the boil is owing merely to inflam­mation, after the matter is evacuated, the complaint goes off ; but when it proceeds from a caries of a tooth, it will continue as long as the cauſe remains ; the tooth therefore ought to be extracted. After the absceſs has burſt, if the matter continue to be discharged, it may ſometimes be dried up by injecting ſome aſtringent liquor ; but the moſt effectual method is to lay the abſceſs fully open, and to heal it from the bottom by doſſils of lint. Sometimes abſceſſes occur of a more obſtinate nature, owing to a carious ſtate of the jaw. In that caſe ſuppuration ought to be promoted, and the part laid open as ſoon as matter is formed; keeping the paſſage open ſor the diſcharge, being the only means for effecting a cure.

Excreſcences of various degrees of firmneſs ſometimes grow upon the gums. Some are ſoft and fungous, while others are of a warty nature. In general they are not at­tended with pain. They frequently originate from caries of the teeth, or of their ſockets ; in which caſe the removal of the ſpoiled teeth, and the ſubſequent exfoliation of the cari­ous part of the jaw, will often accompliſh a cure. But when this does not happen, the tumor ſhould be removed as ſoon as it becomes troubleſome, otherwiſe there may be dan­ger of its ending in cancer. The removal may be effected by a ligature or knife, according as the tumor may have narrow or broad basis. It is ſometimes neceſſary to uſe a speculum oris to keep the mouth open. After the tumor is extirpated, the wound ſhould be allowed to bleed freely, to prevent ſubſequent inflammation. When the hemorrhagy proceeds too far, it ſhould be reſtrained by the applica­tion of ſpirit of wine, or tincture of myrrh, or ſolution of alum, &c. and ſhould theſe prove unſucceſsful, the lunar cau­ſtic will ſeldom fail of having the deſired effect. No dreſſings can be applied ; but for ſome days after the operation, the mouth ſhould be frequently waſhed with a warm emol­lient decoction ; and the cure will be afterwards promoted by the application of ſome gently aſtringent liquor, as port wine, tincture of roſes, & c.

Sect. VI. *Of Abſceſſes,* &c. *in the Antrum Maxillare.*

This diſeaſe is known by a pain and uneafineſs beginning in the cheek, and extending upwards to the eyes, noſe, and ears, together with a ſwelling, which in the latter ſtages of the diſeaſe tends to a point, moſt frequently in the cheek. Sometimes a diſcharge enſues between the roots of the back- teeth, when they happen to penetrate the antrum. Some­times a discharge of matter from the noſtrils takes place, particularly when the patient lies on the side oppoſite to the tumor. The diſeaſe may ariſe from cold, or whatever produces in­flammation in general ; but the moſt common cauſes are violent fits of the toothach, occasioning exceſſive pain and inflammation of the membranes of the noſe and antrum.

The cure is performed by giving a free diſcharge to the