

(No Model.)

H. C. REGISTER.
ARTIFICIAL TOOTH.

No. 319,746.

Patented June 9, 1885.

Fig. 1.

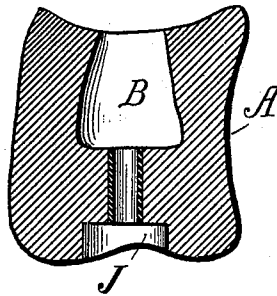
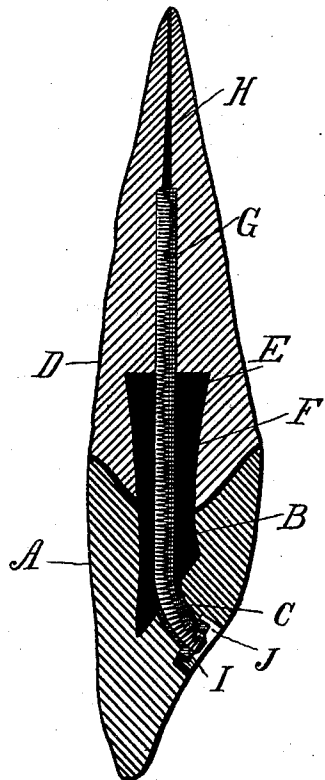


Fig. 2.



WITNESSES:

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HENRY C. REGISTER, OF PHILADELPHIA, PENNSYLVANIA.

ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 319,746, dated June 9, 1885.

Application filed February 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. REGISTER, a citizen of the United States, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented an Improvement in Artificial Teeth, of which the following is a specification.

My invention relates to the art of dentistry, and especially to that branch of dental practice which is known as "prosthetic" dentistry, and is concerned with the repairing or replacing of natural teeth by means of artificial teeth.

In Letters Patent of the United States No. 251,460, granted December 27, 1881, upon my application, there is described, as a new article of manufacture, an artificial tooth or crown which is transversely grooved or channeled across its upper portion.

My present invention is preferably employed in connection with artificial crowns of the above construction, and has for its object the formation of an artificial crown of a character hereinafter described and claimed, and its attachment, in the manner hereinafter described, either to a natural root, or, if desired, to a plate or artificial gum.

Generally stated, my invention consists in forming a cavity or matrix, preferably of dovetailed form, within an artificial crown, in then extending the foregoing cavity as a hole or opening which passes from the body of said cavity completely throughout the substance of the artificial crown out, in case of molars or bicuspid, to its grinding-face, or, in the case of canines or incisors, to its palatine face, and in then lining the said hole or extension of such cavity with a metal lining, bushing, or tube, preferably platinum, which is conveniently affixed by being burned in at the time of the manufacture of the crown, all as represented in Fig. 2.

It further consists in providing the artificial crown so, as aforesaid, provided with a cavity and an extension thereof lined with metal with a retaining-pin or metal post, which is adapted to be screwed within a natural root, (or, if desired, affixed to a plate,) which is conformed to receive it, and which is also provided with a cavity within which the cementing material, which is likewise introduced into the cavity within the artificial crown, is en-

tered, the arrangement being substantially that shown in Fig. 2.

In the accompanying drawings, Figure 1 represents in side sectional elevation an artificial-tooth crown conveniently embodying my improvements and being provided with both a cavity and an extension thereof through to the grinding-face, which is lined with a platinum tube. The crown represented is either a molar or bicuspid. Fig. 2 is a similar view of an incisor or canine tooth crown in which the hole from out the cavity is extended to the palatine face as opposed to the grinding-face, as in Fig. 1. This view represents also the mode of attaching the crown to a natural root.

In the drawings, A represents the body of the tooth or crown; B, the cavity; C, the hole, and *c* a bushing or tube therein. In Fig. 2, D represents a natural root, to which the crown A is to be applied. The cavity within the crown is represented as of dovetail shape.

E is the cavity which is to be formed in the natural root, and F is the cementing material which is designed to be packed in both cavities.

G is a retaining-post, preferably a platinum wire, which is cut with a right and left handed thread, and is screwed into the natural root on either thread as to its portion which is shown in the drawings as above the cavity E in the natural root.

The cementing material F, which is applied after the post has been screwed into the root, engaging with the opposite thread to that upon which the post is screwed into the root, prevents the unscrewing of said post from out the root by locking it. The upper portion of the nerve-cavity, designated as H, is intended to be permanently filled.

I is a nut which threads upon the lower extremity of the post within a recess, J, formed in the palatine face of the crown represented, and is adapted to secure the fixed engagement of the crown upon the post.

The whole contrivance forms a very effective means of locking the crown to a natural root.

Of course, if desired, the post can be secured to a plate and the tooth thereby affixed to the plate as opposed to the natural root. The device, however, is of especial applicability to the placing of artificial crowns upon natural

roots. In the stead of the nut, the post may be soldered to the metal tube or bushing. I, however, prefer to employ a nut, which may be of any desired character and material.

5 The function of the metal tube or bushing which is burned within the hole leading from out the cavity of the artificial crown is not only to strengthen the substance of the parts surrounding the hole, but to serve as a rigid
10 backing against which the nut may bear or to which the post may be soldered.

It is obvious that the cementing material, which may be of any usual character—amalgam or any plastic material being applicable—
15 not only serves, when set, to lock the post within a hole formed for it in a natural root, into which hole said post is screwed, but also assists to retain the artificial crown in place, and to such extent supplements the function
20 of the nut upon the threaded post.

The mode of application of the crown shown in Fig. 1, which is not a front-tooth crown, is similar to the method of application described with respect to the tooth of Fig. 2, and the
25 fact as to whether the hole in the tooth crown terminates in the grinding or the palatine face of the crown depends entirely upon whether the crown is a molar or a bicuspid, a canine or an incisor, the hole merely passing through
30 the crown.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. As a new article of manufacture, an artificial-tooth crown within and surrounded by the substance of the body of which is a cavity
35 or hollow space, from out of which cavity is a hole or kindred channel or opening extending through to the grinding or palatine face of the crown, the said hole containing a lining
40 or bushing of metal, preferably platinum, burned into the substance of the crown, substantially as set forth.

2. In combination with an artificial-tooth crown the body of which is provided with a cavity, from out of which cavity a hole or kindred
45 channel extends through to the grinding or palatine face of said crown, a metal post oppositely threaded as to its respective end portions and secured as to one threaded portion
50 within the crown by cementation within the cavity in said crown by being passed through the hole therein and by having a nut applied to it, substantially as set forth.

In testimony whereof I have hereunto signed my name this 26th day of January, A. D. 1884. 55

HENRY C. REGISTER.

In presence of—

J. BONSALE TAYLOR,
JOHN JOLLEY, Jr.