(No Model.)

T. H. SCHMITZ.

ARTIFICIAL TOOTH.

No. 454,297. Patented June 16, 1891.

Fig. 1.

Fig. 2.

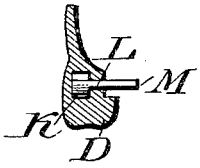


Fig. 3.

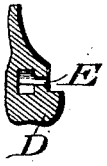


Fig. 4.

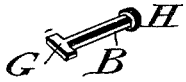


Fig. 5.

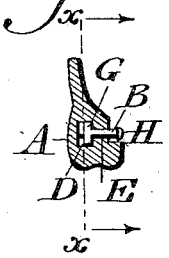


Fig. 7.

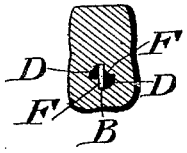
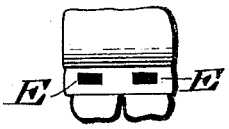


Fig. 8.

Fig. 6.



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ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 454,297, dated June 16, 1891.

Application filed December 12, 1890. Serial No. 374,462. (No model.)

To all whom it may concern:

Be it known that I, THEODORE H. SCHMITZ, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Artificial Teeth, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of novel means for fastening the connecting-pin of an artificial tooth to the body of the same. To this end there is formed in the tooth a recess of peculiar shape, the same receiving the head of the pin and serving to interlock the same, as will be hereinafter set forth.

Figure 1 represents a perspective view of a core employed in forming a recess in a tooth embodying my invention. Fig. 2 represents a longitudinal section of a molded tooth with said core therein. Fig. 3 represents a longitudinal section of the tooth as baked or burned and the core removed therefrom. Fig. 4 represents a perspective view of the fastening-pin employed. Fig. 5 represents a longitudinal section of the tooth, Fig. 3, with the fastening-pin, Fig. 4, on a reduced scale, inserted therein. Fig. 6 represents a rear view of the tooth shown in Fig. 3. Fig. 7 represents a section on line *x x*, Fig. 5. Fig. 8 represents a section of the tooth, Fig. 5, and an attached dental plate.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates an artificial tooth, and B designates a pin with a T-head at one end for fastening the dental plate C thereto, said tooth having within the same a recess D, which is somewhat of the form of two truncated sectors joined at their narrow ends and is in communication with a passage E, extending from the rear of the tooth through the wall behind said recess. The side walls of the recess form two shoulders F, against which the T-head G of the pin B abuts, as will be seen in Fig. 7, said head standing at a right angle to the passage and consequently bearing against the solid wall at the rear of the tooth, whereby the pin is prevented from being withdrawn from the tooth, and it thus remains firmly connected in position.

The material of the plate C embeds the pin and the rounded head H thereof and fills the portion of the passage E and recess D not occupied by the pin and head G thereof, so that the pin is fully embedded by the material, while it is locked with the tooth, thus providing a secure connection for the tooth and plate.

The tooth is primarily molded with the core-piece J therein, said piece most clearly shown in the enlarged view, Fig. 1, being formed of material that will burn entirely away while the tooth is being baked, its shape being that of two frustums of sectors K, united at their narrow ends, and a shank portion L at the rear of said sectors, the end M of the piece constituting a handle for properly manipulating the piece while molding the tooth.

The tooth is burned or baked in the usual way, the heat destroying the core-piece; but the tooth will be found to be formed with the recess D, and the passage E primarily produced by the contour of the portions K and L of the core-piece.

The head G is inserted through the passage E and the pin B turned so that its head G abuts against the shoulders F, after which the dental plate and tooth are connected as hereinbefore specified.

It will be found that the improvement is applicable to single teeth, teeth in sections, crowns, pivots, bridge-work, &c.

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

1. An artificial tooth having a shouldered recess with a smaller communicating recess or mouth, and a pin with a head and lateral projection for entrance into said mouth and securement in said recess, substantially as described.

2. An artificial tooth having therein a recess with shoulders of the form of truncated sectors, and a passage in the rear wall communicating with said recess, substantially as described.

3. An artificial tooth having an interior shouldered recess and a communicating passage rearward thereof formed by a removable core having sector-shaped pieces and a shank, substantially as described.

THEODORE H. SCHMITZ.

Witnesses:

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