(No Model.)

C. M. RICHMOND.

ARTIFICIAL TOOTH.

No. 277,937. Patented May 22, 1883.

Fig. 1.

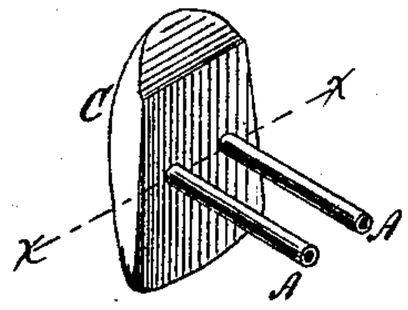


Fig. 4.

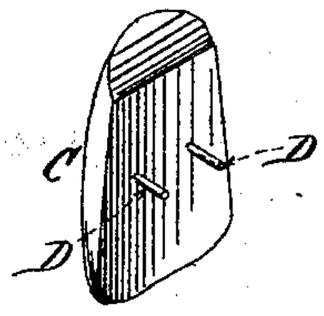


Fig. 3.

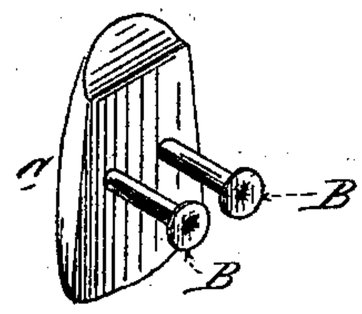
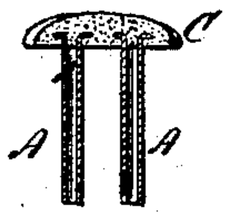


Fig. 2.



Witnesses:
Geo. H. Evans
A. Griffin

Inventor:
Cassius M. Richmond
By his Attorney
E. N. Dickerson Jr.

UNITED STATES PATENT OFFICE.

CASSIUS M. RICHMOND, OF NEW YORK, N. Y., ASSIGNOR TO THE RICHMOND TOOTH CROWN COMPANY, OF SAME PLACE.

ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 277,937, dated May 22, 1883.

Application filed December 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, CASSIUS M. RICHMOND, of the city, county, and State of New York, have invented a new and useful Improvement in Artificial Tooth-Crowns, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

In the preparation of artificial tooth-crown work, especially of the character of that patented to me on the 10th day of February, 1880, No. 224,355, it has been found that the crown will sometimes chip or split or become loose, and the substitution of a new crown thus become necessary. It has heretofore been necessary to remove the ferrule and its attachments from the root, in order to replace the crown; but I have devised a method of replacing an artificial crown upon structures of that character, leaving the attaching-ferrule connected with the root. In practice such artificial crowns are attached generally to a backing by solder or similar material. In case of accident, I remove the crown from such backing or support and drill through the backing one or more holes for the reception of the attaching-holders, which I describe in my present application.

The construction of such tooth-crown will be readily understood from the drawings, in which Figure 1 represents the tooth-crown as prepared ready for application; Fig. 2, a section of the same through the line *x x*. Fig. 3 represents the attaching contrivances so arranged as to hold the artificial tooth-crown in its place. Fig. 4 represents another method of attaching my locking-tubes.

Similar letters refer to similar parts.

C represents the artificial tooth-crown, which may be made of porcelain or other suitable material. In the process of manufacture one or more tubes, preferably two, are fastened in said tooth in the manner shown in Fig. 2. These tubes may be made of any suitable metal—as, for instance, platinum. The inner ends are spread out within the porcelain, so as to lock the tube firmly; or the usual pins, as shown in Fig. 4, may be employed, and the tubes slid over them and soldered thereto. By this means the ordinary crown may be used. I prefer, however, the method shown in Fig. 2. In order to attach said crown to the metallic backing, holes corresponding to the tubes A A are drilled and the crown put in position, said tubes A A projecting through the backing and into the mouth of the cavity. By a suitable instrument, conforming to the shape of the crown and having a mechanical spreading contrivance within, the inner ends of the tubes A A are spread or eyeleted, as shown by B B, thereby locking the tube firmly in position. Larger pins, similar to the pins D D shown in Fig. 4, might be used and screw-threads cut thereon, and by means of the nuts on the inner ends the crown might be drawn up close to the backing; but I prefer the method shown in Figs. 1, 2, and 3.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The method of setting artificial porcelain teeth, which consists in drilling through the hard supporting-backing one or more holes corresponding to a supporting pin or pins, and in then spreading or increasing the size of said pin or pins at their inner ends for the purpose of locking said porcelain teeth after they are in position, substantially as described.

2. The combination of an artificial porcelain tooth with one or more tubular locking-pins adapted to be spread at their inner ends, thereby locking the crown in position, substantially as described.

3. The combination of an artificial porcelain tooth and a tubular pin attached to a pin baked in the tooth, substantially as described.

C. M. RICHMOND.

Witnesses:
GEO. H. EVANS,
ANTHONY GREF, Jr.