

(No Model.)

R. BREWSTER.
ARTIFICIAL TOOTH.

No. 476,605.

Patented June 7, 1892.

FIG. 9.

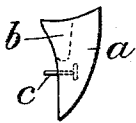


FIG. 10.



FIG. 11.

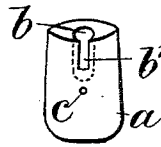


FIG. 12.

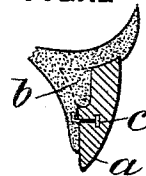


FIG. 8.

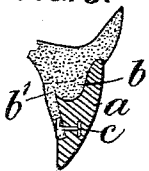


FIG. 4.



FIG. 5.



FIG. 2.

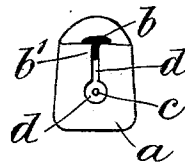


FIG. 6.

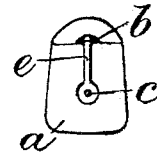


FIG. 1.

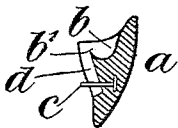


FIG. 7.

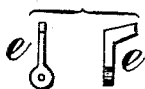
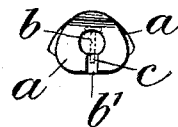


FIG. 3.



Attest:

M. E. Durand.
M. C. Tweedy.

Inventor:

Robert Brewster.

By Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

ROBERT BREWSTER, OF NEW BARNET, ENGLAND.

ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 476,605, dated June 7, 1892.

Application filed September 23, 1891. Serial No. 406,601. (No model.) Patented in England May 1, 1890, No. 6,733.

To all whom it may concern:

Be it known that I, ROBERT BREWSTER, a subject of the Queen of Great Britain, residing at New Barnet, in the county of Herts, England, have invented certain new and useful Improvements in Artificial Teeth, (for part of which I have received Letters Patent in England, No. 6,733, dated May 1, 1890;) and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The invention has for its object improvements in artificial teeth, whereby cheapness of production and security of hold to the backing and base-plate are obtained.

According to my present invention I fix a single projecting platinum or other metal pin in the body of the tooth in the process of molding and firing the same in lieu of employing two of such pins, as heretofore generally adopted, and in combination therewith I form in the back of the neck of the tooth an undercut recess, and I form a narrow shallow recess in the back of the tooth, from the lower part of which the pin projects. This latter recess may, however, be dispensed with.

In order that my said invention may be clearly understood and readily carried into effect, I will proceed to describe the same by aid of the accompanying drawings, in which—

Figure 1 is a vertical section, Fig. 2 is a back view, and Fig. 3 is a plan or top view, of an artificial tooth constructed with an undercut recess in the neck thereof, with a shallow recess in the back and with a single metal pin projecting from such shallow recess. Fig. 4 is a section, Fig. 5 is a side view, and Fig. 6 is a back view, of the said tooth fitted with a metal backing or plate preparatory to its application to a metal base-plate. Fig. 7 represents two elevations drawn at right angles to each other of the metal backing separately, and Fig. 8 is a sectional view representing the said tooth applied to a plastic base. Fig. 9 is a side view, Fig. 10 is a section, and Fig. 11 is a back view, of a similar artificial tooth without the shallow recess; and Fig. 12 is a sectional view representing this latter tooth applied to a plastic base.

In all the figures like parts are indicated by similar letters of reference.

a is the body of the tooth.

b is the undercut recess in the back of the neck, and *c* is a single platinum or other metal pin projecting from the back of the tooth. The above parts are common to both teeth represented in the drawings; but that represented at Figs. 1 to 6 and in Fig. 8 has in addition a narrow shallow recess *d* in the back of the tooth, which extends a short distance below the pin *c* and extends upward to the opening *b'* in the back of the neck, leading to the undercut recess *b*.

When employing the tooth represented at Figs. 1 to 6 in combination with a metal base, I fit into the shallow recess *d* a metal backing-piece *e*, the lower end of which is perforated to enable it to be riveted to the pin *c*, while the upper end is extended, so as to enter the undercut recess *b*. This backing-piece *e* is flush with the back of tooth, thereby enabling the latter to be made stronger and of more natural form than when made to be used with a backing-plate extending entirely across the tooth, in addition to which I retain the translucency of the tooth. The upper end of the piece *e* is soldered to the metal base, and by reason of its being riveted and soldered to the pin *c* and fitting closely the shallow recess *d* and entering the undercut recess *b* the tooth is firmly and securely held in position. When employing said tooth, as represented at Fig. 8, in combination with a plastic base, the outer end of the pin *c* is bent so as to form a hook, and the material of the plastic base is caused to enter the recesses *b d*, by which means I am enabled to firmly secure the tooth to its base without requiring the latter to extend so far down the tooth as has heretofore been required, thereby enabling a more natural appearance to be obtained.

When employing the tooth represented at Figs. 9 to 11, in combination with a plastic base, as represented at Fig. 12, the material of the base is carried down across the back of the tooth, so as to obtain a hold of the pin *c*, and it enters the undercut recess *b* and surrounds the neck of the tooth, as previously described with respect to Figs. 1 to 8. This tooth is also applicable to plate-work.

I would here remark that I am aware that artificial teeth have heretofore been provided with a single projecting platinum pin; but in such case there was no undercut recess in the neck of the tooth, which latter was consequently liable to rotation on the said pin, and was consequently not sufficiently solidly connected with the base. I am also aware that artificial teeth have heretofore been made with undercut recesses in the necks thereof; but in such cases no projecting platinum pin was employed. According to my present invention I combine these two features, and thereby obtain an economy in the amount of platinum employed, while the tooth is as securely connected with the base as when two projecting pins are used, and, further, by the use of the shallow recess in the back of the tooth I am enabled to obtain the advantages hereinbefore referred to.

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

1. In artificial teeth, the combination of a

single metal pin at the back of the tooth, an undercut recess in the neck thereof, an opening in the back, communicating with such undercut recess, and a narrow shallow recess in the back, communicating with said opening, substantially as herein shown and described, and for the purpose stated.

2. In artificial teeth, the combination of a single metal pin at the back of the tooth, an undercut recess in the neck thereof, a shallow recess in the back in communication with said undercut recess, and a metal backing-piece having a lower perforated end fitting over the metal pin and an upper extended end entering the undercut recess in the neck, substantially as herein shown and described, and for the purpose stated.

ROBERT BREWSTER.

Witnesses:

CLAUDE K. MILLS,
Patent Agent, 23 Southampton Buildings, London, England.

WILLIAM GIRLING,
23 Southampton Buildings, London, England.