

No. 688,501.

Patented Dec. 10, 1901.

R. BREWSTER.  
ARTIFICIAL TOOTH.

(Application filed Dec. 11, 1900.)

(No Model.)

Fig. 1.

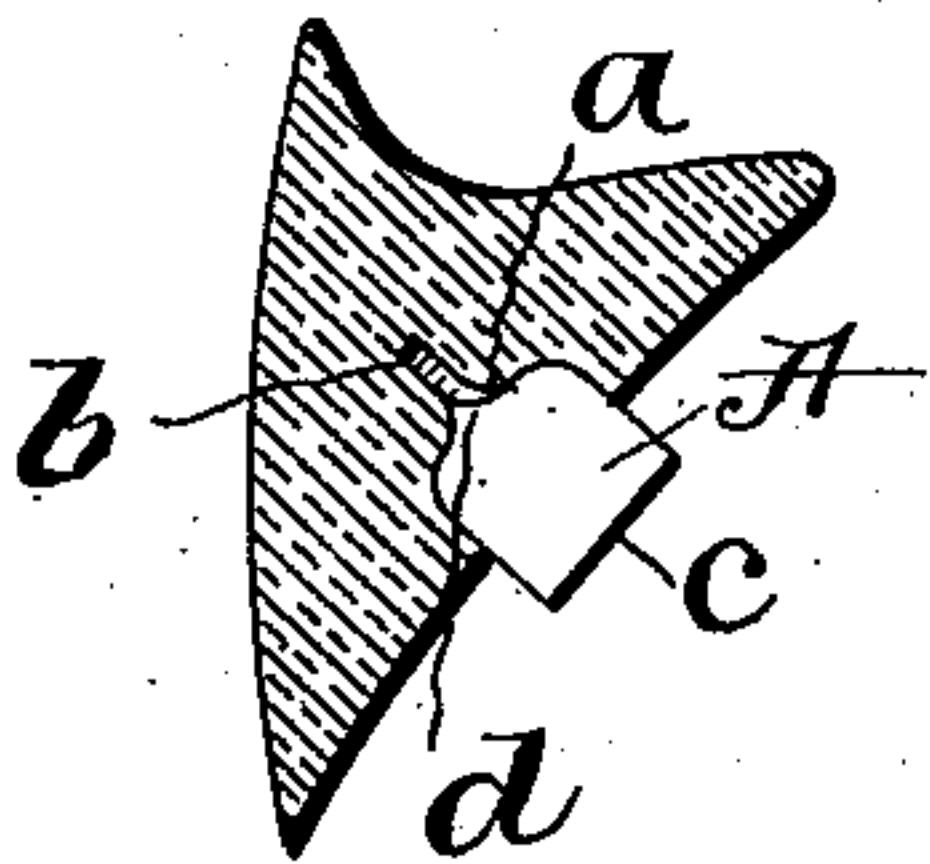


Fig. 2.

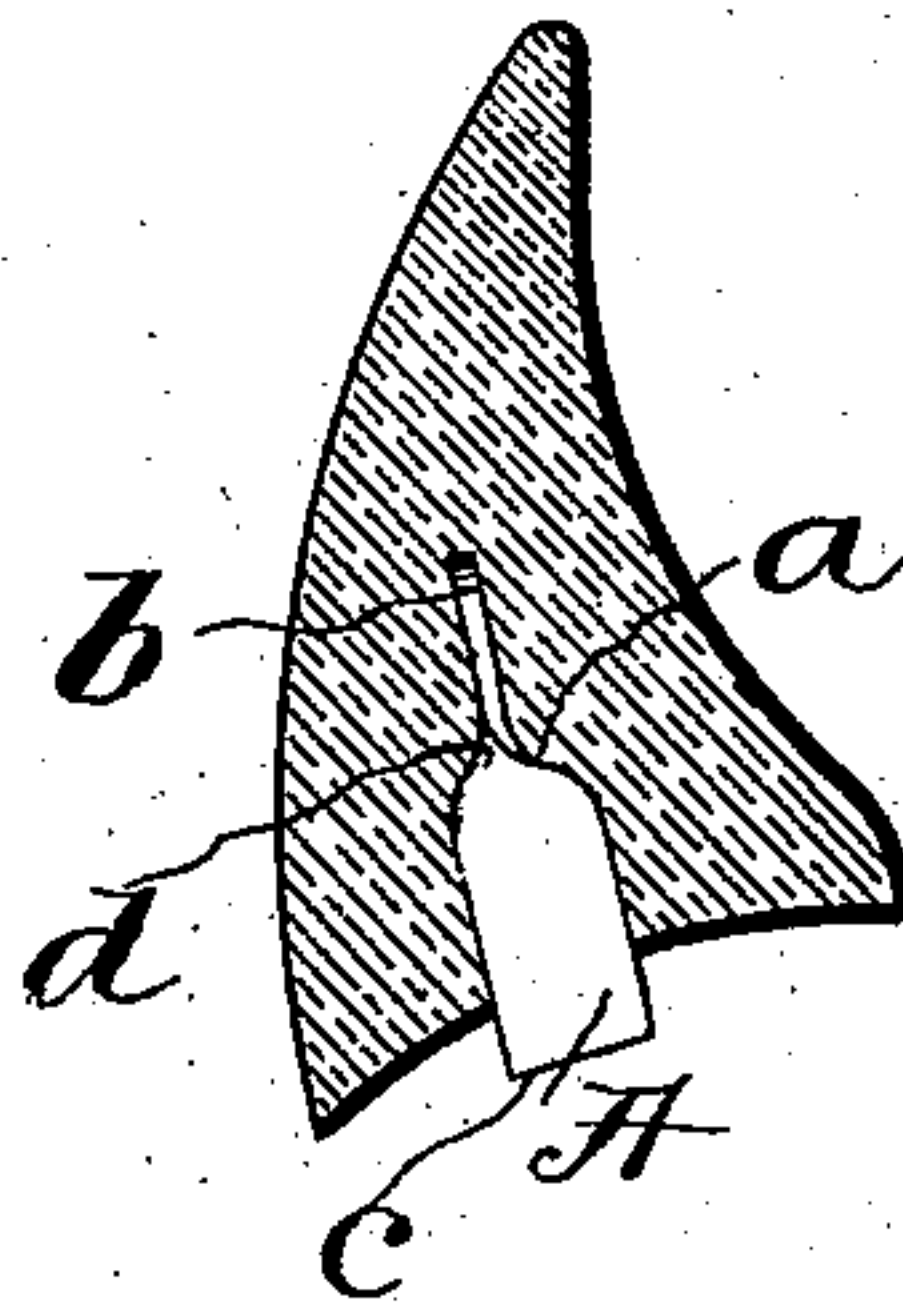


Fig. 3.

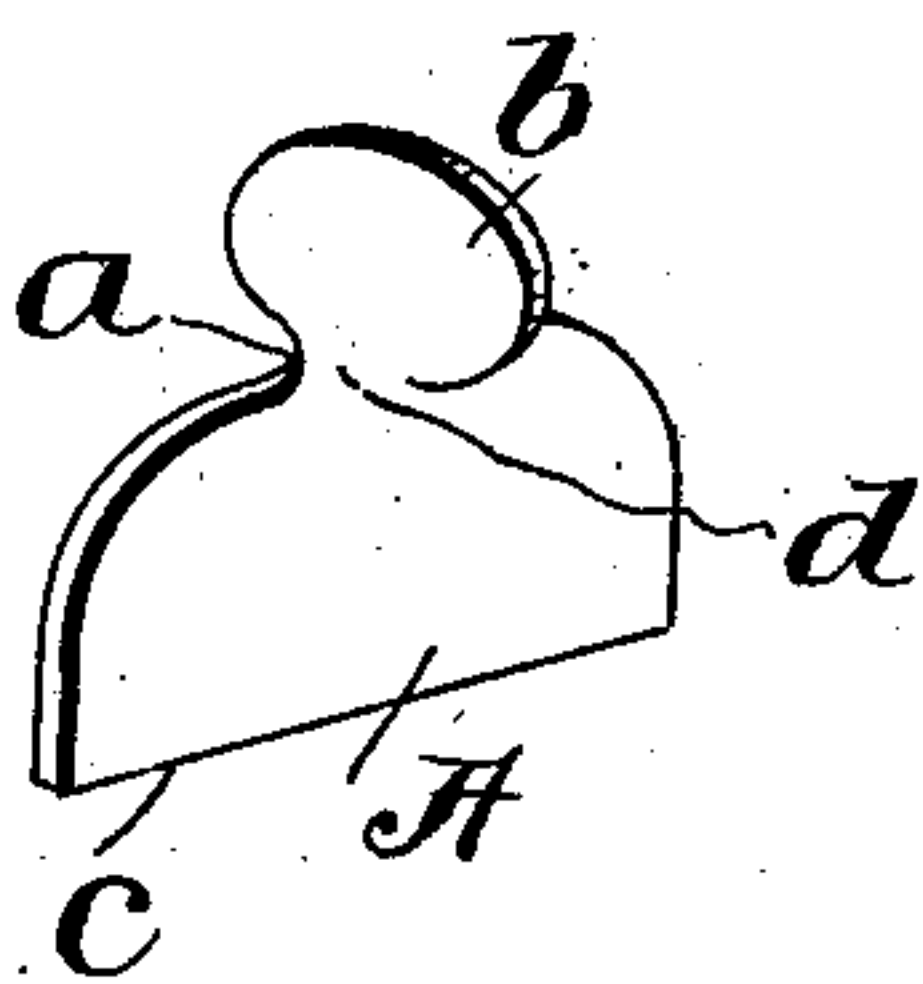
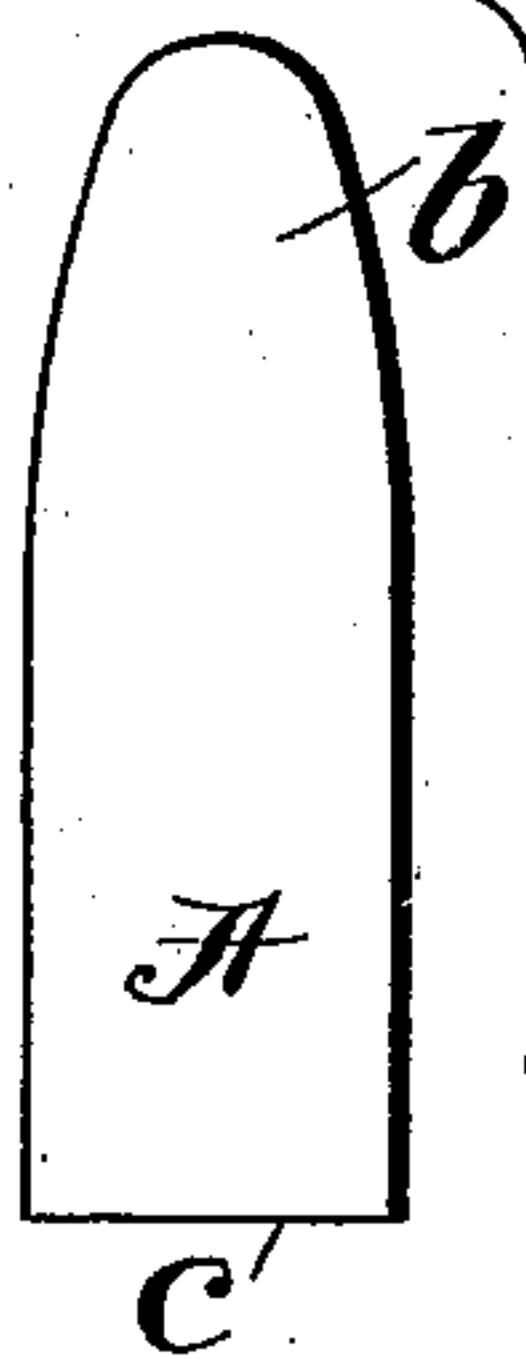
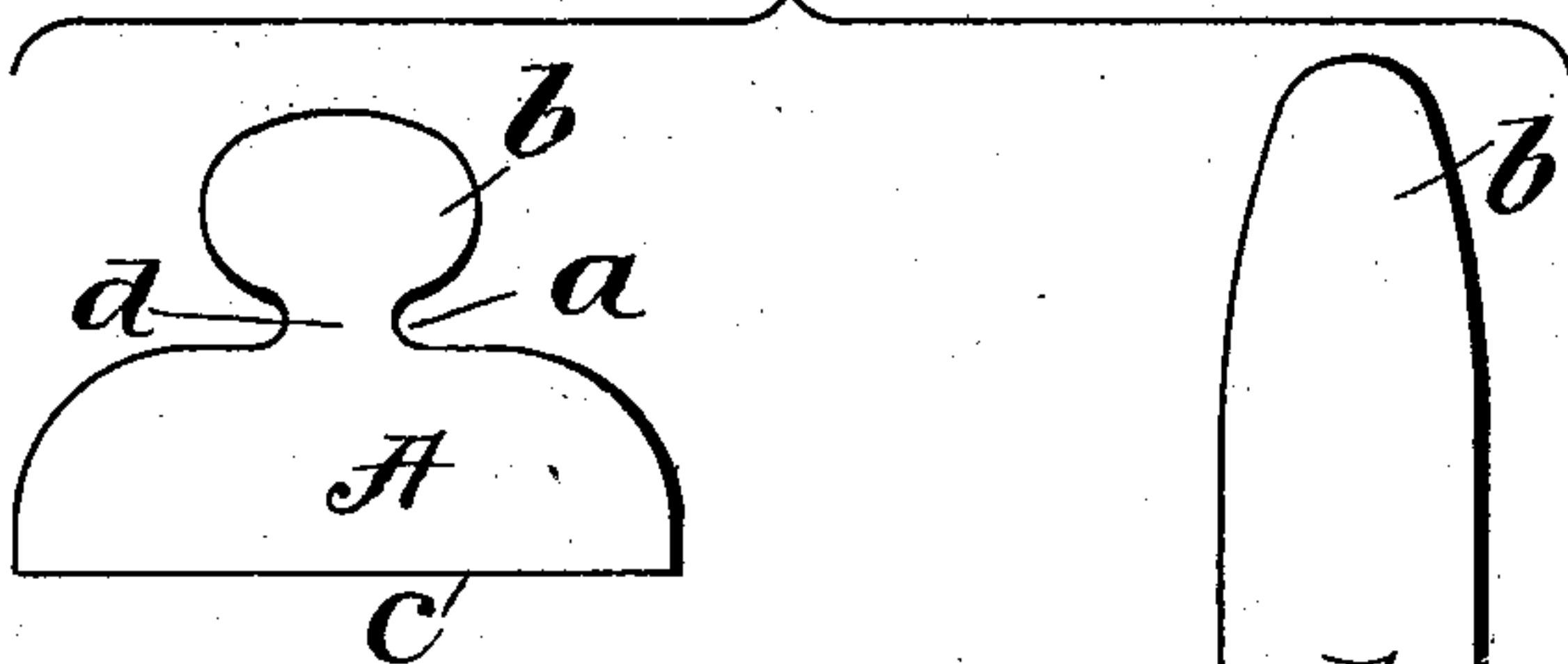


Fig. 4.



Fig. 5.



Inventor

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Witnesses

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# UNITED STATES PATENT OFFICE.

ROBERT BREWSTER, OF CHICAGO, ILLINOIS.

## ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 688,501, dated December 10, 1901.

Application filed December 11, 1900. Serial No. 39,505. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT BREWSTER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Artificial Teeth, of which the following is a specification.

My invention relates to improvements in artificial teeth, and pertains to a tooth in which a metal plate is used for the attachment of a tooth to a plate, bridge, or other supporting member in contradistinction to the use of pins for that purpose, all of which will be fully described hereinafter.

Artificial teeth have heretofore been constructed with a plate which is baked therein. This form of tooth has many advantages over the use of the ordinary pins for that purpose; but a plate of the construction heretofore used has been straight and has divided the tooth structure into two portions, forming a line of cleavage. In practice this form of plate heretofore used has a tendency to split the tooth under pressure of mastication.

The object of my present invention is to construct an artificial tooth with an improved metal plate so constructed when baked in the tooth structure that the tendency to form a line of cleavage and the tendency to split the tooth are overcome, while at the same time the plate is firmly locked into the tooth structure.

In the accompanying drawings, Figure 1 is a sectional view of one form of tooth with my invention applied thereto. Fig. 2 is a similar view of another form of tooth with my invention applied thereto. Fig. 3 is a detached perspective view of the plate applied to Fig. 1. Fig. 4 is similar view of the plate applied to Fig. 2. Fig. 5 is a plan view of the blank from which the plate in Figs. 1 and 3 is formed.

Referring now to the accompanying drawings, and particularly to that form of plate shown in Figs. 1 and 2, A is the plate proper, which is twisted at a point intermediate its ends, as at *a*, forming an inner end *b*, which, together with a portion of the body of the plate A, is baked into the tooth structure and which is preferably (though not necessarily) practically at right angles to the outer

end *c* of the plate A. The twisting of the plate A forms a spiral or screw portion *d* at a point intermediate the ends of the plate, as clearly illustrated, and hence when the plate is secured in the tooth structure it interrupts the straight line of cleavage existing in the metal plate with straight surfaces heretofore used and avoids the tendency to split the tooth structure under pressure of mastication and at the same time serves to securely and permanently lock the plate against removal from the tooth. The outer edge *c* of the plate provides an elongated surface for the soldering of the tooth to its supporting structure, and thus makes a very firm and strong attachment not provided in the plates heretofore used, while, as before explained, by the improved form of the plate here shown and described the tendency to split the tooth by forming a straight line of cleavage is absolutely overcome.

It will be noted that in my improved plate the metal extends both edgewise and flatwise in relation to the tooth, thus doing away with the tendency to split the tooth longitudinally, which is true of the metal plates heretofore used and not so constructed.

The plate A, protruding from the tooth only on its basal surface, does not divide the tooth structure on its lingual side, as heretofore, thereby materially strengthening the tooth and overcoming the tendency to separation of the tooth into two halves, as is the case where the metal extends through the tooth on two surfaces, and, further, my improved form of metal enables me to make a tooth which does not crack in soldering to a backing, whereas with a tooth having the metal protruding on two surfaces the backing impinges on the corners of the tooth, and when undergoing the soldering process the unequal expansion and contraction of the backing and tooth cause the tooth to almost invariably crack at the corners.

It will be noticed that by this improved form of tooth while great strength is added to the completed tooth there is no material added expense either in the construction of the plate or the attachment of the tooth structure in the course of manufacture.



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

5 An improved artificial tooth having a metal plate baked therein, the said plate being twisted at a point between its ends and within the tooth structure to form relatively angularly extending portions, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ROBERT BREWSTER.

Witnesses:

E. R. S. BREWSTER,  
C. SHORT.