

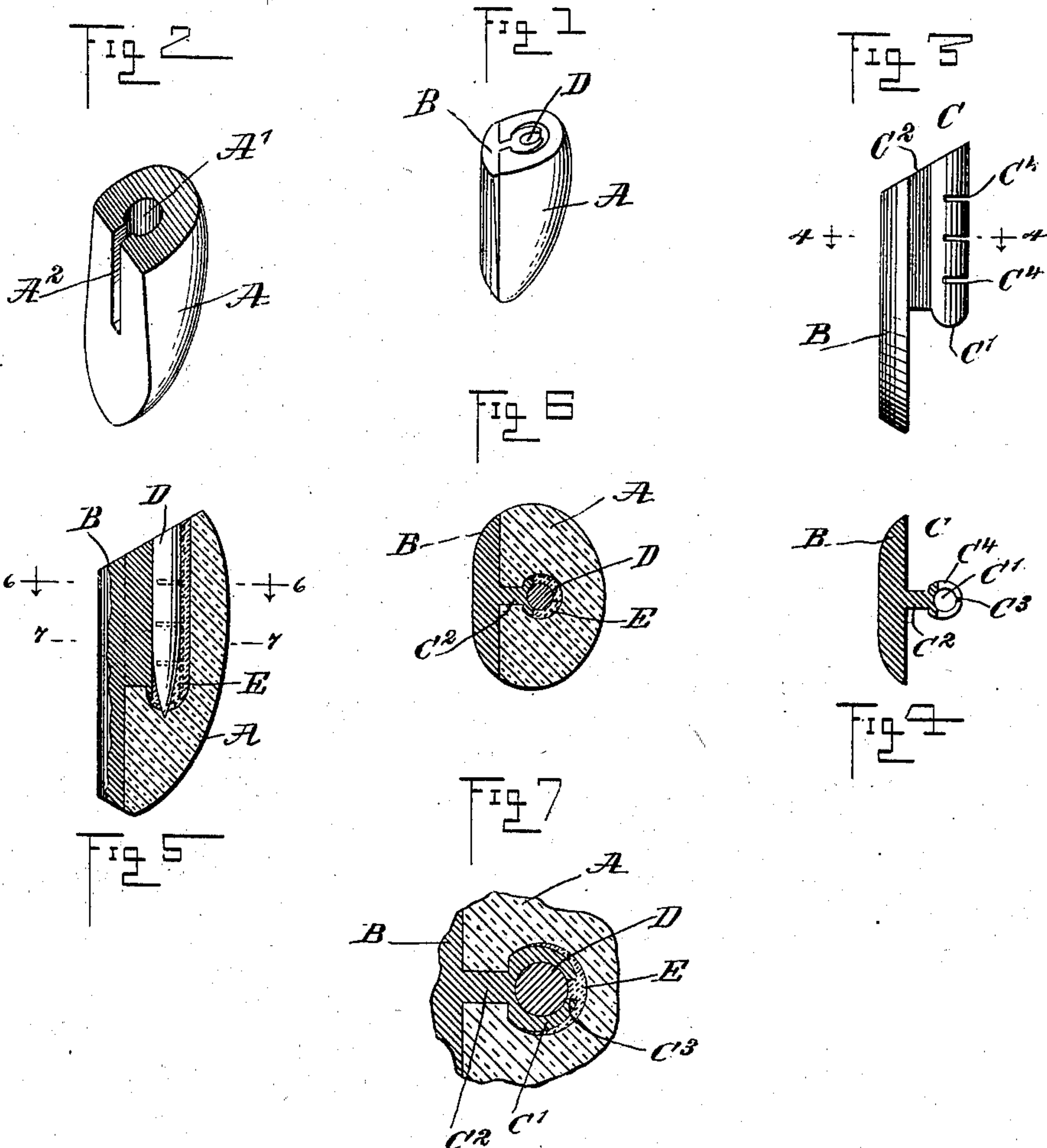
No. 705,546.

Patented July 22, 1902.

T. STEELE.
ARTIFICIAL TOOTH.

(Application filed Nov. 14, 1901.)

(No Model.)



WITNESSES:

John C. Johnson
Rev. J. H. H. H.

INVENTOR

Thomas Steele

BY *Mumford*

ATTORNEYS

UNITED STATES PATENT OFFICE.

THOMAS STEELE, OF REDBANK, NEW JERSEY.

ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 705,546, dated July 22, 1902.

Application filed November 14, 1901. Serial No. 82,216. (No model.)

To all whom it may concern:

Be it known that I, THOMAS STEELE, a citizen of the United States, and a resident of Redbank, in the county of Monmouth and State of New Jersey, have invented a new and Improved Artificial Tooth, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved artificial tooth, arranged to permit convenient and secure attachment of the metallic backing to a front made of porcelain or other suitable material and to allow immediate repair in case part of the tooth is broken or damaged.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement. Fig. 2 is an enlarged perspective view of the porcelain front. Fig. 3 is an enlarged side elevation of the backing and inlay. Fig. 4 is a sectional plan view of the same on the line 4 4 of Fig. 3. Fig. 5 is an enlarged sectional side elevation of the improvement. Fig. 6 is a sectional plan view of the same on the line 6 6 of Fig. 5, and Fig. 7 is an enlarged sectional plan view of part of the same on the line 7 7 of Fig. 5.

The improved artificial tooth consists, essentially, of a front A, made of porcelain or other suitable material, a metal backing B, and an inlay C. The inlay C consists of a tubular portion C' and a shank C² integral with the backing B, the said tubular portion C' of the inlay being adapted to engage a correspondingly-shaped recess A', formed in the front A from the cervix toward the cutting edge, as plainly indicated in Fig. 2, and to the said recess leads a slot A², adapted to be engaged by the shank C² when sliding the backing B in position on the front A, as illustrated in Figs. 1, 5, 6, and 7. The tubular portion C' of the inlay is formed with a longitudinal slot or cut C³ and with a number of transverse slots or cuts C⁴ to permit of expanding the tubular portion C' in the recess

A' of the front A by the use of a suitable expander in the shape of a tapering pin D or the like.

In applying the backing B to the front A a suitable quantity of cement is placed in the recess A', and then the backing is slipped onto the front A, so that the inlay C engages with its tubular portion C' and shank C² the recess A' and slot A². An expander is now pushed into the tubular portion C', so as to expand the same against the side wall of the recess A' to cause the cement to fill the slots or cuts C³ and C⁴ to assist in securely fastening the inlay in position on the cement hardening and adhering to the porcelain front A. In order to hold the tubular portion in an expanded position, I drive the pin D into the tubular portion, the pin corresponding to a mandrel, or it may be a mandrel, if desired.

From the foregoing it will be evident that the several parts can be very cheaply constructed and readily assembled and securely fastened together by expanding the tubular portion C' of the inlay C in the recess A' of the porcelain front A and by filling the cuts or slots C³ C⁴ in the said tubular portion with cement contained in and adhering to the porcelain front A.

In case the artificial tooth is damaged and it is desired to disconnect the several parts, it is only necessary to remove the pin D and then exert longitudinal pressure on the front A and backing B, but in opposite directions, to disengage the inlay C from the front A.

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

1. An artificial tooth, comprising a front having a recess extending from the cervix toward the cutting edge, a backing having an integral inlay for engaging the said recess, and means for expanding the inlay in the recess, as set forth.

2. An artificial tooth, comprising a front having a recess extending from the cervix toward the cutting edge, a backing having an integral inlay engaging the said recess, the inlay having a tubular portion, and means for expanding the tubular portion in the recess, as set forth.

3. An artificial tooth, comprising a front having a recess, a backing fitting the said

front, a hollow inlay for engaging the recess and expanded therein, and a tapering pin in the expanded inlay to hold the latter expanded, as set forth.

5 4. An artificial tooth, comprising a front having a recess, a backing, a tubular inlay on the backing, having longitudinal and transverse cuts and fitting the said recess, and a cement in the recess to engage the said
10 cuts, as set forth.

5. An artificial tooth, comprising a front having a recess, a backing, an inlay on the backing, having longitudinal and transverse cuts and fitting the said recess, a cement in
15 the recess to engage the said cuts, and a pin inserted in the said inlay to keep it expanded in the recess, as set forth.

6. An artificial tooth, having a tubular inlay formed with cuts to allow expansion of
20 the inlay, as set forth.

7. An artificial tooth, having a tubular inlay formed with longitudinal and transverse cuts, as set forth.

8. An artificial tooth, having a backing, and an inlay consisting of a shank integral
25 with the backing, and a tubular portion on the shank, as set forth.

9. An artificial tooth, having a backing, and an inlay consisting of a shank integral
30 with the backing, and a tubular portion on the shank, the said tubular portion having longitudinal and transverse cuts, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS STEELE.

Witnesses:

THEO. G. HOSTER,
EVERARD B. MARSHALL.