

1,298,419.

Patented Mar. 25, 1919.

Fig. 1.



Fig. 2.

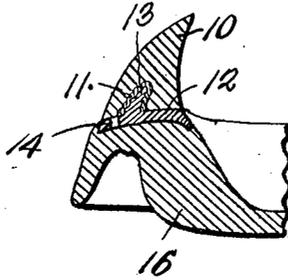


Fig. 3.



Fig. 4.



Fig. 5.

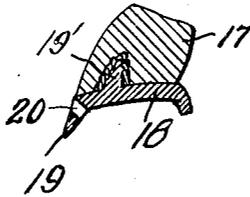


Fig. 6.

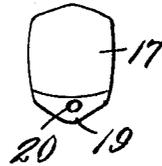


Fig. 7.

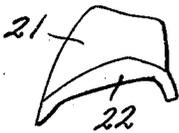


Fig. 8.

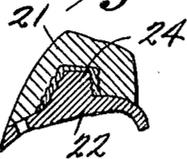
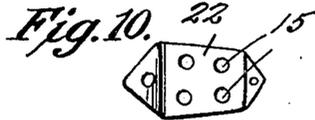
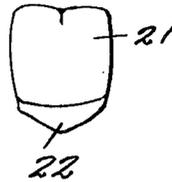


Fig. 9.



WITNESSES

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UNITED STATES PATENT OFFICE.

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ARTIFICIAL TOOTH.

1,298,419.

Specification of Letters Patent.

Patented Mar. 25, 1919.

Application filed March 23, 1918. Serial No. 224,204.

To all whom it may concern:

Be it known that I, CHARLES E. SUMMY, a citizen of the United States, residing at Primghar, in the county of O'Brien and State of Iowa, have invented certain new and useful Improvements in Artificial Teeth, of which the following is a specification.

This invention has relation to the art of dentistry and has for an object to provide new and improved artificial teeth of the type mounted on a plate wherein the teeth may be interchanged or replaced without the necessity of revulcanizing or otherwise affecting the plate or the mounting of the remaining teeth, teeth to be replaced by mere attachment to the anchoring plate without the necessity of altering the structure of the plate, or disturbing the relation of the remaining teeth.

In addition to the foregoing my invention comprehends improvements in the details of construction and arrangement of the correlative parts to be hereinafter more fully described and particularly set forth in the appended claims.

In the accompanying drawings in which similar and corresponding parts are designated by the same characters of reference throughout the several views in which they appear:—

Figure 1, is a view in side elevation of an anterior tooth mounted upon an anchoring plate of my invention.

Fig. 2, is a view of the tooth of the preceding figure in section together with the anchoring plate and the vulcanite plate in section to illustrate the correlation of the parts.

Fig. 3, is a view of an anterior tooth in front elevation including the plates.

Fig. 4, is a view in side elevation of a bicuspid and plate.

Fig. 5, is a view of a bicuspid and plate in section.

Fig. 6, is a view of the bicuspid and plate in front elevation.

Fig. 7, is a view in side elevation of a posterior tooth and plate.

Fig. 8, is a view of the tooth of the immediately preceding figure in section including the plate illustrating the manner in which the tooth is mounted thereon.

Fig. 9, is a view of the posterior tooth in front elevation including the plate, and

Fig. 10, is a view in bottom plan of one of the anchoring plates.

With reference to Figs. 1, 2 and 3 of the drawings, 10 indicates an interior tooth having a recess 11 formed in its under side. My invention includes an anchoring plate indicated at 12 which is curved longitudinally as shown and is provided upon its upper surface with a rearwardly deflected stud 13 designed to enter the recess 11 of the tooth. The surface of the stud is preferably corrugated or formed with threads so as to insure a firm anchorage of the stud in the cement used to secure the tooth in place. The plate 12 is formed adjacent the forward end with a transversely extending aperture 14, and its under side is formed with a plurality of sockets or depressions 15. The vulcanite plate indicated at 16 is formed on its upper surface adjacent the periphery in a manner to permit the embedding of the anchoring plate 12 therein in suitable relation to receive the teeth, whereby the teeth may be disposed in regular order when secured to the plate. It will be noted that the material of the vulcanite plate may enter the aperture 14 as well as the depressions 15 to insure the firm anchoring of the anchoring plate to the vulcanite plate so as to permanently bind the two together. It is to be noted that the stud 13 is to be located adjacent and beyond the vertical center of the tooth so as to be in a position to receive the cement uniformly and to rigidly hold the tooth against movement.

It will be apparent that owing to this construction the tooth 10 when broken may be easily replaced by another without disturbing the anchoring plate 12 and hence without disturbing the order or arrangement of the remaining teeth or without requiring the revulcanization of the vulcanite plate.

With reference to Figs. 4, 5 and 6 of the drawings, 17 indicates a bicuspid, the anchoring plate for which is indicated at 18. This anchoring plate is provided with a stud 19' upon its upper surface of slightly broader dimensions in order to sustain the added strain placed thereupon and the forward end of the plate 18 is formed with a depending lip 19 apertured transversely at 20. This plate is embedded in the vulcanite plate in the manner of the anchoring plate described above and hence the manner in

which this type of tooth is mounted should be obvious.

In Figs. 7, 8 and 9 of the drawings, a posterior tooth has been indicated at 21. The anchoring plate 22 therefor is thicker and heavier than the plates previously described and provided with a stout stud 24 upon its upper surface to enter a relatively large recess in the under side of the tooth. The plate 22 is otherwise constructed in a manner identical with the plates previously described.

In view of this method of mounting artificial teeth it will be obvious that the expense incidental to the replacement of damaged teeth will be nominal. The anchoring plates may be formed of platinum or a cheaper metal such as aluminum, or any material suitably strong which will not corrode, will obviously suffice for the purpose. The uses and advantages of this type of tooth and the manner in which it is mounted will readily occur to those familiar with the art to which this invention appertains.

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

1. A tooth having a recess, and an anchoring plate having an upstanding stud entering said recess, the lower face of the plate being provided with depressions; combined with a vulcanite plate into which said anchoring plate is embedded.

2. The combination of a vulcanizing plate, an anchoring plate embedded therein, its lower face having depressions and its body an aperture, and a stud rising from said anchoring plate and inclined inward; of a tooth having its lower end shaped to fit over said vulcanizing plate and provided with a recess larger than the stud, and a fastening medium around said stud.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. SUMMY.

Witnesses:

R. W. JOHNSTON,
KENNETH H. KERICK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."