(Model.)

P. A. PALMER.

ARTIFICIAL DENTURE.

No. 315,656. Patented Apr. 14, 1885.

Fig. 1.

Fig. 2.

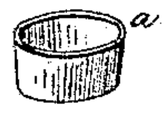
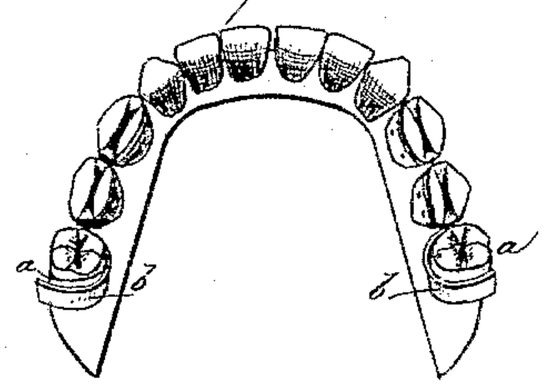


Fig. 3.

Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

PHILIP A. PALMER, OF CHICAGO, ILLINOIS.

ARTIFICIAL DENTURE.

SPECIFICATION forming part of Letters Patent No. 315,656, dated April 14, 1885.

Application filed June 16, 1883. (Model.)

To all whom it may concern:

Be it known that I, PHILIP A. PALMER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Attaching Partial Artificial Dentures, of which the following is a specification, to wit:

My invention relates to a new and useful improvement in the method of protecting natural teeth from the injurious effects in the use of partial artificial dentures.

Heretofore in the application of partial artificial dentures it has been the custom to retain said partial artificial dentures in place by supporting or attaching their clasps, plates, bands, or other appliance directly to the natural teeth in the mouth without any intermediate permanent protective band or cover between the natural teeth and the supporting or attaching appliance. The supporting or attaching said partial artificial dentures directly to the natural teeth (even with the intervention of cement) is found to be very injurious to said natural teeth, resulting in their injury, decay, and destruction.

The object of my invention is to provide a method whereby the natural teeth are protected from injury, decay, and destruction, and a simple and effective method of supporting partial artificial dentures is secured.

To this end my method consists in first fitting the natural tooth or teeth in the mouth with a suitable permanent protective band or cover of any suitable material, and then supporting the clasp containing the partial artificial denture on said natural tooth or teeth so protected, so as to provide an intermediate permanent protective band or cover between said natural teeth and the supporting appliance containing the partial artificial denture; and my invention consists, further, in my novel means of securing said protective bands or covers to the natural teeth.

I will now proceed to describe my method and my means of securing said protective bands or covers, referring to the accompanying drawings, in which—

Figure 1 is a view of a tooth; Fig. 2, a view of a protective band or cover. Fig. 3 shows the permanent protective band applied to a tooth; and Fig. 4, a partial artificial denture with clasps for clasping and holding it in position, showing the plate clasping two teeth, one of which is fitted with a band and the other with a crown.

I fit upon the natural tooth to be clasped, no matter what its position in the mouth may be, a permanent protective band or cover, *a*, of any suitable material, (preferably of gold,) which is soldered together, and prevented from any movement by means of rivets, screws, and cement. In fitting this band it should be cut and drawn together upon its lower edge after being placed, in order to fit more accurately the taper of the tooth toward its base, and filled in with cement or similar substance to make it perfectly tight, and prevent any foreign and injurious matter from getting beneath it. This band *a* may be secured in any convenient way to prevent any movement of the same, as by screws or rivets. A convenient mode of doing this is as follows: A hollow wire slit at both ends is fitted into a hole through the band and into the tooth. The hole in the tooth is undercut, and, after the hollow wire is inserted, a sufficient amount of filling is inserted, and by lateral pressure the pin in undercut of tooth spreads, forming a head, which effectually prevents its coming out. The hole through the band is slightly countersunk upon its outer side, and the outer end of the hollow wire being spread apart, headed down, and finished, the band is firmly secured and becomes a permanent fixture in the mouth. If, now, a small peg of suitable wood be driven into the hollow wire and allowed to slightly project, all friction of band and clasp is obviated, and the natural tooth is saved from all decay. The natural tooth being protected is now ready for the reception of the partial artificial denture. The denture which I use is formed, as usual, of a skeleton plate containing the requisite number of artificial teeth, and provided with one or more spring-clasps, *b b*, adapted to fit around the protected teeth. The denture is inserted, fitting the clasps around the protected teeth, effectually retaining the plate in position at all times while allowing it to be easily and quickly removed for cleansing. In my method I take each natural tooth separately and protect it with its permanent

protective band or cover irrespective of the position or part of the mouth in which it may be. It is then always ready for the reception of the partial artificial denture, and becomes a permanent protection in the mouth.

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

A natural tooth provided with a protective band or cover permanently secured thereto, in combination with a removable partial artificial denture provided with one or more fastenings, whereby the natural teeth will not be clasped directly, substantially as shown and described.

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

PHILIP A. PALMER.

Witnesses:
MARTIN BEEM,
W. C. MCARTHUR.