

E. P. OFF.
ARTIFICIAL TOOTH.
APPLICATION FILED APR. 22, 1909.

953,702.

Patented Apr. 5, 1910.

Fig. 1.

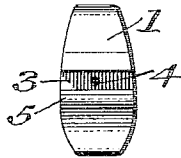


Fig. 2.

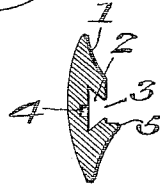


Fig. 3.

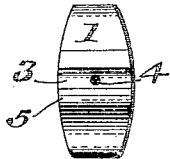


Fig. 4.

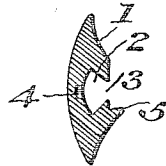


Fig. 5.

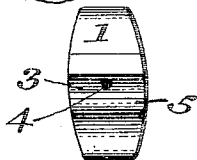
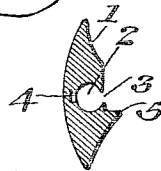


Fig. 6.



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ARTIFICIAL TOOTH.

953,702.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD PELTZ OFF, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Artificial Tooth, of which the following is a specification.

My invention relates to a new and useful improvement in artificial teeth and consists in novel means for connecting the same with the plate whereby vertical and lateral disconnection of the teeth from the plate is prevented.

It consists in providing a suitable recess extending laterally across the rear face of the tooth and providing a cavity or depression to prevent lateral displacement of the tooth.

Figures 1 and 2 represent respectively a rear elevation and sectional view of a tooth showing one form of recess with the depression. Figs. 3 and 4 represent respectively a rear elevation and sectional view of a tooth showing a slightly different form of recess. Figs. 5 and 6 represent respectively a rear elevation and sectional view of a tooth showing a still different form of recess which may be employed.

Similar numerals of reference indicate corresponding parts in the figures.

As has been found in practice and as is well known, the major portion of breakage of a tooth from the plate occurs from one or more of the following reasons:—First—where a platinum pin is connected with the tooth, the pin stretches and pulls out either of the porcelain composing the tooth or from the plate. Second—there being no give to the porcelain and there being a certain amount of give to the pin the latter will in course of time crumble and break up the porcelain at the point of contact at which time the pin will either break off or pull out of the porcelain.

In the case of a composition pin the above defects will hold good, with the addition, that the action of the sulfur in the rubber, in connection with the acids of the mouth, act upon this composition metal which causes a chemical action and dissolves the pin at this point of contact with the porcelain and so causes the tooth to leave the plate.

My invention is designed to overcome these defects and in the drawings I have shown a construction which will operate successfully in practice but it will be evident that various changes may be made in the

construction and arrangement and other instrumentalities may be employed which will come within the scope of the invention and I do not therefore desire to be limited in every instance to the exact forms as herein shown and described but desire to make such changes as may be necessary.

I have shown in the drawings different forms of recesses, it being understood that it is desirable to have a recess, the opening of which is narrower than the interior thereof, so that a suitable joint is formed between the rubber, composing the plate, and the walls of the recess and in addition I provide an off-set depression or cavity into which the rubber composing the plate is seated and while I have, in the drawings, only shown one opening, it will be understood that a plurality may be employed, the walls of said opening engaging with the rubber to prevent lateral displacement of the tooth while the walls of the recess prevent vertical displacement and pins, as such, are dispensed with for connecting the teeth with the plate.

Referring to the drawings 1 designates a tooth having a recess 2 extending across the rear face, the opening 3 of which is smaller than the interior of the recess so that when the rubber composing the plate, enters the recess, a dove-tailed joint is formed.

4 designates a depression or cavity formed in the tooth into which the rubber composing the plate enters so that side or lateral movement of the tooth from the plate is prevented and the tooth will be firmly and positively held with respect to the plate and practically becomes part of the plate, thus producing a construction of much greater strength than heretofore and one which will occupy much less room in the mouth.

It will be noticed that the depression 4 is formed in the back wall of the recess 2 and extends forwardly therefrom, it being so disposed that while some portion of the plate will enter said recess 2 from side to side, another portion thereof will enter said depression 4, the recess forming a long interlocking surface for the tooth and the plate preventing vertical displacement of the tooth, while the depression provides a sufficient lock for the tooth with the plate preventing lateral displacement or shifting of the tooth.

In Figs. 3 and 4 I have shown a slightly different form of recess from that of Figs. 1 and 2 but the opening 3 of which is narrower

than the remainder of the recess and will accomplish the same result as previously described.

5 In Figs. 5 and 6 I have shown a substantially curved recess 2 and the opening of which is less than the diameter of the recess, so that a lock will be formed thereby, the depression or cavity in all instances receiving the rubber of the plate and preventing
10 lateral movement.

It is the object of all dentists to produce a plate that takes up the least possible room in the mouth and this is especially important at the back of the tooth as a thick
15 plate at that point takes up the room of the tongue which is very uncomfortable to the wearer.

By my invention I am enabled to provide a relatively thin plate which is not possible
20 where the ordinary pin fastening means is

employed since it is necessary to make the flange of the tooth extend sufficiently to receive enough rubber to cover the pin.

In my construction I am enabled to make a relatively small flange 5 and can practically reduce the size of this at least one-half from the ordinary flange, thus allowing a
25 thin but strong plate.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—
30

An artificial tooth having in rear face thereof, a laterally extending dovetailed recess and a depression in the back wall of said recess extending forwardly therefrom
35 and communicating with said recess.

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Witnesses:

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