

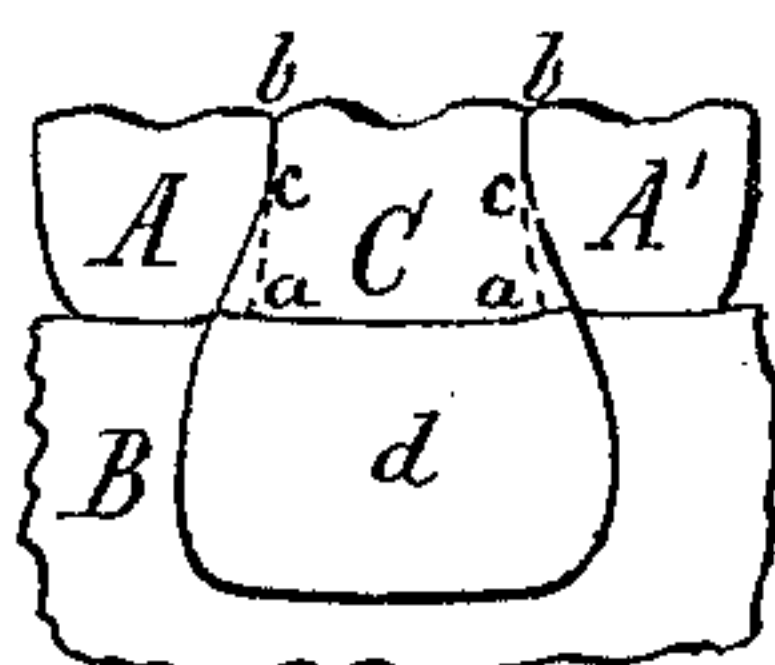
(No Model.)

J. F. PORTER.  
Artificial Teeth.

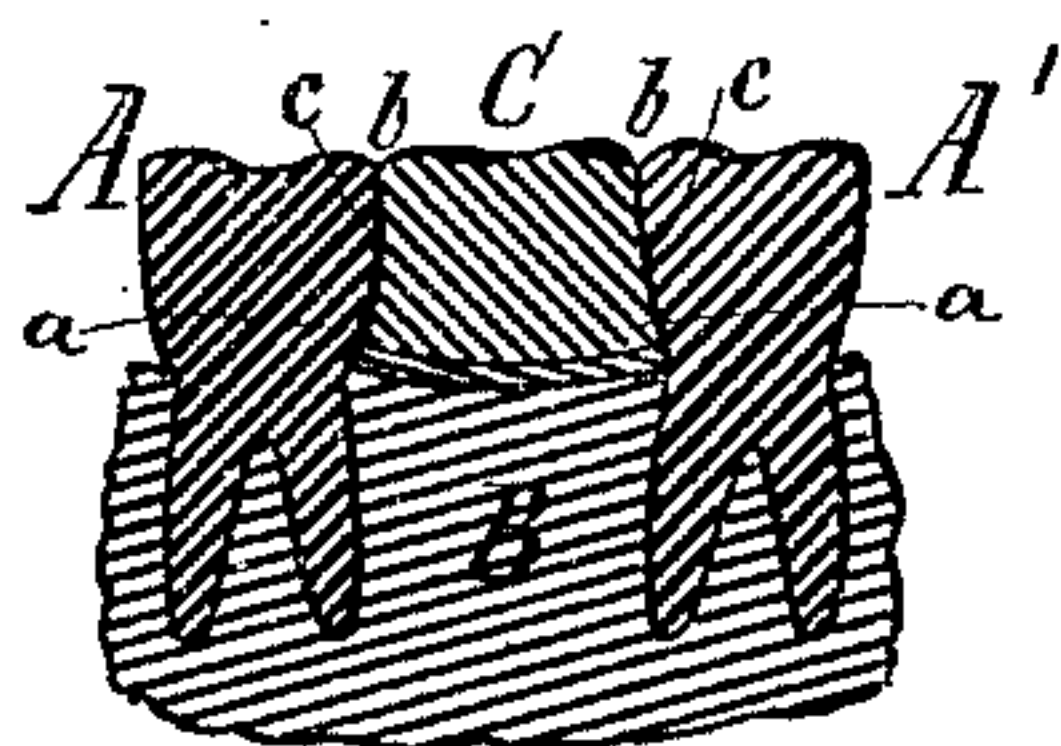
No. 233,013.

Patented Oct. 5, 1880.

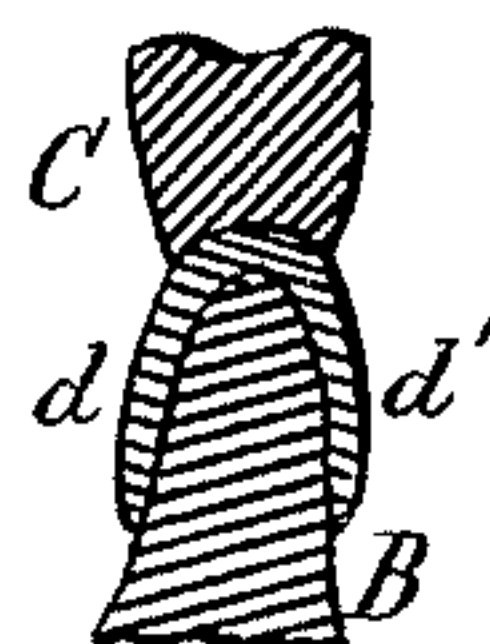
*Fig 2.*



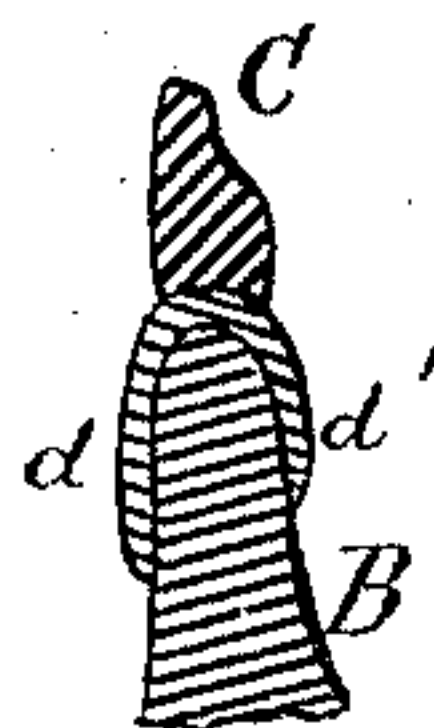
*Fig 1.*



*Fig 3.*



*Fig 4.*



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

JOHN F. PORTER, OF WOOSTER, OHIO.

## ARTIFICIAL TEETH.

SPECIFICATION forming part of Letters Patent No. 233,013, dated October 5, 1880.

Application filed July 23, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. PORTER, a citizen of the United States, residing at Wooster, in the county of Wayne and State of Ohio, have  
5 invented a new and useful Improvement in Artificial Teeth, of which the following is a specification.

The nature of my invention consists in an artificial tooth formed with a front and a rear  
10 clasp or flange or wing, and with side edges which taper inwardly from the crown of the tooth to its biting or grinding surface. This construction of tooth can be placed between two natural standing teeth having a space be-  
15 tween them from which a tooth has been extracted, and when so placed will be kept from descending out of the wedge-shaped space or rising out of said space, accordingly as it may be applied to the upper or lower jaw, and it  
20 will also be kept from moving backward or forward. The plan is such that a base-plate and a peg are dispensed with, and thus the extra expense, as well as the annoyance experienced with the old plans, are avoided.  
25 With the old plans the tooth is apt to come down or break off in biting with it, and the capability of tasting with the roof of the mouth is impaired and inconvenience from the plate and tooth becoming foul is experienced.

30 My invention can be applied to two or more artificial teeth connected together by any of the known modes of pinning or cementing teeth into sets, and in such use of it the outer tooth at each end of a set of two, three, or  
35 more would be formed with a tapering side edge, and with the front and rear flanges, or all of the set may have the said flanges.

In the accompanying drawings, Figure 1 is a longitudinal section of a portion of a human  
40 jaw, showing two perfect or natural teeth with my improved artificial tooth between them. This view shows a part of the lower jaw. Fig. 2 is an elevation of Fig. 1. Fig. 3 is a vertical cross-section of Fig. 1. Fig. 4 is a similar  
45 view to Fig. 3, but showing a front tooth instead of a jaw-tooth.

Similar letters of reference in the several figures indicate like parts.

50 A and A' represent two natural teeth in a jaw, B. The cavity or space between these teeth is, as usual, of wedge shape, from the fact

that the teeth gradually enlarge from the point *a* to the point *b*. The teeth A and A', on account of being set flexibly in sockets, can be sprung apart to a slight extent for the admission between them of wedge-shaped artificial  
55 tooth, and owing to this I am enabled to employ a nicely-fitted artificial tooth, C, having tapering side edges, *c c*, and to insert it vertically into the wedge-shaped space formed between *a* and *b*, as shown in Fig. 2. The artificial  
60 tooth thus applied will be clasped edgewise by the natural teeth, and cannot move vertically outward from between either an upper or lower pair of natural teeth.  
65

On the artificial tooth, at front, a deep flange or wing, *d*, is formed, and a similar flange, *d'*, is formed on said tooth at the back, as shown in Figs. 3, 4.

The flanges *d* and *d'* clasp the human gum  
70 and jaw, and also the natural teeth, if desirable, at front and rear, as shown in the drawings, and by this means the tooth is prevented from moving backward and forward, while the wedge fit of the tooth between the two natu-  
75 ral teeth prevents it from moving vertically. Thus it will be seen that the tooth C is held from moving inward and outward by the flanges *d d'*, and is kept from moving vertically by its wedge fit between the points *a* and *b*.  
80 The wedge form of the tooth, as at *c c*, gives it a corresponding form to the vacuum or space between the natural teeth, and since this space is, in the case of back teeth, always larger  
85 next the jaws than at the crown of the teeth, and is most always so in front teeth, the invention can generally be employed in all parts of the mouth between standing teeth.

In applying my invention to two or more artificial teeth the two, three, or other num-  
90 ber of teeth are joined together and the rubber runs under them and makes a cup-like groove to fit the jaw. The several teeth are provided with flanges similar to *d d'*, and a taper form is given to the outer edge of the  
95 two outermost teeth.

The tooth as herein described has been found very serviceable to the inventor, and it is found that apples and other articles of the like nature can be eaten with it without lia-  
100 bility of breakage.

The artificial tooth or teeth are to be made



of porcelain or other suitable material and the gum portion of rubber, such as dentists generally use.

Prior to my invention teeth have been set  
5 on a plate which extends up against the roof of the mouth in form of a spring-pad, such spring-pad serving to hold the artificial teeth in place. It also has been proposed, in connection with said plate and pad, to provide  
10 grooves or channels in the sides of the artificial teeth. My invention differs from this in having the artificial tooth tapering, and in providing it with a front and a back flange, both flanges being rigid and of a form corresponding to the gums, and they bearing against  
15 the gums and the natural teeth. It also has been common, prior to my invention, to provide a tooth or a series of teeth with holding-pins, and to weight the teeth with a piece of  
20 metal, for the purpose of preventing accidental detachment from their base; but I believe it is new to construct a tooth or a series

of teeth in the peculiar manner herein described by me, and to provide such tooth or teeth with front and rear flanges.

What I claim as my invention, and desire to secure by Letters Patent, is—

One or more artificial teeth, C, having the tapering form, as at *c*, and provided with the rigid front and rear flanges, *d* and *d'*, said  
30 flanges setting against the inner and outer surfaces of the gums and in the relation described to the natural teeth, while the tapering sides of the tooth bear against the reversely-tapered sides of the natural teeth,  
35 whereby one or more artificial teeth can be held firmly in position and prevented from moving either inward or outward, and also downward, without the use of a plate or spring-pad, substantially as described.

JOHN F. PORTER.

Witnesses:

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A. P. McKELLOP.