July 29, 1924. 1,502,970

A. S. VAN HOUTEN

ARTIFICIAL DENTURE

Filed Aug. 4, 1923

Fig. 1.

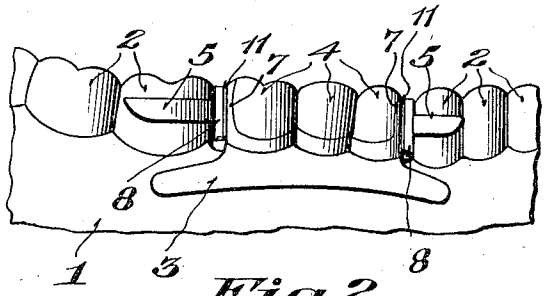


Fig. 2.

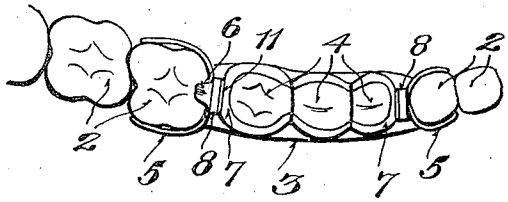


Fig. 3.

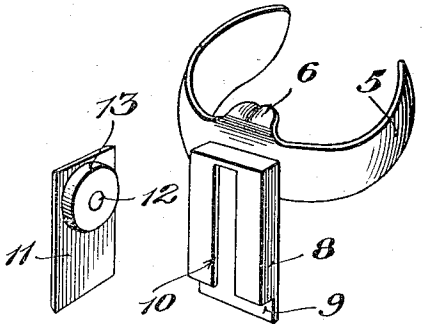


Fig. 4.

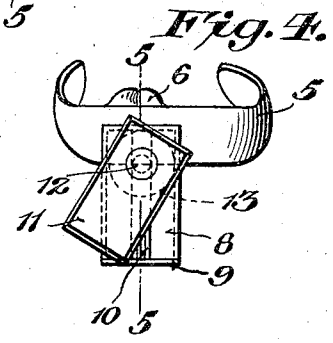


Fig. 5.

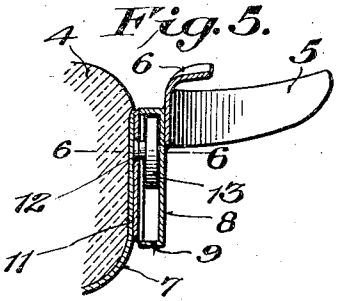
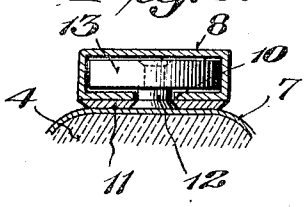


Fig. 6.



Inventor

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Patented July 29, 1924. 1,502,970

UNITED STATES PATENT OFFICE.

AUGUSTUS S. VAN HOUTEN, OF NEWARK, NEW JERSEY.

ARTIFICIAL DENTURE.

Application filed August 4, 1923. Serial No. 655,702.

To all whom it may concern:

Be it known that I, AUGUSTUS S. VAN HOUTEN, a citizen of the United States of America, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Artificial Dentures, of which the following is a specification.

My invention relates to artificial dentures and is applicable particularly to dental attachments for plates and bridges.

My invention relates to the construction of the connection between a bridge, plate or other form of artificial denture containing artificial teeth and a clasp or other removable means of connection to a natural tooth. My attachment makes a movable removable connection for a bridge to natural teeth and also permits the bridge to be removed readily from the mouth. My attachment, therefore, is adapted to permit an artificial denture to be adjusted vertically with respect to the teeth to which it is attached and to make a pivotal or rotatable connection with the teeth to which it is attached. My construction eliminates stress of the plate. It, therefore, also enables the artificial denture to be set at the necessary angle with the natural teeth to which it is connected. A further object of my invention is to enable the dentist or dental supply manufacturer to complete the construction of the parts of an artificial denture and then to attach the parts permanently together.

One embodiment of my invention is shown in the accompanying drawings in which,

Figure 1 is a side elevation conventionally representing a part of the lower jaw with some natural teeth and a bridge provided with artificial teeth attached to the natural teeth with my attachment;

Figure 2 is a top plan view of the part shown in Figure 1;

Figure 3 is a perspective of the two parts of my attachment separated, one part being attached to a conventional clasp;

Figure 4 is a side elevation of my attachment and a clasp one part of the attachment being placed at an angle to the other part thereof;

Figure 5 is a section on the line 5—5 of Figure 4 showing the connection of the attachment with a clasp and an artificial tooth;

Figure 6 is a section on the line 6—6 of Figure 5.

I have shown in the drawings a conventional part of a lower jaw 1 and natural teeth 2 to which is attached a bridge 3 containing artificial teeth 4, the bridge being attached to the natural teeth by clasps 5. These clasps 5 may have a cusp 6 if used with a tooth requiring such a part.

The artificial teeth may be secured to the bridge in any of the well known ways and may have a metal bar 7 on the sides of the end teeth.

The part of my attachment 8 which is soldered, sweated, cast or otherwise attached to the clasp may be hollow and rectangular in shape and until completed will have one end 9 open and a slot 10 in one side thereof. It will be evident, however, that the part 8 may be of other shapes which would have the same functions as the shape shown.

The second part 11 of my attachment is secured to the bridge in any desired manner as by soldering, sweating, or casting it to the plate 7. The part 11 has attached thereto and spaced therefrom as by a pin 12 a circular head 13. The head 13 is adapted to slide in the rectangular part and to make a connection which is pivotal and enables the second part and the bridge to be adjusted vertically with respect to the first part and the clasp. After the parts 8 and 11 have been joined by sliding the head 13 into the opening 9, the lower part of 8 is bent as shown in Figures 4 and 5 to close the opening 9. The bent part of 8 may be then soldered or otherwise finished flush to close the bottom of the part 8 the same as the top thereof.

It may be pointed out that although I have shown my attachment connecting a bridge having three teeth, it is evident that my attachment may be used to connect one as well as a plurality of artificial teeth to a natural tooth or teeth.

It is also evident that my movable removable attachment may be applied to one side only of a bridge or plate if such a construction is desired.

It may also be pointed out, therefore, that my connection enables an artificial denture to move buccally, lingually and vertically.

Having described my invention what I claim and desire to protect by Letters Patent is,

1. An attachment for artificial dentures comprising a hollow part attached to means removably connected with a natural tooth, said part having a slot in the side thereof

and a second part attached to a denture body, said part comprising a plate having a circular member attached thereto and separated therefrom, whereby a slidable and pivotal connection is formed between said parts.

2. An attachment for artificial dentures comprising a hollow part attached to means removably connected with a natural tooth, said part having a slot and a second part attached to a denture body, said part comprising a plate having a member attached thereto and separated therefrom, whereby a slidable and pivotal connection is formed between said parts.

In testimony whereof I affix my signature.

AUGUSTUS S. VAN HOUTEN.