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2,467,163

DEVICE FOR HOLDING DENTURES

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Fig. 1

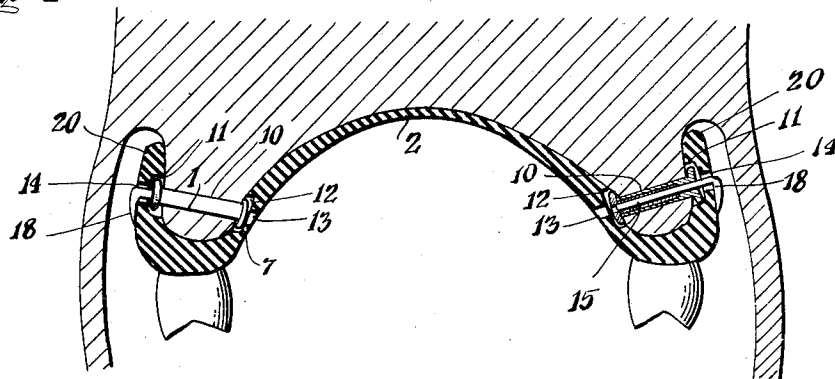


Fig. 2

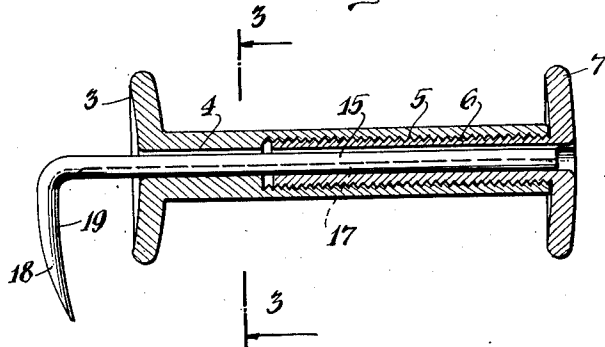


Fig. 3

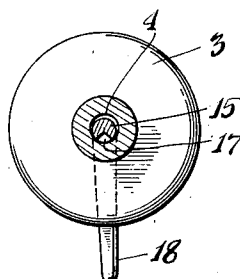
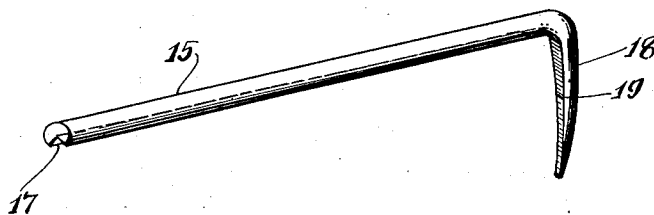


Fig. 4



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DEVICE FOR HOLDING DENTURES

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6 Claims. (Cl. 32-2)

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This invention relates to the retention of artificial dentures in the mouths of users in such a way that they can be removed when desired. It is particularly useful for retaining upper dentures in place but is not restricted to this purpose.

It is well known that even when dentures are made very accurately and fitted in the mouths of patients they often become loosened and sometimes fall out. This is particularly so with dentures for the upper jaw where suction is depended upon largely for keeping the dentures in place.

In carrying out the present invention, a holding device for a denture, or plate for artificial teeth, is anchored or installed in the bone structure of the mouth in such a way that the denture can be removably retained in the mouth without danger of the same accidentally falling out or even becoming displaced to any noticeable extent.

In accordance with the present invention an anchoring or holding means is fixed in the bony structure of the mouth and the denture is held thereby in such a manner that the danger of the denture coming out accidentally is eliminated, while provision is made for removing the denture when it needs to be removed for repair or cleaning.

The invention may be understood from the description in connection with the accompanying drawing in which

Fig. 1 is a section through a mouth showing a denture and holders therefor in place;

Fig. 2 is a longitudinal section showing one of the holders;

Fig. 3 is a section along the line 3-3 of Fig. 2; and

Fig. 4 is a perspective view of one of the parts.

In the drawing, reference character 1 indicates a tube or cylinder of non-corrosive material that is used in keeping the denture 2 in place. It has a concave flange 3 at its outer end and an opening 4 therethrough which is internally threaded as indicated at 5. An externally threaded tube 6 fits the threads 5 and is provided with a slightly convex flange 7 at its outer end.

Two of the devices 1-7, which may be made of different sizes for different patients, are installed in the bone structure of the mouth on opposite sides in such a way that they will serve as means to keep the denture 2 securely in the mouth. This may be done by slitting the flesh at opposite ends of the place where each hole 10 is to be drilled through the upper jaw bone on both sides of the mouth, then drilling these holes 10 the size of the tube 1, through this bone on

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opposite sides of the mouth, and inserting these tubes.

Recesses 11 and 12 are provided in the denture 2 to receive the flanges 3 and 7. Openings 13 and 14 which are aligned with the recesses 11 and 12 are provided through the denture 2.

A pin 15 is provided for each side of the jaw to hold the denture 2 in place. Each pin consists of a straight portion 15 which has a V-shaped groove 17 along the lower side thereof. The outer end is provided with an extension 18 substantially at right angles thereto. This extension is provided with a slightly flattened side 19 to rest against the denture 2 when in place.

In order to install the denture 2 the tubes 1-7 are put in place in the holes 10. The denture is then located in the mouth with the recesses 11 and 12 receiving the flanges 3 and 7. The pins 15 are then inserted so that the flattened sides 19 of the extensions 18 rest against the outer sides of the flanges 20 of the denture 2.

The denture can be easily removed for cleaning and then replaced. For removal, the pins 15 can be drawn out, for instance, by inserting the thumb nail behind the extensions 18 whereupon the denture can be taken out of the mouth, cleaned and replaced.

What is claimed is:

1. A device for retaining a removable artificial denture in the mouth of the user, which has its edge shaped to lie along opposite sides of the bone structure of the jaw of the user, said device including holders on opposite sides of said denture and extending transversely through said bone structure and through the corresponding portions of said denture that lie along opposite sides of said bone structure.

2. A device for retaining a removable artificial denture in the mouth of the user, which denture has its edge shaped to lie along opposite sides of the bone structure of the jaw of the user, said device including holders on opposite sides of said denture and extending transversely through said bone structure and through the corresponding portions of said denture that lie along opposite sides of said bone structure, said holders comprising flanged telescoping tubes.

3. A device for retaining a removable artificial denture in the mouth of the user, which denture has its edge shaped to lie along opposite sides of the bone structure of the jaw of the user, said device including holders on opposite sides of said denture and extending transversely through said bone structure and through the corresponding portions of said denture that lie along opposite

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sides of said bone structure, said holders comprising flanged telescoping tubes, one of which is longer than the other.

4. A device for retaining a removable artificial denture in the mouth of the user, which denture has its edge shaped to lie along opposite sides of the bone structure of the jaw of the user, said device including holders on opposite sides of said denture and extending transversely through said bone structure and through the corresponding portions of said denture that lie along opposite sides of said bone structure, said holders comprising flanged telescoping tubes, one of which is threaded externally and the other one internally.

5. A device for retaining a removable artificial denture in the mouth of the user, which denture has its edge shaped to lie along opposite sides of the bone structure of the jaw of the user, said device including holders on opposite sides of said denture and extending transversely through said bone structure and through the corresponding portions of said denture that lie along opposite sides of said bone structure, said holders comprising flanged telescoping tubes and a pin extending through said tubes.

6. A device for retaining a removable artificial denture in the mouth of the user, which denture

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has its edge shaped to lie along opposite sides of the bone structure of the jaw of the user, said device including holders on opposite sides of said denture and extending transversely through said bone structure and through the corresponding portions of said denture that lie along opposite sides of said bone structure, said holders comprising flanged telescoping tubes and a pin extending through said tubes, said pin having a longitudinal groove therein.

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