May 24, 1938. J. F. GIFFEN 2,118,555

DENTURE CONSTRUCTION

Filed July 1, 1936

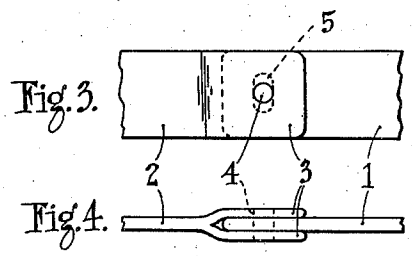


Fig.3.

Fig.4.

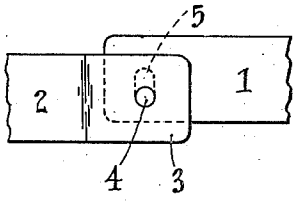


Fig.5.

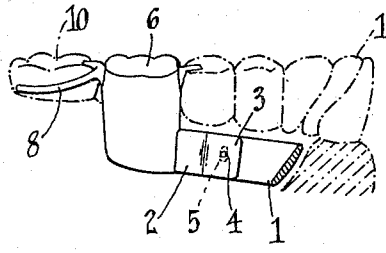


Fig.1.

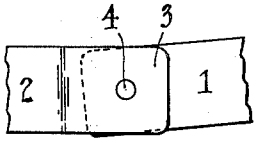


Fig.6.

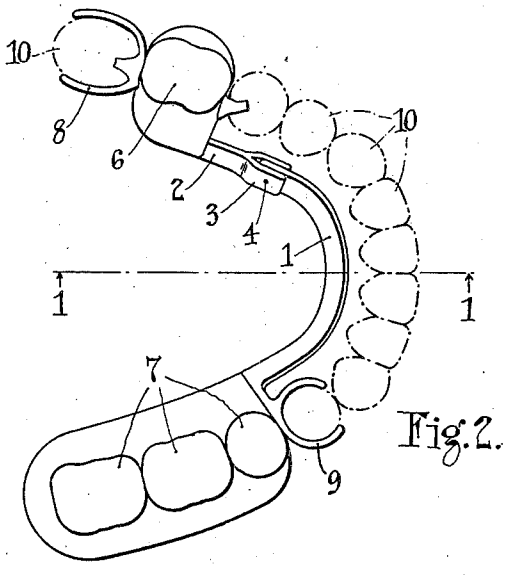


Fig.2.

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DENTURE CONSTRUCTION

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Application July 1, 1936, Serial No. 88,464

1 Claim. (Cl. 32—7)

This invention relates to denture construction and more particularly to lingual bars for use in connection therewith. The invention is especially, though not exclusively, suitable for use in lower partial denture constructions, where both sides are to be supported by the soft tissue or mucous membrane of the lower ridge, or where the denture is to be partly supported by the soft tissue and partly by the existing teeth.

In such cases the two sides of the denture settle unequally, and this unequal settlement normally sets up a considerable strain or stress on the anchor teeth, thus causing discomfort and reducing the efficiency and the useful life of the denture and of the remaining natural teeth.

The object of the present invention is to overcome this disadvantage and with this end in view the invention provides means whereby the various parts of the denture may automatically adjust themselves in relation to each other without imposing any appreciable stress on the anchor teeth. According to the present invention the parts of the denture are connected by a lingual bar comprising a plurality of parts which are so connected together as to permit them to be capable of limited movement relative to each other both in a vertical and a rotary direction.

Referring now to the accompanying drawing, which illustrates, by way of example, one convenient embodiment of the invention,

Figure 1 is a side elevation partially in section on the line 1—1 of Figure 2,

Figure 2 is a plan view of the improved device, the natural teeth being indicated in dotted lines,

Figure 3 is an enlarged fragmentary side elevation showing the joint in the lingual bar in normal position,

Figure 4 is a plan view of the device shown in Figure 3, and

Figures 5 and 6 are views similar to Figure 3 but showing the parts of the lingual bar displaced in relation to each other.

The improved lingual bar is made in two parts, for example as shown at 1 and 2. As illustrated, the arrangement for permitting the desired limited relative movement between the parts, comprises a bifurcated end 3 on the part 2 embracing the adjacent end of the part 1 as indicated in Figures 2 and 3. A pin 4 is rigidly mounted in the parallel lugs forming the bifurcated end 3 of the part 2. The end of the part 1 is mounted on the pin 4 so as to be capable of moving relatively to the part 2, this being preferably accomplished by providing the end of part 1 with a short vertical slot 5 of substantially the same width as the diameter of the pin 3, and of slightly greater length. With this arrangement the parts 1 and 2 can move relatively to each other in a vertical direction as shown in Figure 5 or with a rotary motion as indicated in Figure 6, or with any combined vertical and rotary motion within the limits permitted by the slot 5.

The improved lingual bar is illustrated as applied to a partial denture construction 6, 7, held in place by clips 8 and 9 with respect to the natural teeth which are indicated in dotted lines at 10. The invention can of course be applied to a great variety of denture constructions.

It will be understood that the foregoing description and accompanying drawing are given by way of example only and that modification within the scope of the appended claim may be resorted to without departing from the spirit of the invention.

What I claim is:

A lingual bar comprising a plurality of parts and means for so connecting said parts as to permit them to move relatively to each other either bodily in a vertical direction or in a rotary direction or with a combined vertical and rotary movement, characterized in that the adjacent ends of the parts of the bar are loosely pivoted to each other so as to be capable of a limited relative movement in the plane of said parts, and wherein the end of one of the parts is bifurcated and the end of the other part projects into said bifurcation, one of said ends carrying a pin which extends through a vertical slot formed in the other end.

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