No. 713,040.

Patented Nov. 4, 1902.

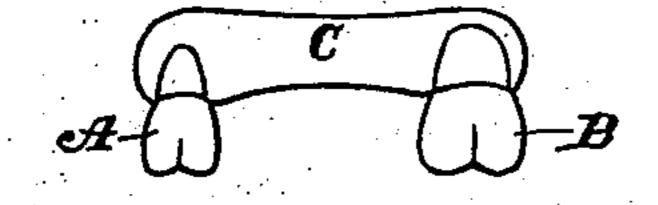
E. L. TOWNSEND. DENTAL BRIDGEWORK.

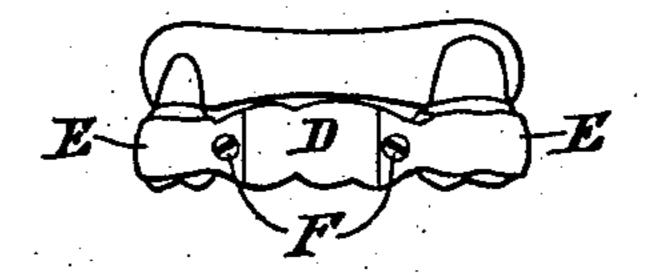
(Application filed Nov. 4, 1901.)

(No Model.)

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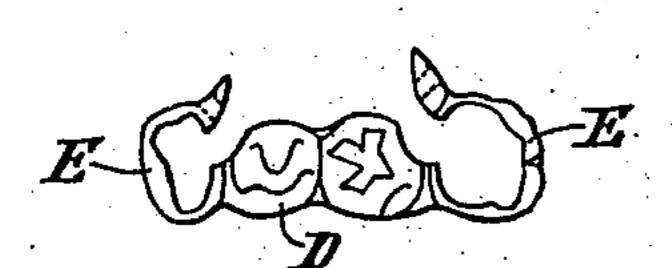
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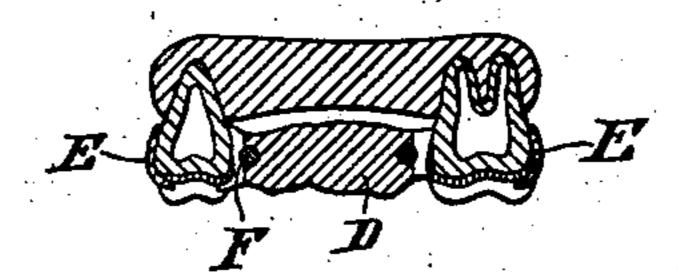




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WITNESSES Chas. L. Myde.

Mattie M. Ginnis

INVENTUR

Emory L. Townsend By Hazard & Harpham

United States Patent Office.

EMORY L. TOWNSEND, OF LOS ANGELES, CALIFORNIA.

DENTAL BRIDGEWORK.

SPECIFICATION forming part of Letters Patent No. 713,040, dated November 4, 1902.

Application filed November 4, 1901. Serial No. 81,133. (No model.)

To all whom it may concern:

Be it known that I, EMORY L. TOWNSEND, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented a certain new and useful Improvement in Bridgework, of which the following is a specification.

My invention relates to the means whereby an artificial denture is secured in the mouth between natural teeth in place of natural denture which has been removed therefrom; and the object thereof is to secure such artificial denture to the natural teeth without the use of cement. I accomplish this object by the bridge described herein and illustrated in the accompanying drawings, in which—

Figure 1 represents a fragment of a jaw, showing the absence of two teeth between the abutment-teeth. Fig. 2 shows my improved bridge on said teeth. Fig. 3 shows the bridge detached from the teeth with the binding-screws removed. Fig. 4 is a longi-

tudinal vertical section of Fig. 2.

The mode of practicing my invention is as 25 follows: An impression is taken of the abutment-teeth A and B and the jaw C therebetween. Metallic teeth of the exact configuration are then cast, and a plain band, a little longer than sufficient to pass over an abut-30 ment-tooth, of the requisite width and thickness, is then fitted upon the metallic casts of the abutment-teeth by being drawn by properly-constructed pincers and hammered until it conforms to the configuration of both 35 sides and the external ends of the cast of the abutment-teeth and projects somewhat beyond the internal ends of the teeth. By the "external ends" of the abutment-teeth is meant the outside ends, those farthest apart, 40 and by "internal ends" those nearest together. The intervening part of the bridgework which is to occupy the space between the abutment-teeth is then formed in the usual manner, which I will call the "bridge" D. The bands E, which have been fitted to the casts of the abutment-teeth, are cut so that a part thereof, which passes beyond the internal end, will overlap upon each side of each end of the bridge, and these ends are 50 then fitted into the bridge and are securely affixed thereto on one side only by soldering

or any other suitable manner. A hole is then drilled through the other end of the band and into the bridge. The hole in the bridge is threaded and a screw F, passing through 55 the hole in the band, is screwed into the bridge. The parts being fitted perfectly, the screw is removed and the ends of the band bent back, as shown in Fig. 3, far enough so the bands will pass over the abutment-teeth 60 in the mouth of the person desiring the bridge, around which they are placed. The ends of the bands are then bent in and secured to the bridge by the screws, when the work is complete. As the teeth are always 65 larger between the crown and gum and as the bands fit the abutment-teeth perfectly, conforming to their configuration, they will hold the bridge firmly without the use of any adhesive substances, and the bridge-bands 70 cannot move on the teeth.

Having described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. An artificial bridge comprising an intermediate portion adapted to fit between the abutment-teeth; flexible bands fitted to conform to the configuration of said abutment-teeth connected to said intermediate portion at each end and adapted to pass around said 80 abutment-teeth, the connection of one side of each band to the intermediate portion being removable.

2. An artificial bridge comprising an intermediate portion adapted to fit between the 85 abutment-teeth; flexible bands fitted to conform to the configuration of said abutment-teeth rigidly attached to said intermediate portion at one side thereof, and removably attached at the other side thereof, the free 90 ends of said bands being adapted to be passed around said abutment-teeth and to be removably secured by screws to said intermediate portion.

In witness that I claim the foregoing I have 95 hereunto subscribed my name this 26th day of October, 1901.

EMORY L. TOWNSEND.

Witnesses:
G. E. HARPHAM,
MATTIE MCGINNIS.