

C. E. CROMBIE.
DENTAL BRIDGE.
APPLICATION FILED FEB. 1, 1908.

898,559.

Patented Sept. 15, 1908.

Fig. 2

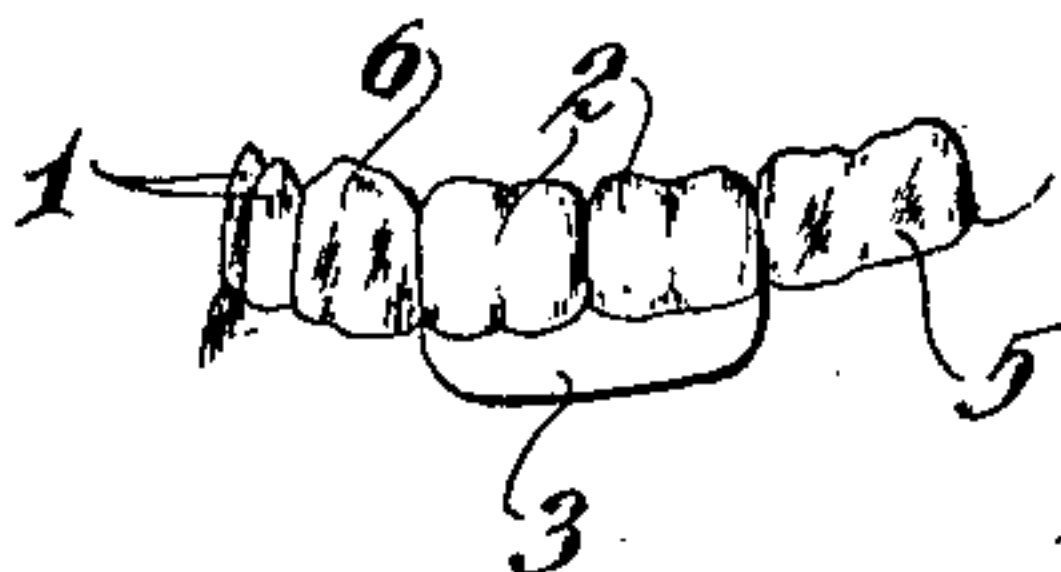


Fig. 1

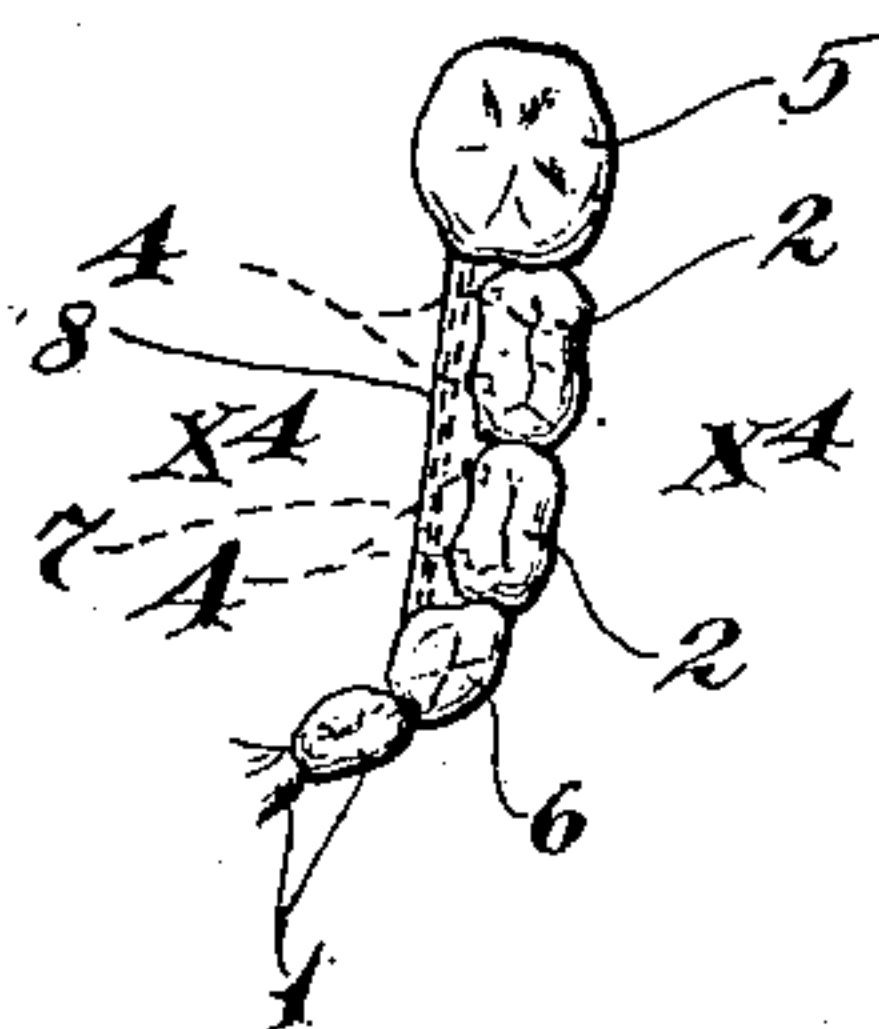


Fig. 3

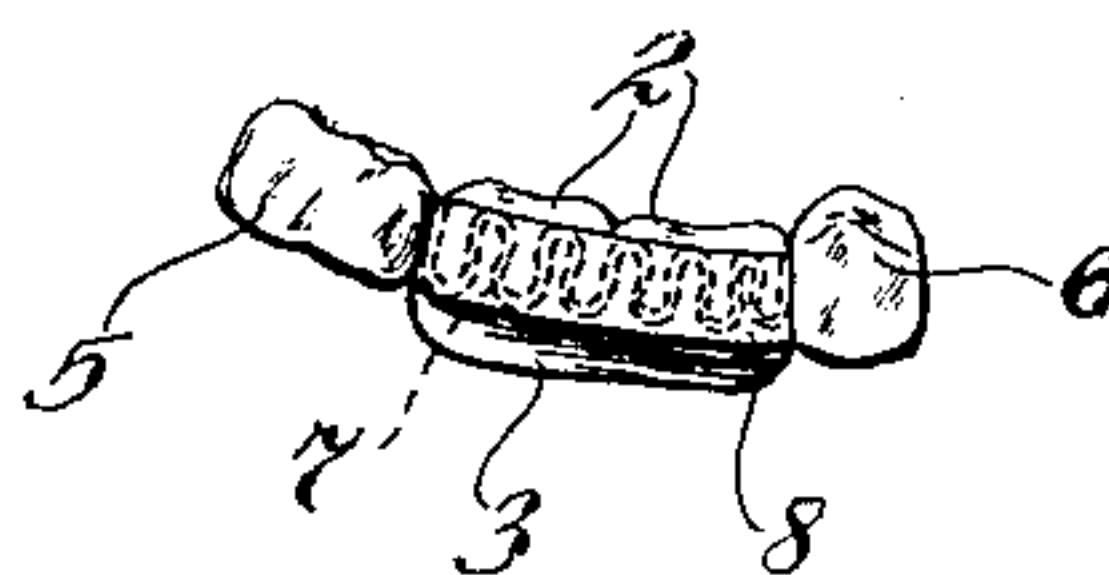


Fig. 4

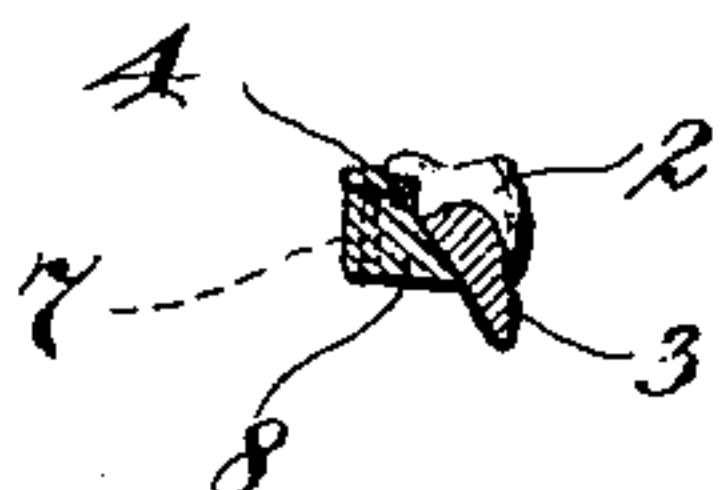


Fig. 6



Fig. 5



Witnesses:

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UNITED STATES PATENT OFFICE.

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DENTAL BRIDGE.

No. 898,559.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed February 1, 1908. Serial No. 413,736.

To all whom it may concern:

Be it known that I, CHARLES E. CROMBIE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Dental Bridges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is in the art of artificial teeth and has for its object to provide a simple and efficient improvement in bridge construction, the primary purpose thereof being to reduce the cost of such work by very great reduction or elimination of the gold hitherto necessarily used.

To the above ends the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a plan view, Fig. 2 an out side elevation, and Fig. 3 an inside elevation, showing a bridge designed in accordance with my invention and attached to a wisdom tooth and second bi-cuspid, and supporting two artificial teeth in the space where teeth are out. Fig. 4 is a section on the line $x^4 x^4$ of Fig. 1. Fig. 5 is a plan view showing two crowns connected by a crooked or fluted metal bridge reinforcement; and Fig. 6 is a fragmentary detail in elevation, showing a section of a metallic bridge reinforcement.

In the drawings, the numeral 1 indicates the natural teeth and the numeral 2 indicates two artificial teeth. These artificial teeth 2 are or may be of the usual porcelain construction having an integral gum portion 3 and customary projecting anchoring pins 4.

The numerals 5 and 6 indicate customary gold crowns, which, as shown, are applied respectively to a wisdom tooth and to a bi-cuspid. In carrying out my invention I connect these two crowns by a metallic bridge

reinforcement of gold, German silver, brass 50 or any other suitable metal, and embed the same in rubber or other cementitious material which is used to form the body of the bridge, and to which the artificial teeth are directly secured. This metal reinforcement 55 is preferably formed by a piece of quite stiff wire 7 bent zig zag or into fluted form, as shown in the drawings. The ends of this wire are soldered to the crowns, and the rubber, indicated at 8, is applied around the 60 same and the artificial teeth are secured to the said rubber body 8 with its headed projections 4 embedded therein. Preferably the wire 7 has a rough exterior, as shown in Fig. 6, so that the rubber will more firmly adhere 65 thereto. This embedded metal bridge reinforcement makes the bridge very strong and, as is obvious, is of very small cost. Also it very greatly reduces the amount of work required to apply a bridge. In fact, 70 this invention makes possible high grade work at small cost.

What I claim is:

1. In a dental bridge structure, the combination with lateral spaced crowns, of a 75 metal bridge reinforcement in the form of a crooked wire secured at its ends to said crowns, a body of rubber or cementitious material embedding the said reinforcing wire, and one or more artificial teeth secured to 80 said cementitious body, substantially as described.

2. In a dental bridge structure, the combination with laterally spaced crowns, of a 85 metal bridge reinforcement in the form of a crooked wire secured at its ends to said crowns, a body of rubber or cementitious material embedding the said reinforcing wire, and one or more artificial teeth secured to 90 said cementitious body and having metallic projections embedded therein, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. CROMBIE.

Witnesses:

H. D. KILGORE,
MALIE HOEL.