

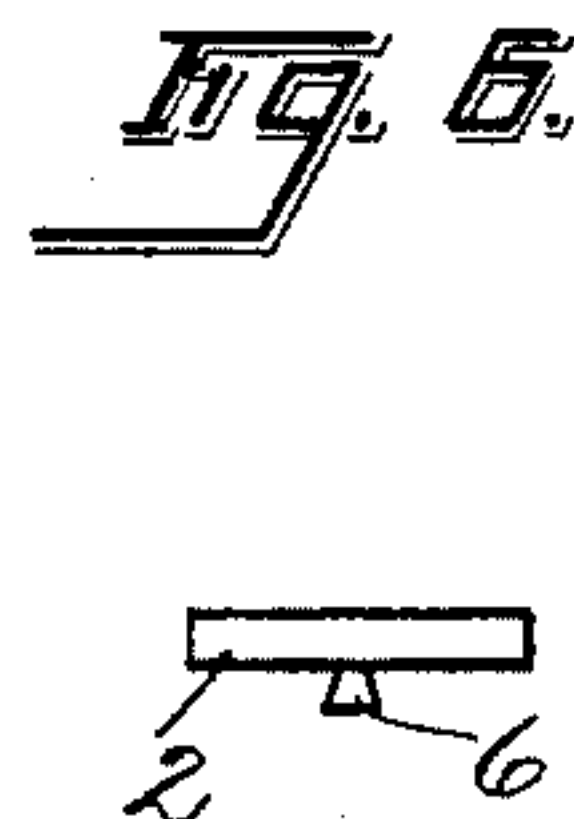
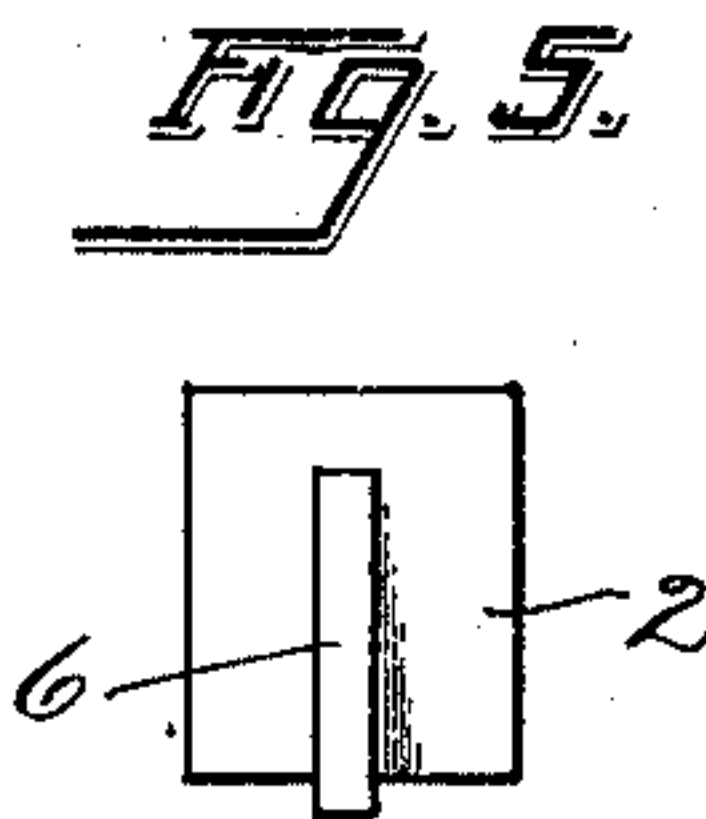
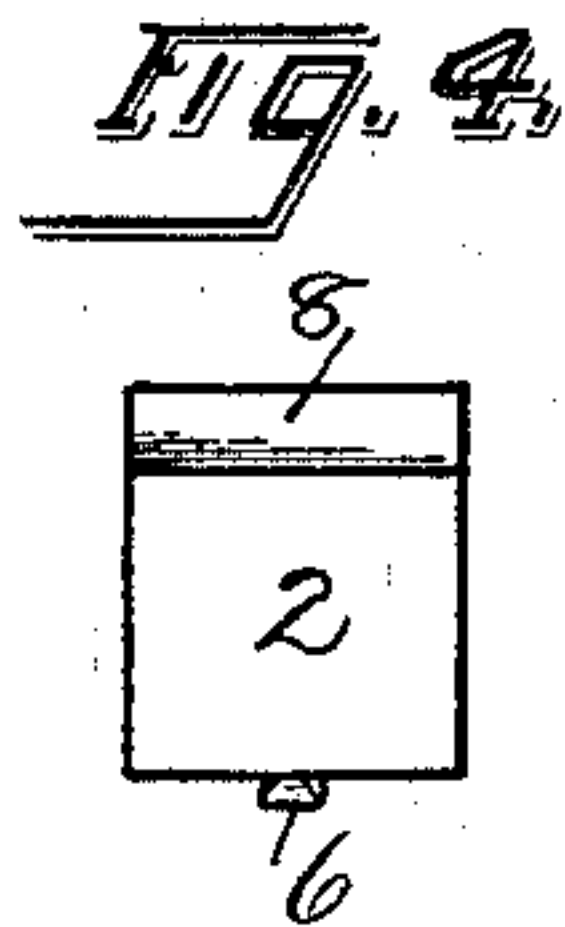
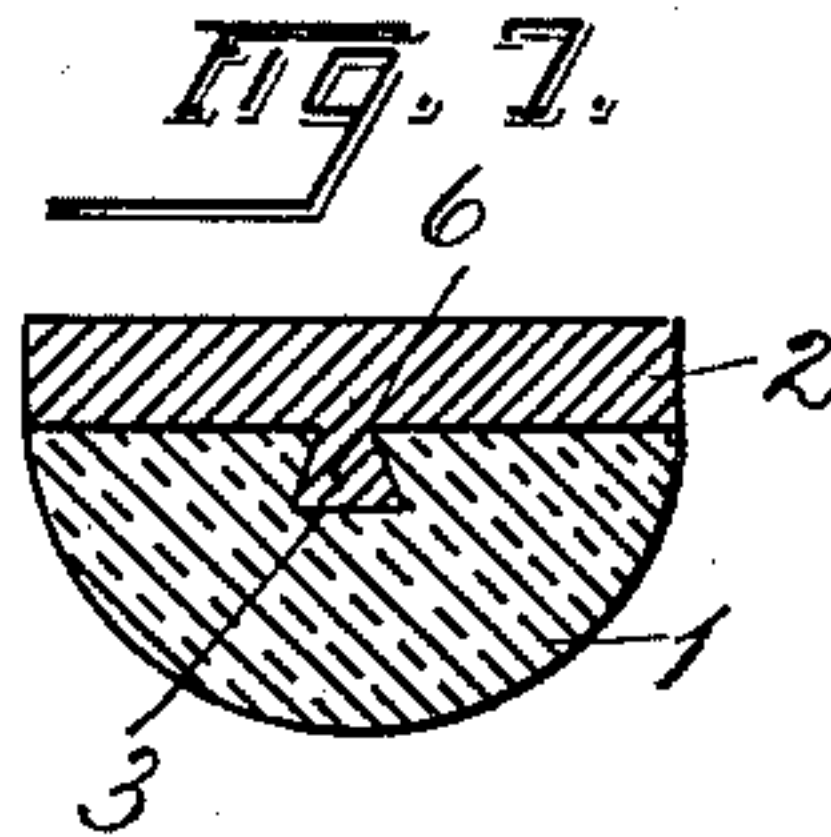
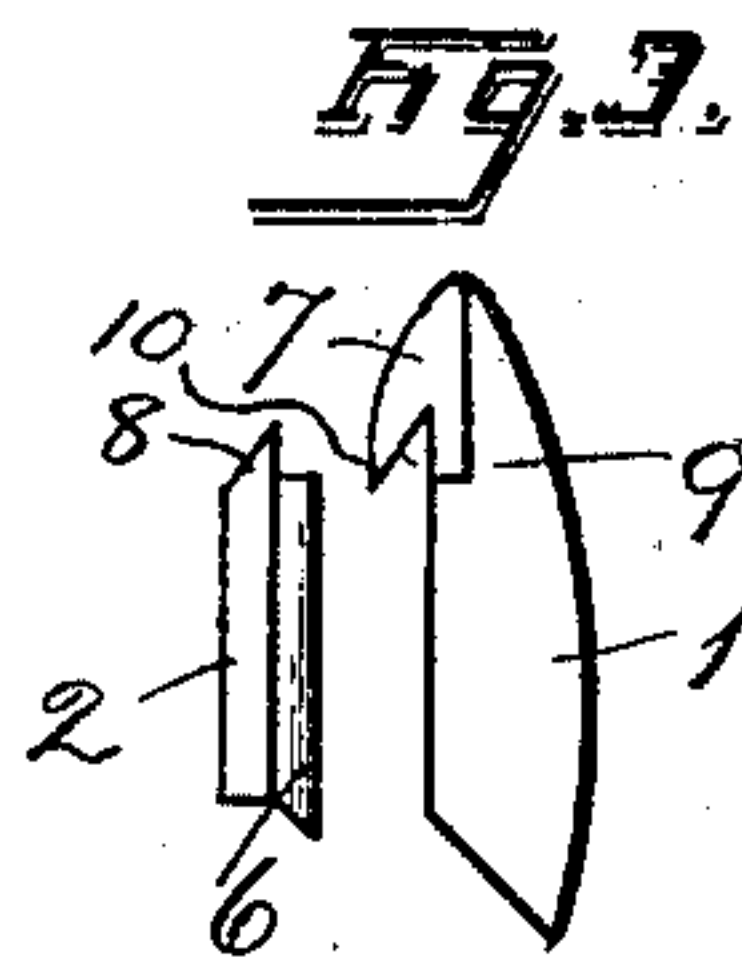
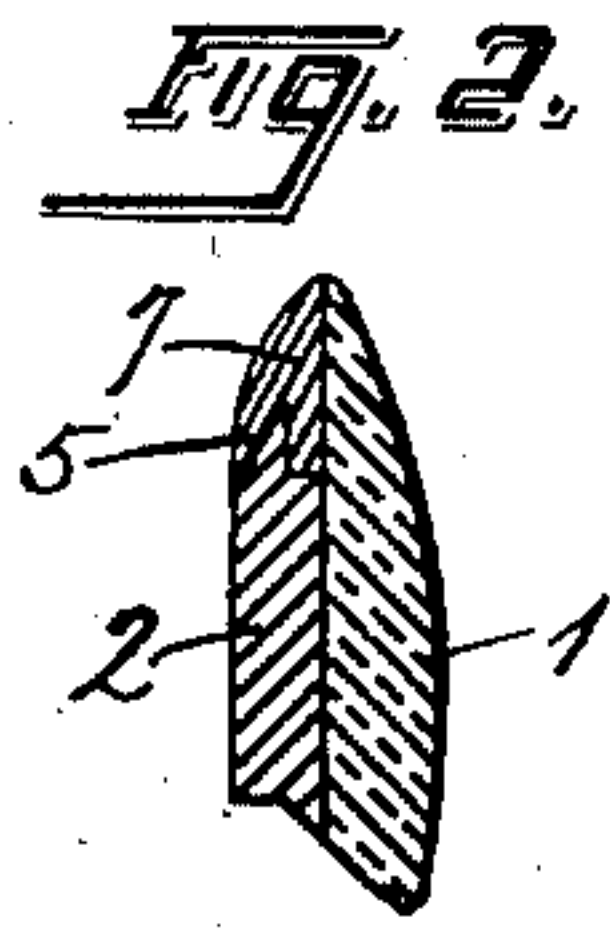
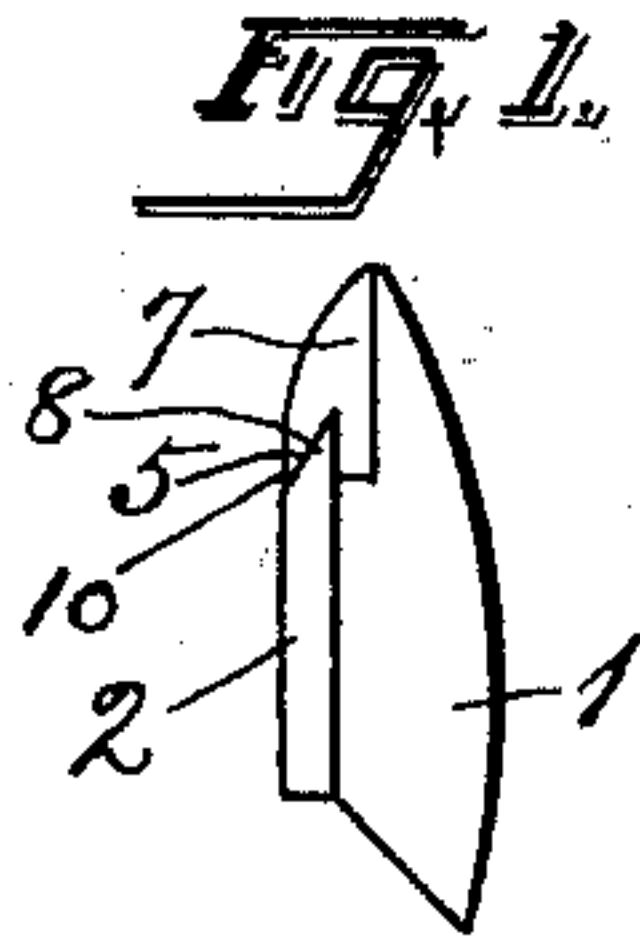
No. 656,596.

Patented Aug. 21, 1900.

R. E. CAMPBELL.
DETACHABLE ARTIFICIAL TOOTH.

(Application filed July 24, 1899.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

ROBERT EDGAR CAMPBELL, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF
ONE-HALF TO T. R. EDWARDS, OF SAME PLACE.

DETACHABLE ARTIFICIAL TOOTH.

SPECIFICATION forming part of Letters Patent No. 656,596, dated August 21, 1900.

Application filed July 24, 1899. Serial No. 724,996. (No model.)

To all whom it may concern:

Be it known that I, ROBERT EDGAR CAMPBELL, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented certain new and useful Improvements in Detachable Artificial Teeth; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention relates to certain improvements in that class of artificial teeth in which a porcelain front is detachably connected with a metallic back, which in turn is attached to and forms part of a bridge or crown.

The object of my invention is to provide improved means for resisting strain between the two parts in a line perpendicular to the face of the tooth.

In the accompanying drawings, Figure 1 is a side elevation of the improved tooth. Fig. 2 is a vertical central section of the same. Fig. 3 is a side elevation showing the parts separated. Fig. 4 is a view of the rear face of the metal backing. Fig. 5 is a view of the front face of the same or that which adjoins the porcelain front. Fig. 6 is a top view of the same, and Fig. 7 is a horizontal section of the same.

Referring to the drawings, 1 represents the porcelain front, and 2 the metal backing, of a detachable artificial tooth. The rear face of the porcelain front and the front face of the metal backing are made plane and smooth, except the dovetail attaching devices which connect them together. In the rear face of the porcelain front I make a dovetail groove 3, which extends from the lower end of the tooth up to the overhanging locking joint or abutment 5 near the upper or biting end, and on the front face of the backing-plate 2 is formed a corresponding dovetailed rib 6, which fits in the groove 3 when the two dovetailed portions are placed in line and slide together.

The overhanging abutment 5 is formed by baking the metal piece 7 into the porcelain. The upper end of the backing-plate 2 is made beveled, as shown at 8, and the groove 9 of the abutment, into which said upper end fits, is correspondingly formed, so that the rear-

most edge 10 of the abutment extends downward below and behind the uppermost edge of said end, and thus when the backing is pushed up into place forms a locking-joint against a strain in a direction perpendicular to the face of the tooth, tending to separate the parts. This affords a powerful support against biting pressure tending to separate the front and backing.

I do not limit myself to the dovetail attaching devices, the groove 3, and rib 6 to connect the lower portions of the front and backing, as other attaching devices may be used at this point without departing from the spirit of my invention.

I claim—

1. In a detachable artificial tooth, the combination of a porcelain front and a metal backing, having vertical coengaging surfaces, the upper or biting end of said tooth having baked thereinto a metallic piece forming a transverse abutment against which the transverse edge of the backing abuts, said metallic piece having its rearmost edge extended downward and passing behind and below the abutting edge of the backing, thereby forming a locking-joint against strain in a direction perpendicular to the plane of the tooth, and independent means for securing together the lower portions of said vertical coengaging surfaces against strain in the said perpendicular direction, substantially as described.

2. In a detachable artificial tooth, the combination of a porcelain front and a metal backing, having vertical coengaging surfaces, the upper or biting end of said tooth having baked thereinto a metallic piece forming a transverse abutment against which the transverse edge of the backing abuts, said metallic piece having its rearmost edge extended downward and passing behind and below the abutting edge of the backing, thereby forming a locking-joint against strain in a direction perpendicular to the plane of the tooth, and a dovetail attachment for the lower portions of said vertical coengaging surfaces, substantially as described.

In witness whereof I have hereunto set my hand this 1st day of July, 1899.

R. EDGAR CAMPBELL.

Witnesses:

D. B. RICHARDS,

CHAS. J. ARMBRUSTER.