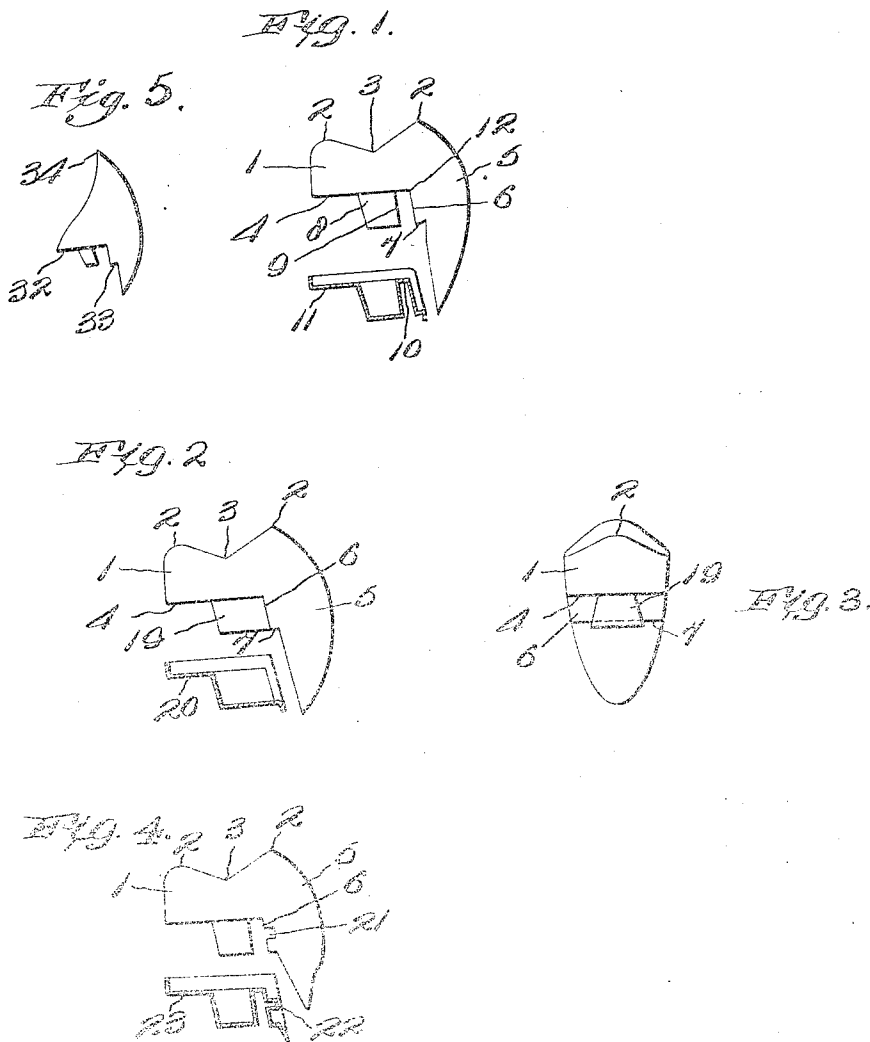


J. A. GARDNER.
ARTIFICIAL TOOTH.
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1,064,635.

Patented June 10, 1913.



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UNITED STATES PATENT OFFICE.

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ARTIFICIAL TOOTH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH A. GARDNER, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Artificial Teeth; 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 relates to improvements in artificial teeth, and it consists in the constructions, combinations and arrangements herein described and claimed.

An object of my invention is to provide improved artificial teeth which can be firmly anchored in position without the use of weakening recesses or pins.

A further object of my invention is to provide strong and attractive artificial teeth, which render possible the construction of a single crown or a bridge of anterior bicuspids and molars with porcelain libial buccal and occlusal surfaces, thereby preventing the unsightly appearance of gold.

A further object of my invention is to provide improved artificial teeth having flat bearing surfaces extending outside of their grinding cusps for firmly seating in a metal backing to positively prevent all tilting or rocking of the teeth by the pressure exerted on said cusps or cutting edge in use.

A further object of my invention is to provide interchangeable, artificial teeth and backings which enable bridges or single crowns to be readily repaired in the mouth without removing the framework.

In the accompanying drawings forming a part of this application, and in which similar reference symbols indicate corresponding parts in the several views:

Figure 1 is a side elevation of a porcelain tooth, illustrating one embodiment of my invention, the metal backing for said tooth being shown in section; Fig. 2 is a view similar to Fig. 1, illustrating a modified construction; Fig. 3 is an elevation from the left hand side of Fig. 2; Fig. 4 is a view similar to Fig. 1, illustrating a further modification; Fig. 5 is an elevation similar to Fig. 1, of an anterior tooth.

Referring to the drawings, 1 indicates the occlusal portion of a porcelain tooth pro-

vided with the usual grinding cusps, 2 and 65 depression 3, and having a flat base face, 4; an integral buccal portion 5 being provided with a plane lingual surface 6 extending at an angle of approximately 5° to a perpendicular to said flat base face 4, and recessed 60 to provide a shoulder 7 spaced from said base face. An integral lug 8 projects from said flat base face 4 beneath the depression 8, and is provided with a plane wall 9 extending angularly to said base face; said inte- 65 gral lug constituting a reinforcement for strengthening the occlusal portion of the porcelain tooth at the point of the weakening depression 3 therein, and said angularly- 70 extending parallel walls 6 and 9 cooperating with a correspondingly shaped shoulder 10 on a metal backing 11 to prevent rocking of the tooth. The flat base face 4 and shoulder 7 constitute flat bearing faces, which extend 75 past, or outside of, the grinding cusps 2, for firmly seating in the metal backing to positively prevent all tilting or rocking of the tooth by pressure exerted on said cusps in use.

Where it is desired to use the above de- 80 scribed tooth with a rubber or plastic backing, an under cut recess can be readily grooved across the lingual surface 6 of the biscuit at the angle 12 by any sharp instrument before baking.

Figs. 2 and 3 illustrate a modification of 85 the tooth shown in Fig. 1, in which an under cut lug 19 extends from the flat base face 4 of the tooth integral with the buccal portion. This provides means for positively inter- 90 locking with a correspondingly shaped metal backing 20.

Fig. 4 illustrates a modification of the tooth shown in Fig. 1, in which the lingual surface of the buccal portion is provided 95 with a groove 21 for lockingly engaging a shoulder 22 on a metal backing 23, on receiving the material of a rubber or plastic backing.

Fig. 5 illustrates a construction similar to 100 Fig. 1 of a facing or tooth, in which the flat base face 32 and the shoulder 33 constitute flat bearing faces, which extend past, or outside of, the cutting edge 34 of the tooth; whereby the tooth will be firmly supported 105 in the metal backing and all tilting or rocking of the tooth by pressure on its cutting edge will be positively prevented.

I have illustrated and described the preferred and satisfactory construction, but changes could be made within the spirit and scope of my invention.

5 What I claim is:—

1. An artificial tooth comprising a body portion provided with an occlusal portion having a flat base face and formed with an unrecessed integral lug extending downwardly from said base face for engaging a correspondingly-shaped backing.

10 2. An artificial tooth comprising an occlusal portion having a flat base face, and a buccal portion at an angle thereto having an inner face provided with a shoulder spaced from said flat base face.

15 3. An artificial tooth comprising an occlusal portion having a flat base face, and a buccal portion having a flat inner face extending at an obtuse angle to said flat base

face and provided with a shoulder spaced from the latter.

4. An artificial tooth comprising an occlusal portion provided with the usual grinding cusps and intermediate depression and having a flat base face, and an integral unrecessed lug extending from said flat base face beneath such depression for engaging a backing.

5. An artificial tooth comprising an occlusal portion provided with the usual grinding cusps, and formed with spaced bearing faces extending outside of said cusps for firmly seating in a backing.

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

JOSEPH A. GARDNER.

Witnesses:

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