

J. W. Hollingsworth,

Artificial Teeth.

No. 103189.

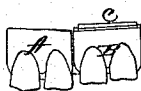
Patented May 17. 1870.



Fig. 2.



Fig. 3.



Witnesses
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JOHN W. HOLLINGSWORTH, OF MOUNT VERNON, INDIANA.

Letters Patent No. 103,189, dated May 17, 1870.

IMPROVEMENT IN ARTIFICIAL TEETH.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JOHN W. HOLLINGSWORTH, of Mount Vernon, in the county of Posey and State of Indiana, have invented certain new and useful Improvements in the Mode of Preventing Artificial Teeth and Gums from Cracking or Breaking; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in coating the inner and marginal surfaces of artificial gums with a compound that will prevent the teeth from breaking by the contraction of the metal when chilled.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe the manner in which the same is or may be performed, referring to the annexed drawings, in which—

Figure 1 is a vertical section through one of the teeth.

Figure 2 is a side view, and

Figure 3 is a front view.

G represents a metal plate with two sections of teeth, A and B, attached to it. This plate is cast directly upon the teeth and around the pins, as at D; from thence extending over the inner surface of the gums, and overlapping the margin of the gums at C.

Now, when the metal embraced between the points C and D is chilled, it very often contracts so forcibly upon the teeth as to break them in pieces, or, at least, crack them and spoil their appearance.

To prevent this I coat the inner and marginal surfaces of the gums with a suitable plastic compound, when the metal may be cast upon the teeth without danger, as the plastic compound readily yields to the contracting metal, thereby relieving the teeth from

the rigid pressure of the metal, and their consequent breakage.

The compound which I propose to use for this purpose is composed of French chalk, carbonate of magnesia, borax, and water. French chalk and carbonate of magnesia are alike indestructible by the low temperature to which they are exposed in the process of molding.

French chalk alone would form too solid a body, and carbonate of magnesia alone would form too light a body; but, by mixing the two, we have a body of the proper plasticity.

The borax is added to hold the mass together, and in position. The water is added to unite all, and make the application easy and simple, with a small camel's hair brush, or other suitable instrument.

There are, doubtless, many other substances which would serve the same purpose just as well as this compound; hence, I do not confine myself to the use of any particular material for coating the gums as above described, the object being merely to interpose some plastic material which will yield to the contraction of the metal.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

Coating the inner and marginal surfaces of artificial gums with some plastic material, preparatory to casting the metal upon the same, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

JOHN W. HOLLINGSWORTH.

Witnesses:

ELIJAH M. SPENCER,
DAVID T. WEIR.