

UNITED STATES PATENT OFFICE.

A. HILL AND S. G. BLACKMAN, OF NORWALK, CONNECTICUT.

IMPROVEMENT IN COMPOSITIONS FOR FILLING TEETH.

Specification forming part of Letters Patent No. 6,110, dated February 13, 1849.

To all whom it may concern:

Be it known that we, ASA HILL and SAMUEL G. BLACKMAN, both of Norwalk, Fairfield county, Connecticut, have invented, discovered, and produced a new and valuable Compound Substance for Stopping or Filling Carious, Hollow, and Defective Teeth, which may be made of sufficient hardness to answer all the purposes of a permanent filling, with the advantage of being easily applied, filling the cavity with great uniformity, and forming a compact mass with the tooth with scarcely a possibility of getting removed.

This article is made by taking the gutta-percha of commerce, freeing it from its impurities and coloring-matter by boiling and working it or by maceration, and combining with it, when sufficiently heated with a dry heat to render it plastic, about two parts quicklime and one part each of quartz and feldspar, all reduced to an impalpable powder.

The gutta-percha in its natural state has too much tenacity and too little hardness and consistency, and has not a proper color. The addition of these materials deprives it of its excess of tenacity, gives it greater hardness and consistency, and ordinarily the proper color. The same effect may be produced in a greater or less degree by any other earthy, mineral, or metallic substance.

The article may be varied in color by the addition of any of the other earths, or in color and slightly in hardness by adding the filings of any of the metals used in filling teeth. A similar article may be made by using, instead of the three articles enumerated—viz., lime,

quartz, and feldspar—any of the earthy, mineral, or metallic substances known, which will shorten and harden the base and give the proper color. We have used them all, and in various combinations and proportions, but think the combination abovenamed makes the cheapest and best article. It is entirely innoxious, becomes plastic at a moderate heat, hardens again when applied, and when reduced to the heat of the body adheres firmly to the cavity, and is sufficiently hard and permanent for matiseation.

We do not claim as our invention and discovery the application of gutta-percha alone to the stopping and filling of carious teeth, although we are not aware that it was ever so used until we commenced using it; but

What we do claim is—

The combination of gutta-percha, as a base, with such other mineral, earthy, and metallic substances as will make such a compound of such a character and adapted to such purposes as we have described—viz., its combination with such of those substances as will shorten it and render it less tenacious, harden it and render it fit for a useful filling, and give it the desired color without any noxious quality and without destroying its plasticity when heated, and the application of the compound substance for that purpose.

ASA HILL.

SAML. G. BLACKMAN.

Witnesses:

JOSIAH M. CARTER,

CHARLES E. DISBROW.