

No. 819,249.

PATENTED MAY 1, 1906.

F. C. C. T. A. OSIUS.

DENTAL FILLING.

APPLICATION FILED MAY 15, 1905.



Fig. 1.



Fig. 2.

Witnesses:
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By his Attorney

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UNITED STATES PATENT OFFICE.

FREDERICK C. C. T. A. OSIUS, OF MUSKEGON, MICHIGAN.

DENTAL FILLING.

No. 819,249.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed May 15, 1905. Serial No. 260,533.

To all whom it may concern:

Be it known that I, FREDERICK C. C. T. A. OSIUS, a citizen of the United States, residing at Muskegon, county of Muskegon, State of Michigan, have invented a certain new and useful Improvement in a Dental Filling, of which the following is a specification, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object a certain new and useful dental filling material herein described and claimed, and illustrated with accompanying drawings, in which—

Figure 1 is a view of a tooth having my improved filling in section. Fig. 2 is a view of a mass of the filling.

In the drawings, *a* represents the tooth, and *b* my improved filling.

It is well understood that many defective teeth on account of their fragile or weak condition cannot be filled with a hard gold filling hammered into place in the customary well-known manner.

The object of my invention is to provide a soft dental filling containing gold which may be burnished and polished, so as to give the appearance of an ordinary gold filling when the process of burnishing is completed, which may be used in filling weak or fragile teeth, and which may be applied in much less time and at less expense than by hammering or pressing in a gold filling, the filling, however, having the appearance, as above observed, of an ordinary gold filling when the process of its insertion is completed, except that possibly my improved filling when burnished and polished has a somewhat duller finish than when a hard gold filling is hammered into place and polished.

The dental filling which I employ may be composed of the following elements. The proportions herein named have been found to give satisfactory results, although the proportions may be varied without departure from my invention. In making said filling I employ, say, two pennyweights of precipitated gold pulverized to a very fine powder. With the precipitated gold I mix, say, one pennyweight of a suitable cement—as, for example, a zinc cement, which may consist of oxyphosphate of zinc, phosphoric acid, or

oxychlorid of zinc, or other cement. To the above may preferably be added one grain of French rouge, although the rouge might be omitted without departing from my invention. These substances are well mixed together, as by grinding the same together, and when thoroughly mixed constitute a powder ready for use or ready to be put upon the market in powdered or other form.

It will be apparent that the metal is suspended in and indifferent to the cement—*i. e.* the metal and the cement do not form a chemical union.

While I have described gold in particular as mixed with a suitable dental cement, I would have it understood also that my invention contemplates the mixing of any other metal suitable for dental purposes with such a cement.

In the process of filling a tooth when the tooth has been treated in the customary manner a suitable amount of this dental filling is then mixed with an ordinary cement liquid until the mixture is of the consistency of thick paste, which is then applied to the cavity already prepared. After said filling has been sufficiently hardened it is then burnished and polished, whereby a gold surface is brought out upon its exterior.

This dental filling is especially adapted for such cavities as cannot be filled with gold by the methods heretofore commonly employed for reasons obvious to those skilled in the art.

This filling when burnished and polished has not the objectionable appearance of ordinary gold fillings.

What I claim as my invention is—

1. A soft dental filling material composed of pulverized metal and dental cement mixed together, the metal being suspended in and indifferent to the cement, substantially as described.

2. A soft dental filling material composed of precipitated gold and a dental cement mixed together, the metal being suspended in and indifferent to the cement, substantially as described.

3. A dental filling material composed of metal and a zinc cement mixed together, substantially as described.

4. The process herein described of produc-

ing a dental filling for teeth capable of being
burnished and polished consisting of mix-
ing with gold pulverized to a fine powder, a
cement and reducing the mixed compound
5 to a powder the metal being suspended in and
indifferent to the cement.

In testimony whereof I have signed this

specification in the presence of two subscrib-
ing witnesses.

FREDERICK C. C. T. A. OSIUS.

Witnesses:

M. OSIUS,

THEODORE F. A. OSIUS.