## W. A. DARTT.

## PROCESS OF FILLING TEETH.

No. 386,692.

Patented July 24, 1888.







Fig\_4\_

Fig. 5

Witnesses. Judy Hinkelyn MW. Fowlers

Inventor. Nelliam A. Dartt. By floot Hludenwood. Cattozney.

## United States Patent Office.

WILLIAM A. DARTT, OF MILWAUKEE, WISCONSIN.

## PROCESS OF FILLING TEETH.

SPECIFICATION forming part of Letters Patent No. 386,692, dated July 24, 1888.

Application filed February 3, 1888. Serial No. 262,923. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. DARTT, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in the Process of Filling Teeth; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to the process of fill-10 ing teeth, and will be fully set forth herein-

after, and pointed out in the claim.

In the drawings, Figure 1 represents a tooth to be filled; Fig. 2, the same, with the cavity filled and the original form restored with wax.

15 Fig. 3 represents a die, as of zine, cast from an impression of the restored tooth. Fig. 4 shows a plate of soft metal after it has been pounded down over the die; and Fig. 5 shows the metallic facing or gold plate shaped between the die and the soft-metal plate and with a pin attached thereto, all as more fully set forth hereinafter.

In carrying out my invention I proceed as follows: The cavity of decay is filled with some 25 soft material, like wax, and the original form of a tooth is restored in said soft material. Then an impression is taken in plaster-of-paris of this entire restored tooth, and a cast of zinc is made in this impression, forming a die in 30 shape like the tooth. Next, a piece of gold or other swageable metal plate is laid on the side of the zinc tooth at a point corresponding to the location of the cavity in the natural tooth, said plate being sufficiently large to 35 cover said cavity, and a piece of sheet-lead or analogous soft metal is placed over this gold or other plate and pounded down onto the die, which forms the gold or other plate into the shape of the tooth at that point. The piece 40 of gold or other plate is then removed, and the inside thereof (which was next the tooth) is covered with wax and pressed in position on the natural tooth, when the impression of the wax will show the surplus of the gold or 45 other material to be removed, and said surplus material is then removed, together with the wax, leaving the gold or other plate of the exact size and shape required. Next, I solder one or more pins (preferably of platinum) to

the inside of the gold or other piece, and the 50 cavity in the natural tooth is filled with any suitable plastic material—such as cement or gutta-percha—and while said material is still soft the gold or other metal plate is pressed into position, forming the desired metallic facing, and the filling hardens around the pin or pins soldered to said plate and keeps the latter in place.

Having thus described my invention, what I claim as new, and desire to secure by Letters 60

Patent, is—

The hereinbefore-described method of filling decayed teeth, consisting in first filling the cavity of decay with a soft material, as wax, and restoring the original form of a tooth out 65 of the same soft material, next taking an impression of this restored tooth in plaster-ofparis and casting a zinc die therefrom in shape like said tooth, then placing a piece of gold or other swageable metal plate on the side of 70 the zinc tooth at a point corresponding to the location of the cavity in the natural tooth, and next placing a piece of soft metal—such as sheet-lead—over the last-named metallic plate and pounding it down onto the die, forming 75 the gold or other plate into the shape of the tooth at that point, removing said plate and coating the inner side thereof with wax and pressing it against the natural tooth at the corresponding point, removing the surplus metal so and wax and affixing a pin or pins to the said inside of said plate, next cleaning the cavity in the natural tooth of the first-named soft material and filling it with a suitable plastic material, like cement or gutta-percha, and press- 85 ing the pin or pins secured to the plate into said plastic material while the latter is still soft, and keeping the plate in position till said material hardens around said pin or pins.

In testimony that I claim the foregoing I 90 have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

WILLIAM A. DARTT.

Witnesses:

H. G. UNDERWOOD, N. E. OLIPHANT.