

No. 758,750.

PATENTED MAY 3, 1904.

O. C. & J. R. HALDEMAN.

ARTIFICIAL DENTURE.

APPLICATION FILED SEPT. 19, 1902.

NO MODEL.

Fig. 1.

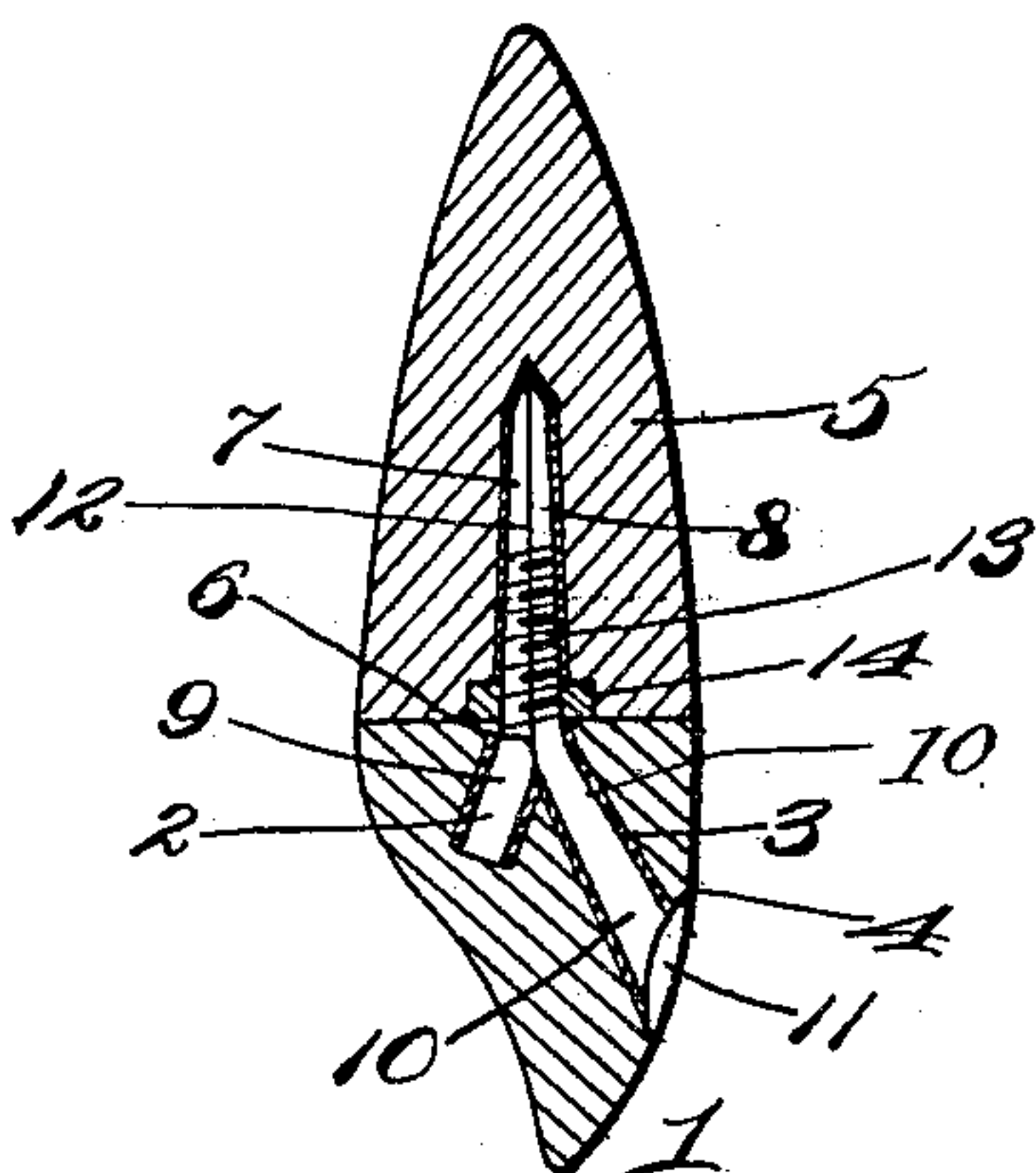


Fig. 2.

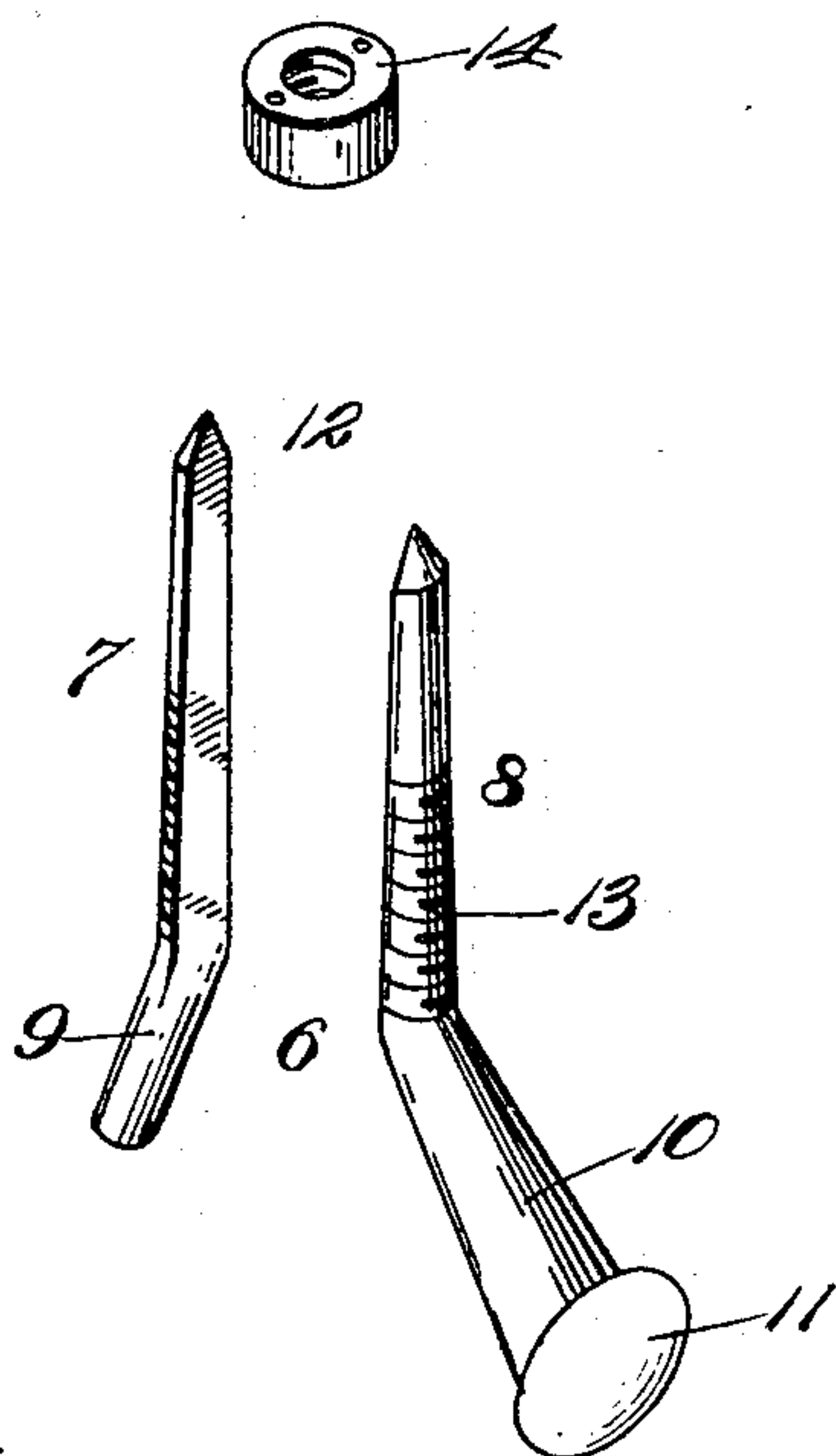
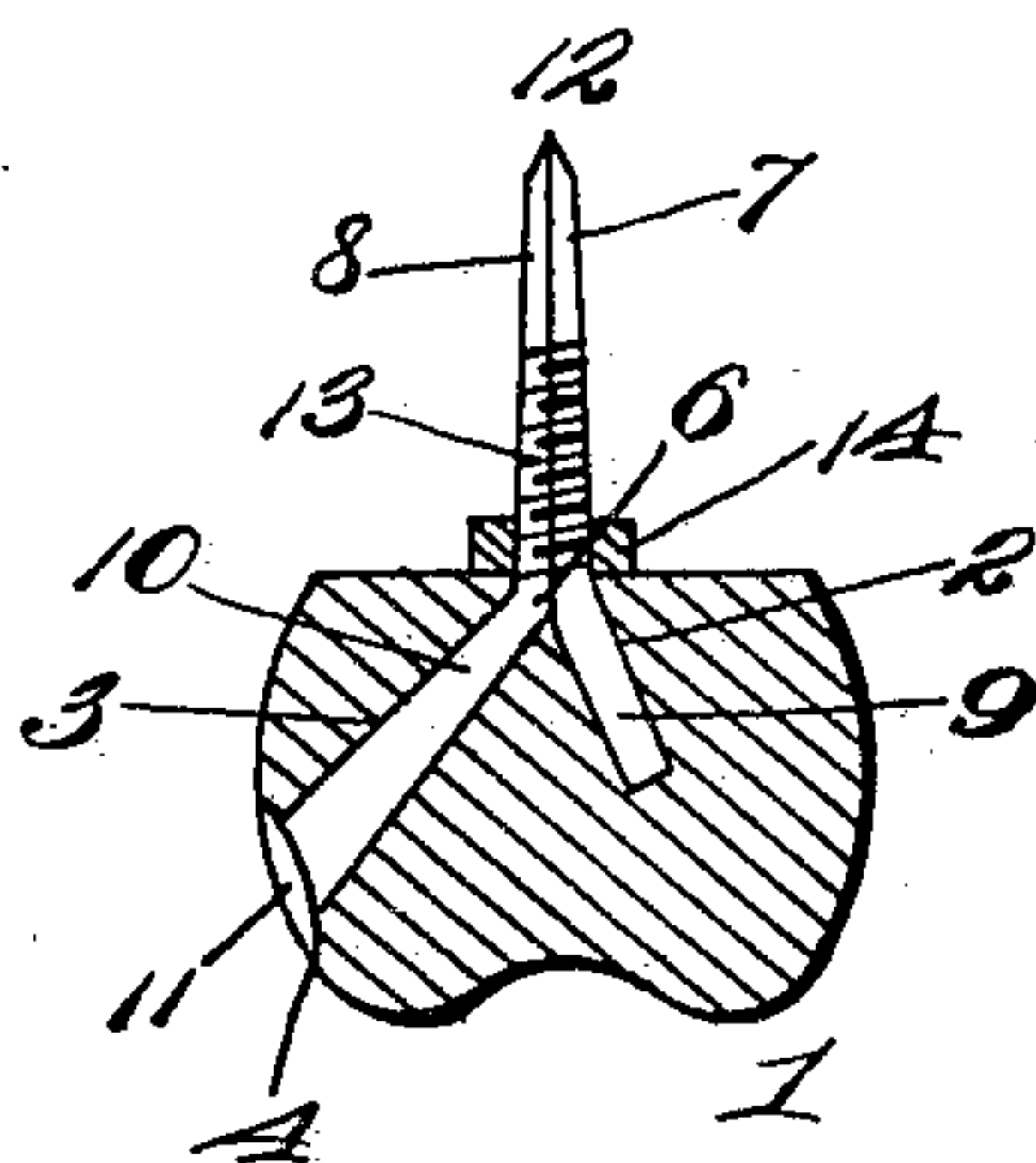


Fig. 3.



Witnesses:

A. M. Hildner
H. C. Rodgers

Inventors:

O. C. & J. R. Haldeman.

By Fischer & Thorpe attys.

UNITED STATES PATENT OFFICE.

OLIVER C. HALDEMAN, OF UPLAND, NEBRASKA, AND JOHN R. HALDEMAN, OF INDEPENDENCE, MISSOURI, ASSIGNORS, BY MESNE ASSIGNMENTS, TO HALDEMAN PORCELAIN CROWN COMPANY, OF KANSAS CITY, MISSOURI, A CORPORATION OF MISSOURI.

ARTIFICIAL DENTURE.

SPECIFICATION forming part of Letters Patent No. 758,750, dated May 3, 1904.

Application filed September 19, 1902. Serial No. 123,984. (No model.)

To all whom it may concern:

Be it known that we, OLIVER C. HALDEMAN, residing at Upland, Franklin county, Nebraska, and JOHN R. HALDEMAN, residing at Independence, in the county of Jackson and State of Missouri, citizens of the United States, have invented certain new and useful Improvements in Artificial Dentures, of which the following is a specification.

Our invention relates to improvements in dentistry; and it consists in the manner in which artificial crowns are secured to the natural roots of teeth.

By our invention we provide an anchor which is separable from the crown, so the latter may be ground or otherwise manipulated to obtain a perfect fit upon the exposed terminal of the root. Said anchor by its peculiar form also provides a reliable connection between the root and crown and rigidly holds the latter against lateral displacement. It also reinforces the crown against accidental fracture, but is secured to the root in such a way that it may be readily removed therefrom in case the crown should become broken.

In order that the invention may be fully understood, reference is to be had to the accompanying drawings, in which—

Figure 1 represents a vertical sectional view of a crown secured to a root by our improved anchor. Fig. 2 is a detail view of the separate parts of the anchor. Fig. 3 is a vertical sectional view of a bicuspid provided with our improved anchor.

In the drawings, 1 indicates a crown having channels 2 and 3, which communicate at the upper surface of the crown and are diverging at their lower ends. The lower end of channel 2 terminates at a point approximately midway between its upper end and the articulating-surface of the crown, while the flaring lower end of channel 3 communicates with a depression 4 in the front surface of the crown. After the upper surface of the crown has been accurately fitted to root 5 it is provided with our improved anchor 6, comprising two

members 7 and 8, the former of which has an oblique lower end 9, that snugly fits into channel 2. The opposite member 8 has a conical portion 10 adapted to snugly fit into flaring channel 3 and is also provided at its lower terminal with a filling 11 for plugging the depression or cavity 4 in the front portion of the crown. The vertical portions of members 7 and 8 are semicircular in cross-section and are arranged, when in position in the crown, with their flat surfaces in juxtaposition to form a cylindrical post 12, which is provided with screw-threads 13 to receive a clamping-nut 14, which when screwed down against the upper surface of the crown holds the two members together and tightly draws their oblique ends in contact with the walls of their respective channels, thus rigidly securing the crown from all independent movement.

The filling 11, which is provided for the purpose of giving the crown the appearance of a natural tooth and also to render it sanitary by excluding particles of food and saliva from channel 3, is then worked down flush with the surface of the crown and burnished, and post 12 after being soldered at its upper end to hold its two members together is prepared with a coating of cement and inserted into the canal of the natural root.

While a crown provided with our improved anchor is braced and reinforced against accidental fracture while in use by the forked end of the anchor, if such fracture should occur the anchor may be readily unscrewed from the root without recourse to drilling, which method is not only slow, but is apt to result in serious injury to the root by the bur piercing the same.

Should it be desirable in any instance to have the front surface of the crown unbroken by the filling, it is obvious that we could without departing from the spirit or scope of our invention reverse the position of the channels so the lower terminal of the larger one would appear at either side or to the rear of the crown.

Having thus described the invention, what we claim as new, and desire to secure by Letters Patent, is—

1. An artificial denture comprising a crown
5 provided with diverging channels, one of which
has a flaring end, an anchor consisting of two
members and which is separable from the
crown, means for securing the members of the
anchor together and to the crown, and diverg-
10 ing portions at one end of the anchor adapted
to snugly fit the channels in the crown, sub-
stantially as described.

2. An artificial denture comprising a crown
provided with diverging channels, an anchor
15 comprising two separate detachable members,
oblique portions at one end of each of said
members adapted to engage the channels in
the crown, and suitable means for securing
the two members of the anchor together, sub-
20 stantially as described.

3. An artificial denture comprising a crown
having an exterior-wall cavity and diverging
channels, one of which communicates with the
cavity in the wall of the crown, an anchor
25 consisting of two members having diverging
portions at one end adapted to snugly fit the
channels in the crown, means for securing the

members together and to the crown, and a
filling on the terminal of one of the diverging
portions adapted to fit the cavity in the wall 30
of the crown.

4. An artificial denture comprising a crown
provided with diverging channels, an anchor
consisting of two members comprising a
threaded post at one end and diverging oppo- 35
site ends adapted to engage the channels in
the crown, and a nut for securing the mem-
bers of the anchor together and to the crown,
substantially as described.

5. An artificial denture comprising a crown 40
provided with diverging channels, an anchor
consisting of two separate detachable mem-
bers comprising a post at one end and diverg-
ing opposite ends adapted to engage the chan-
nels in the crown, and suitable means for re- 45
movably securing the members together and
to the crown.

In testimony whereof we affix our signatures
in the presence of two witnesses.

OLIVER C. HALDEMAN.

JOHN R. HALDEMAN.

Witnesses:

F. G. FISCHER,

G. Y. THORPE.