F. H. SKINNER.

ANCHORAGE FOR DENTAL BRIDGE AND CROWN PLATES.

APPLICATION FILED DEC. 19, 1913.

1,140,538. Patented May 25, 1915.

Fig. 1.

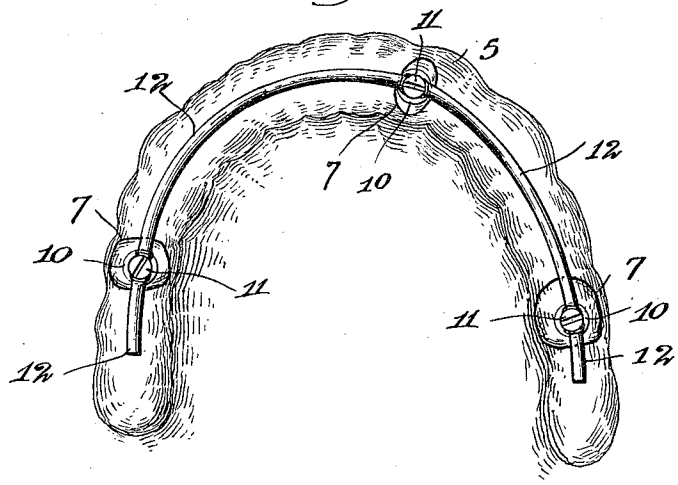


Fig. 2.

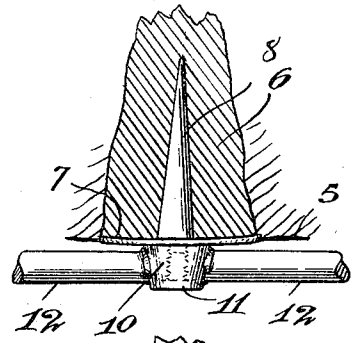
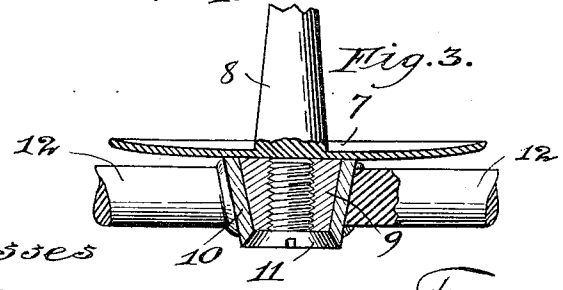


Fig. 3.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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ANCHORAGE FOR DENTAL BRIDGE AND CROWN PLATES.

1,140,538. Specification of Letters Patent. Patented May 25, 1915.

Application filed December 19, 1913. Serial No. 807,581.

To all whom it may concern:

Be it known that I, FRANK H. SKINNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Anchorages for Dental Bridge and Crown Plates, of which the following is a specification.

This invention relates to improvements in dentistry, and has reference more particularly to a new and improved anchor device for removably attaching bridge and crown plates to natural teeth.

The present invention relates to bridge and crown plate anchorages of the general character of that disclosed in Letters Patent of the United States No. 1,022,070, granted April 2, 1912, to S. F. Gilmore, wherein the bridge-plate carrying one or more spring clamps or clips is removably attached through the agency of said spring clamps or clips to a round anchor bar that is in turn soldered to permanently attached abutments on natural teeth.

The object of my present invention is to provide an improvement in an anchor bar of this character, more particularly in the direction of providing an improved attachment of said anchor bar to the abutments, whereby the said anchor bar can be readily removed and replaced when required for purposes of cleaning or repair or renewal in case of breakage.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a plan view of an upper jaw with all the teeth gone except three roots, and showing my improved anchor bar secured to the latter and extending along substantially the median lines of the sides and front of the jaw. Fig. 2 is a side elevation, enlarged, of one of the devices for removably attaching the anchor bar to the abutment on the root of a natural tooth, the root of said tooth, and adjacent parts of the gum being shown in section. Fig. 3 is a still further enlarged detail view in axial vertical section through the attaching device.

Referring to the drawing, 5 designates the gum of an upper jaw from which, in the instance shown, all the teeth are gone excepting three roots, one of which latter is shown at 6 in Fig. 2. To the lower end of the root 6, suitably prepared therefor, is secured an abutment member 7 by means of an anchor pin or post 8 thereon which enters the canal of the root and is cemented therein, as indicated in Fig. 2, and as well understood in the art. Soldered or otherwise secured to the outer face of the abutment member 7 is an internally threaded boss 9 (Fig. 3), the outer surface of which is preferably slightly conical, as shown. Snugly fitted around the boss 9 is a correspondingly tapered or conical metal sleeve 10 which, at one end, rests upon the abutment member 7, and, at its other end, is strongly secured in place by the head of a screw 11 that is entered into the threaded bore of the boss 9. Soldered to and extending between adjacent sleeves 10 are the sections of the round anchor bar 12, with which anchor bar the spring clamps or clips of the bridge-plate (not shown) engage.

In applying the device, the root 6 is first suitably prepared, the abutment member 7, carrying the boss 9 is then fitted and permanently secured to the root, the anchor bar carrying the sleeves 10 is next applied by forcing said sleeves snugly over the tapered bosses 9, and the anchor bar and the sleeves are then secured in place by entering the screws 11 into the bosses 9. In the use of dental bridge anchorages of this type it not infrequently happens that a break in the anchor bar or some other accident or defect necessitates the removal of the same for repair or replacement by a new anchor bar; and where this anchor bar is permanently united to the roots of the teeth, this operation is a more or less difficult and disagreeable one. It will be readily seen that by my present invention the entire anchor bar can be instantly removed by simply withdrawing the screws 11 and slipping the sleeves 10 off the supporting bosses 9, and the same may be applied with equal facility; thereby making it entirely unnecessary to remove the abutment members 7 and their pins or posts 8 from the roots of the teeth. Sometimes a root will cause an abscess or an abutment work loose. With this appliance it is unnecessary to take off any part that is already well secured and in a healthy condition.

I claim—

1. The combination with an abutment member adapted to be permanently secured to a natural tooth, of a boss carried by said abutment member, a sleeve removably at-

tached to said boss, and an anchor bar attached to said sleeve.

2. The combination with an abutment member adapted to be permanently secured to a natural tooth, of an internally threaded boss carried by said abutment member, a sleeve fitted to said boss, a screw threaded into said boss and having its head engaging and clamping said sleeve onto said boss, and an anchor bar attached to said sleeve.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."