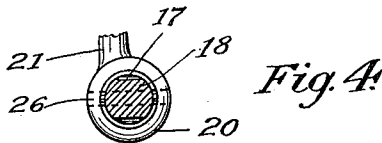
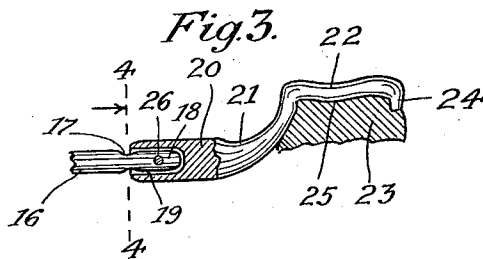
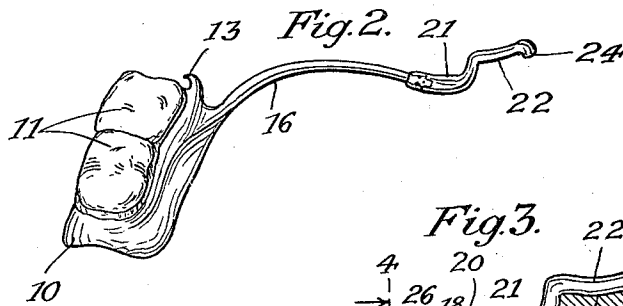
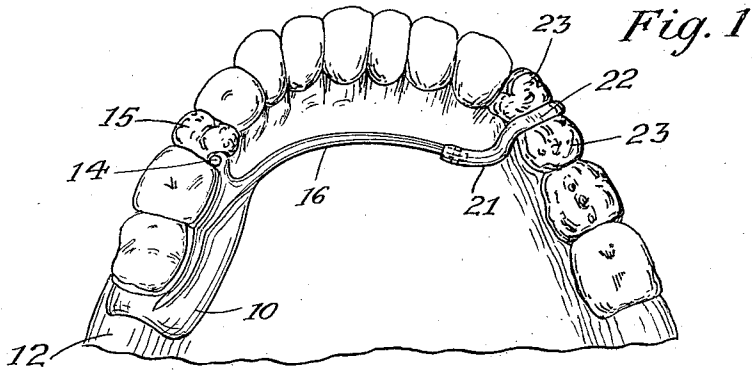


H. P. BOOS.
DENTAL PLATE HOLDER.
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1,140,566.

Patented May 25, 1915.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY P. BOOS, OF MINNEAPOLIS, MINNESOTA.

DENTAL PLATE-HOLDER.

1,140,566.

Specification of Letters Patent.

Patented May 25, 1915.

Application filed November 5, 1914. Serial No. 870,430.

To all whom it may concern:

Be it known that I, HENRY P. Boos, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Dental Plate-Holders, of which the following is a specification.

My invention relates to dental plate holders and has for its object to provide means for holding a plate carrying one or more teeth upon a jaw by anchoring said plate to roots at each side of the jaw, and connecting the anchoring means so as to permit some movement of the plate in accommodating the same to the jaw.

The full objects and advantages of my invention will appear in connection with the detailed description thereof and are particularly pointed out in the claims.

In the drawings, illustrating the application of my invention in one form, Figure 1 is a plan view of a portion of the lower jaw showing a plate held in position by my improved securing means. Fig. 2 is a similar view of the plate and securing means detached from the jaw. Fig. 3 is an enlarged part sectional view of the joint formed in the securing member. Fig. 4 is a sectional view on line 4—4 of Fig. 3. Fig. 5 is an enlarged sectional view taken longitudinally through the pin 26 to show the sliding connection of head 18 on said pin.

As illustrated, a plate 10 carrying teeth 11 is shaped in a well known manner to fit upon a toothless portion 12 of the gum of the lower jaw. The plate 10 is provided with a socket 13 which engages a pin 14 secured to a crown 15 on a permanent tooth root. The plate 10 is extended inwardly, as shown, and has connected with the forward portion thereof a forwardly extended curved arm 16, which arm will occupy a position in the mouth back of the front teeth of the lower jaw and below the tongue. If used for the upper jaw the arm will extend straight across below the palate. The outer end of arm 16 is provided with a diminished collar 17 and has a head 18 extended within a socket 19 opening into the end 20 of a retaining piece 21 which has an anchor member 22 adapted to seat within a prepared groove 25 in a crown or crowns 23. A hook portion 24 on the end of anchor piece 22 engages a shoulder at the end of the groove 25 and holds said anchor piece from

lateral displacement, the arrangement being such that the anchor piece may have some oscillatory movement which will permit swinging of the end 20. The head 18 of the pin 16 is of smaller diameter than the socket 19 and is pivotally secured therein by means of a pin 26 which extends through the wall of end 20 surrounding socket 19 and through the head 18, as clearly shown in Fig. 3. The head 18 is free to slide on pin 26 and to pivot on the same, being loosely mounted on said pin. By this means, when the plate 10 has been secured through post 14 and socket 13 to one side of the jaw and through arm 16 and retaining piece or arm 21 to the other side of the jaw, the hinge connection through head 18 and pin 26 in socket 19 permits some relative movement of the plate 10 about post 14 as a pivot whereby said plate may accommodate itself perfectly to the gum surface to which it is applied even after the gum undergoes some change in form due to the application and use of the plate thereon, as is usually the case. It will thus be seen that I have provided an anchoring means for the plate which is adapted to hold the same from both sides of the jaw and permit the plate to fit accurately and in a thoroughly effective manner the gum portion thereof.

I claim:

1. In combination with a removable dental plate and the teeth thereon, means for anchoring said plate at both sides of the jaw, and a member connecting said anchoring means comprising portions adapted to permit movement of the plate relative to the points of anchorage so that said plate may accommodate itself to the gum surfaces to which it is applied.

2. In combination with a removable dental plate and the teeth thereon, means for anchoring the plate to a permanent root in the jaw adjacent the point of application of the plate, a curved arm extending forwardly from said plate and adapted to occupy a position back of the front teeth extending to a point near the jaw at the other side of the mouth, a retaining piece movably secured to a permanent root or roots of the jaw at such other side, and means connecting said arm and retaining piece to permit relative movement thereof.

3. In combination with a removable dental plate and the teeth thereon, means for anchoring the plate to a permanent

root in the jaw adjacent the point of application of the plate, a curved arm extending forwardly from said plate and adapted to occupy a position back of the front teeth
5 extending to a point near the jaw at the other side of the mouth, a retaining piece movably secured to a permanent root or roots of the jaw at such other side, said retaining means having a socket on the end
10 thereof, a head on the end of the arm of

less diameter than said socket extending within the socket, and a pin fast in the end of the retaining piece extending across said socket and loosely through said head.

In testimony whereof I affix my signature 15
in presence of two witnesses.

HENRY P. BOOS.

Witnesses:

F. A. WHITELEY,
H. A. BOWMAN.

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