

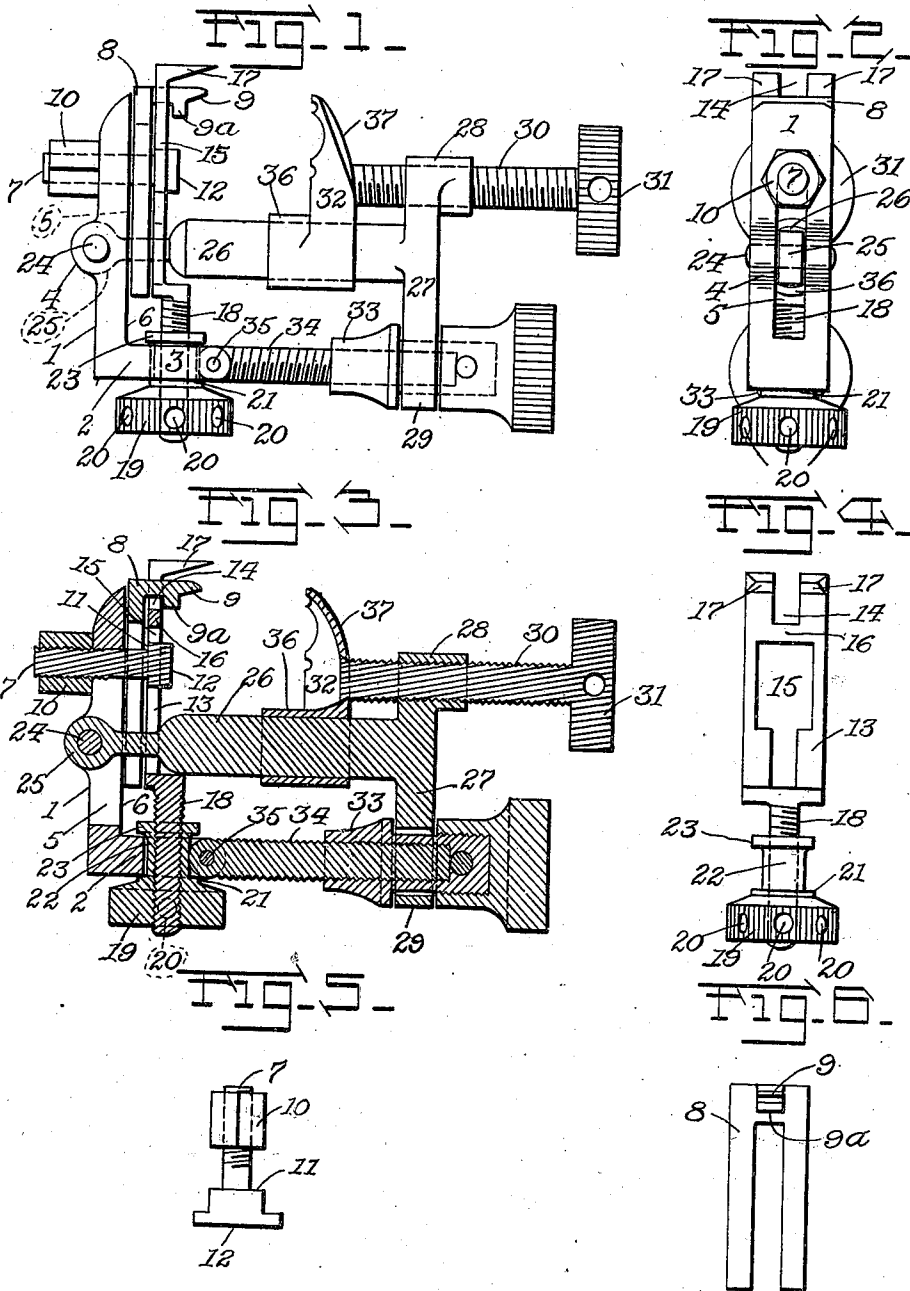
W. H. MOSLEY.

DEVICE FOR THE REMOVAL OF ARTIFICIAL POST TOOTH CROWNS.

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996,113.

Patented June 27, 1911.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM H. MOSLEY, OF TORONTO, ONTARIO, CANADA.

DEVICE FOR THE REMOVAL OF ARTIFICIAL-POST-TOOTH CROWNS.

996,113.

Specification of Letters Patent. Patented June 27, 1911.

Application filed September 23, 1909. Serial No. 519,212.

To all whom it may concern:

Be it known that I, WILLIAM HAROLD MOSLEY, a British subject, residing at Toronto, in the Province of Ontario, Dominion of Canada, have invented a new and useful Device for the Removal of Artificial-Post-Tooth Crowns, of which the following is a specification.

This invention relates to improvements in the art of dentistry; and the prime object of my improvement is to present means whereby those artificial teeth technically termed "post tooth crowns" can be readily removed, without any or material damage or injury, from the natural roots of the teeth to which they have been firmly cemented or otherwise affixed, either singly or in combination with other teeth such as anchorages or abutments in crown and bridge work.

I am well aware that inventions have been made of devices for removing dental structures known as shell or cap crowns, bands, ferrules, etc., but I am not aware that heretofore the dentist has had any mechanical appliance to remove post teeth crowns without the aid of the well-known "drill," and the use of the latter is not only laborious and exceedingly painful to the patient but frequently entails the fracture of the crown or injury to the root or both. The desideratum aforesaid, as well as other advantages to be observed by a reading of the following description, I attain by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a side elevation of the assembled or complete device; Fig. 2 an end view thereof; Fig. 3 a cross-section; and Figs. 4, 5, and 6 detail views of certain parts of the tool, hereinafter to be particularly described.

Throughout the several views like numerals refer to like parts.

In the practice of my invention I present what may broadly be termed or characterized as a vise or clamping device and a prying or "jacking" device coöperating therewith. There is provided a comparatively heavy plate 1, having a right angled projection 2 terminating in opposed arms 3, opposed bosses 4 apertured in register, and a central slot 5. Fastened to inner face 6 of plate 1 by bolt 7 is a plate 8, the latter being normally stationary and upwardly terminating in a shouldered wedge or tongue 9. Bolt 7 not only locks plate 8 into fixed position through the tightening, by means of nut

10, of its shoulder 11 thereagainst, but its T-shaped extremity 12 serves to maintain in upright position a vertically movable skeleton plate 13. The latter is constructed with a narrow slot 14, which is separated from a larger slot 15 by a bar 16, and as the continuation of slot 14 there projects at a right angle a forked wedge 17, while from the lower termination of slot 15 depends a threaded rod 18 engaging a rotatable threaded cap 19. The latter, having apertures 20 for the possible insertion of a lever, is formed with an annular shoulder 21 from which rises a narrow throat 22 terminating in an annular flange 23, and said throat being disposed between arms 3 of plate 1 it follows that said shoulder and flange bear, respectively, upon the lower and the upper surface of said arms. Thus cap 19 while freely rotatable is normally locked in its illustrated position.

Hinged by a pin 24 to bosses 4 of plate 1 is an attenuated extremity 25 of a comparatively heavy rod 26 which connects with the central portion of what may be termed a cross-head 27, an extremity 28 of said cross-head being apertured and threaded, while its opposite extremity 29 is merely apertured. Through aperture 28 works threaded rod 30, having cap 31 and engaging a device 32, while through aperture 29 is projected threaded socket 33 engaging threaded rod 34, the latter hinged by pin 35 between arms 3 of plate 1. Device 32 comprises an apertured cylinder 36 adapted to ride rod 26 upon revolution of cap 31, and formed as a right-angled continuation of said cylinder is a shell 37 adapted to fit the labial or outside contour of crowns or facings thereof, there being a cushion of blotting-paper, felt or cotton placed in said shell when operating in order to further insure against fracture of the porcelain or other material of which the crown is made.

In operation, the tooth, consisting of a natural root and a crown affixed thereto by post and cement, is placed between shell 37 and plates 8 and 13. Wedges or tongues 9 and 17 are next positioned directly opposite the posterior aspect of the union of crown with root and shell 37 forced against the labial side of said tooth by turning cap and rod 31, 30, the proper angle of adjustment being gained by the ability to vertically raise or lower cross-head 27 and, in consequence, the parts supported thereby by

working socket 33 inwardly or outwardly upon rod 34. When said wedges have been thus forced into said joint, threaded cap 19 is rotated, either to right or left as the location of the tooth demands, which action positively raises or lowers plate 13 and thus separates forked wedge 17 from its first position in horizontal alinement with wedge 9. The latter remaining fixed in its position, as aforesaid, and its shoulder 9^a being firmly seated over the edge of the crown, it follows that said movement of plate 13 and its wedge 17 operates to separate the crown from the root, whereupon the crown is removed from the mouth undamaged.

What I claim as new and desire to secure by Letters Patent is:—

1. A dental crown remover comprising members adapted to grip the tooth operated upon, means to regulate the distance between said members, devices adapted to enter between the crown and tooth-root, and means for separating one of said devices from the other whereby the separation of the crown from the root is effected.

2. A dental crown remover comprising members adapted to grip the tooth operated upon, means to regulate the distance be-

tween said members, devices adapted to enter between the crown and tooth-root, means whereby one of said members may be adjusted parallel with or at an angle to the other member, and means for separating one of said devices from the other.

3. A dental crown remover comprising devices adapted to enter between the crown and tooth-root, means for the disposition and retention of said devices between said crown and root, and means for separating one of said devices from the other.

4. A dental crown remover comprising members adapted to grip the tooth operated upon, means to regulate the distance between said members, devices adapted to enter between the crown and tooth-root, and means for separating one of said devices from the other, the entrance of said devices between said crown and root effected by juxtaposing said members.

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

W. H. MOSLEY.

Witnesses:

MARY E. GIBSON,
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