

No. 833,375.

PATENTED OCT. 16, 1906.

L. DOLLAR.

DENTAL INSTRUMENT FOR SLITTING AND REMOVING CAP CROWNS.

APPLICATION FILED AUG. 3, 1906.

Fig. 1.

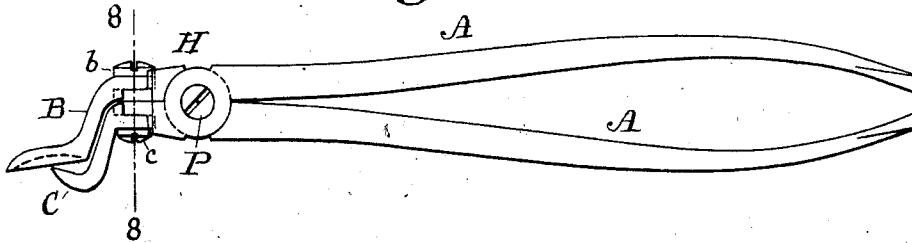


Fig. 2.

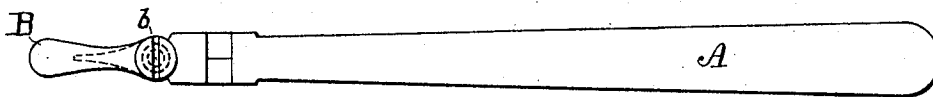


Fig. 3.

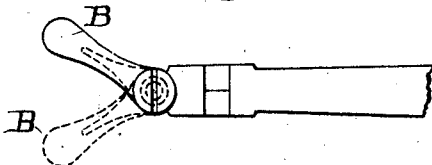


Fig. 4.

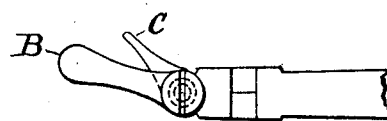


Fig. 5.

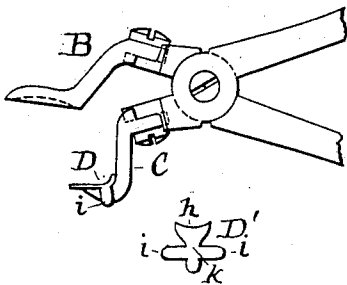


Fig. 6.

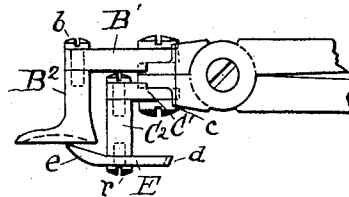


Fig. 8.

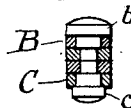


Fig. 7.

Witnesses
R. J. Snyder
James C. Kerr

Inventor
Leo Dollar
by John Dolman
Attorney

UNITED STATES PATENT OFFICE.

LEO DOLLAR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO EDWARD H. BERRY, OF PHILADELPHIA, PENNSYLVANIA.

DENTAL INSTRUMENT FOR SLITTING AND REMOVING CAP-CROWNS.

No. 833,375.

Specification of Letters Patent.

Patented Oct. 16, 1906.

Application filed August 3, 1906. Serial No. 329,040½.

To all whom it may concern:

Be it known that I, LEO DOLLAR, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Dental Instrument for Slitting and Removing Cap-Crowns, of which the following is a specification.

The object of my invention is to provide a tool by means of which cap-crowns on any tooth may be conveniently slit from the inner side without interfering with the view of the operator and by means of which the cap-crown may be forced off of the tooth after it is slit.

Referring to the drawings, Figure 1 is a side view of my improved instrument as arranged for slitting. Fig. 2 is a top view of the same. Figs. 3 and 4 are similar top views with the handles cut off and showing the jaws in different positions. Fig. 5 is a side view, the handles cut off, showing the instrument as adjusted for removing cap-crowns. Fig. 6 shows a modification. Fig. 7 is a view of the blank from which the contact-piece is formed, and Fig. 8 represents a section through 8 8 of Fig. 1.

The instrument is provided with handles similar to those of other dental instruments, which are hinged on a main pivot P in the usual manner. The bearing-jaw B to rest against the tooth and afford a purchase in operating has an extended bearing-surface, preferably spoon-shaped, as shown. The cutting-jaw C has a cutting-surface for slitting the cap-crown. Each jaw is independently adjustable in a plane parallel with the pivot P by rotating the same on the screw-pivots *b* and *c*. The jaws are so curved as to bring the cutting or operating point below the head of the instrument H when in the position for operating on the patient's lower jaw, as in Fig. 1, or above the head of the instrument when reversed, as in operating on the patient's upper jaw, thus allowing the instrument to clear the jaws of the person operated on. The jaws of the instrument are held in their adjusted position by friction which may be regulated by tightening or loosening the screw-pivots *b* and *c*.

A separate contact-piece D is provided, which may be slipped over the cutting-jaw

C, as shown in Fig. 5, thus converting the instrument into a cap-crown remover by covering up the cutting edge and causing it to exert a lifting instead of a cutting action. This contact-piece D is formed from a blank D', (shown in Fig. 7,) having a crescent-shaped edge *h*, a body portion *k*, and two wings *i i*. These wings are bent down until close enough together to fit with a good spring tension on the point of the jaw C, as in Fig. 5. The contact-piece may then be slipped on or off of the point, as required.

In slitting cap-crowns for the removal thereof it is of advantage to slit them from the inner side, because the inner side being usually finished with less perfection than the outer it is easier to get the point of the cutting-jaw under the edge of the cap-crown, and also because if the cap-crown is to be soldered together and used over again the line of jointure will then be on the inside and out of sight. With my instrument it is possible to thus slit the cap-crown on any tooth from the inner side by turning the jaws to one side or the other, as shown in Fig. 3 and as is obvious to any dentist.

The condition of the dental work may sometimes make it desirable that the bearing-jaw B should rest against a tooth other than the one being operated on. This is especially true when removing the cap-crown after slitting, and this adjustment may be readily made with my instrument by simply turning the two jaws to different angles, as indicated in Fig. 4 and as would be obvious to any dentist.

A modification of my instrument is illustrated in Fig. 6, in which the jaws instead of being simple curved pieces of metal are each formed of two pieces pivoted together, as shown—the bearing-jaw B' and B² and the cutting-jaw C and C². These two parts of each jaw may be rotated on each other in addition to the rotation on the screw-pivots *b* and *c*, as in Fig. 1. By the rotation of the piece B² its spoon-shaped bearing-surface may be caused to lie along the edges of two or more teeth, if desired. In the piece C² of the cutting-jaw the cutter E is made of a separate piece secured to the jaw by the screw *r*, on which it may be rotated. One end of the cutter E has a cutting edge *e* and

the other end a flat edge *d*, the former being used for slitting and the latter for forcing off or removing the cap-crown after slitting.

The modification shown in Fig. 6 has the advantage of the reversible cutter E, the rotating piece B², and a somewhat cheaper construction; but for ordinary use I prefer the form illustrated in the other figures.

What I claim is—

10 1. A dental tool for slitting cap-crowns having the pivoted handles, a bearing-jaw adjustable in a plane parallel with the handle-pivot, a cutting-jaw, also adjustable in a plane parallel with the handle-pivot but independently of the bearing-jaw, substantially
15 as shown and described.

2. A dental tool for slitting cap-crowns having the pivoted handles, a bearing-jaw, adjustable in a plane parallel with the handle-pivot, a cutting-jaw independently adjustable in a plane parallel with the handle-

pivot, and both jaws curved to bring the operating-point above or below the head of the instrument as shown and described.

3. A dental tool for slitting and removing 25 cap-crowns, having pivoted handles a bearing-jaw and a cutting-jaw each independently adjustable in a plane parallel with the handle-pivot, each curved to bring the operating-point above or below the head of the 30 instrument, and a separate contact-piece attachable to the point of the cutting-jaw, as shown and described and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEO DOLLAR.

Witnesses:

JOHN DOLMAN,
HENRY S. CALLAWAY.