(No Model.)

A. I. F. BUXBAUM.

RUBBER DAM CLAMP.

No. 482,618. Patented Sept. 13, 1892.

Fig. 1.

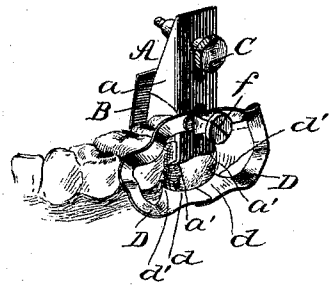


Fig. 2.

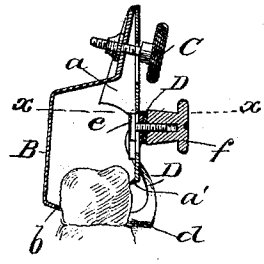
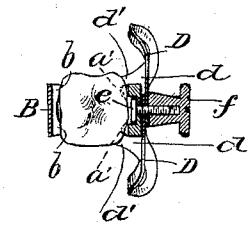


Fig. 3



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RUBBER-DAM CLAMP.

SPECIFICATION forming part of Letters Patent No. 482,618, dated September 13, 1892.

Application filed June 13, 1892. Serial No. 436,609. (No model.)

To all whom it may concern:

Be it known that I, ASHER I. F. BUXBAUM, of Walnut Hills, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Dental Cervix-Clamps, of which the following is a specification.

My invention is in the nature of an improvement in dental cervix-clamps which are used for pushing back and holding back the gum and rubber dam from the neck of the tooth, so as to permit of the treatment of decay-cavities occurring at this point.

It consists in the peculiar construction and arrangement of parts of the clamp, whereby it is adapted to fit the neck of any-sized tooth and its parts rendered adjustable and interchangeable, as hereinafter fully described.

Figure 1 is a perspective view of my clamp shown applied to a tooth. Fig. 2 is a vertical section, and Fig. 3 a horizontal section through line *x x* of Fig. 2.

In the drawings, A represents the main frame, which has inclined flanges *a a* upon its sides, between which is held and adjusted the thickened end of the arm B, which is bent twice at right angles and terminates at its lower end in clutch-points *b b*, that engage with the inner neck portion of the tooth. The main frame A also terminates at its lower end in points *a' a'*, that clutch against the tooth, and said main frame A is also slotted both at its upper and lower portions to connect with the other parts. It is connected adjustably to the inner bent arm B by means of a set-screw C, which passes through the upper slot and is tapped into the screw-threads of the thickened upper end of said arm. When this set-screw is turned up, it draws the bent arm and the main frame together and causes the tooth to be clutched between the points *a' a'* and *b b*.

To the lower end of the main frame are adjustably and removably attached the curved arms D D. These arms are made alike in the form of a semi-elliptical curve and terminate at their lower ends in blades *d d* with teeth or spurs *d' d'* on their inner edges, which embrace between them the neck of the tooth. These curved arms D are connected to the main frame A by a pivotal clamp consisting of a slide *e*, moving vertically in guides in the main frame and having a screw-stem that passes through the slot in the main frame and also through the pivot-holes of the arms D. Upon the protruding end of this screw-stem is turned a nut *f*, terminating as a knob, with a nick in it for tightening it by a screw-driver. This pivotal connection for the arms permits by reason of the slot in the main frame of the vertical adjustment of the arms to correspond to the height and length of the tooth. It also permits of the pivotal adjustment of the arms, which serves to bring the spurs or teeth and the blades on the lower edges of the arms closer together or farther apart in spanning the neck of a larger or smaller tooth. The lower edges of these blades may be made straight, but are preferably curved in such a manner that when brought together or separated they still form a curve. After the arms have been fitted to the neck of the tooth the nut *f* may be tightened, so as to lock the pivotal connection and clamp the parts together. It will thus be seen that the adjustable arms D adapt the clamp to any-sized tooth from an incisor to a molar or from a short to a long tooth, and if said arms or either of them become damaged they may be easily removed and replaced with another or others.

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

1. A dental cervix-clamp having arms D D, with teeth or spurs adapted to embrace between them a portion of the neck of the tooth, the said arms being pivotally connected to the clamp and made adjustable, as described.

2. In a dental cervix-clamp, the arms D D, with teeth or spurs adapted to embrace between them a portion of the neck of the tooth, in combination with a slide moving vertically in the clamp-frame and having a screw-stem passing through the arms and forming a connection for the same and a screw nut or knob fitting said screw-stem and

adapted when turned up to rigidly fix the arms to the clamp, substantially as shown and described.

3. A dental cervix-clamp consisting of the flanged and slotted main frame A and the bent arm B, having clutch-points at their lower ends, the clamp-screw for fastening the two together, and the pivotally connected and adjustable arms D D, with means for rigidly connecting the same to the main frame, substantially as shown and described.

ASHER I. F. BUXBAUM.

Witnesses:
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