

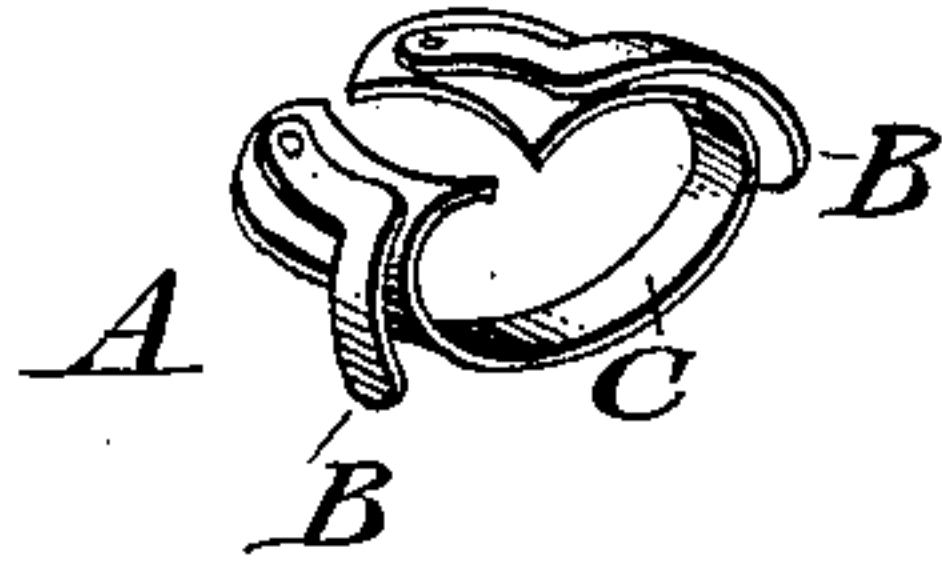
(No Model.)

J. W. IVORY.  
RUBBER DAM CLAMP.

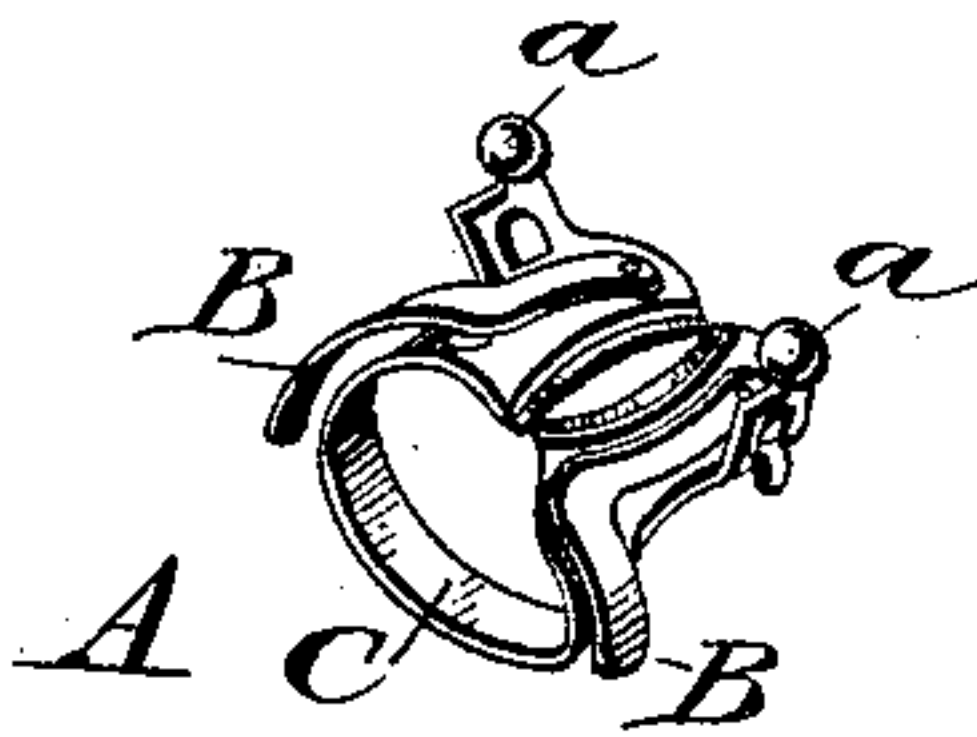
No. 435,228.

Patented Aug. 26, 1890.

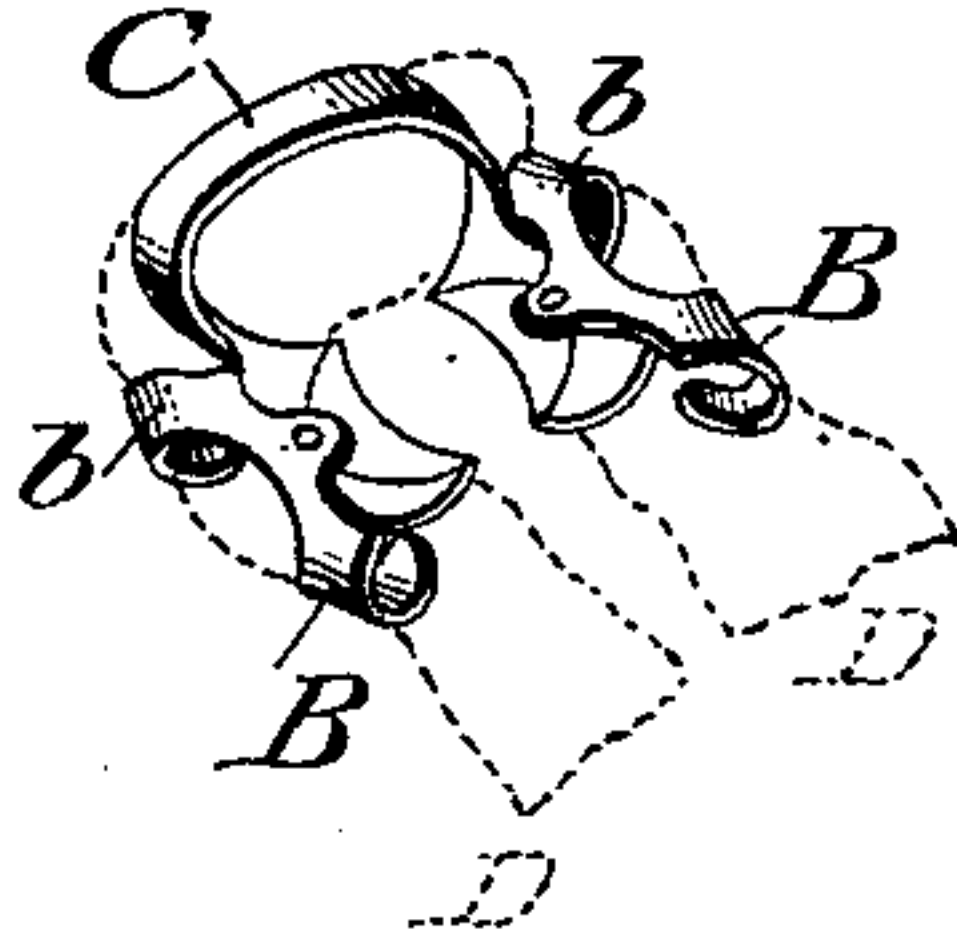
*Fig. 1.*



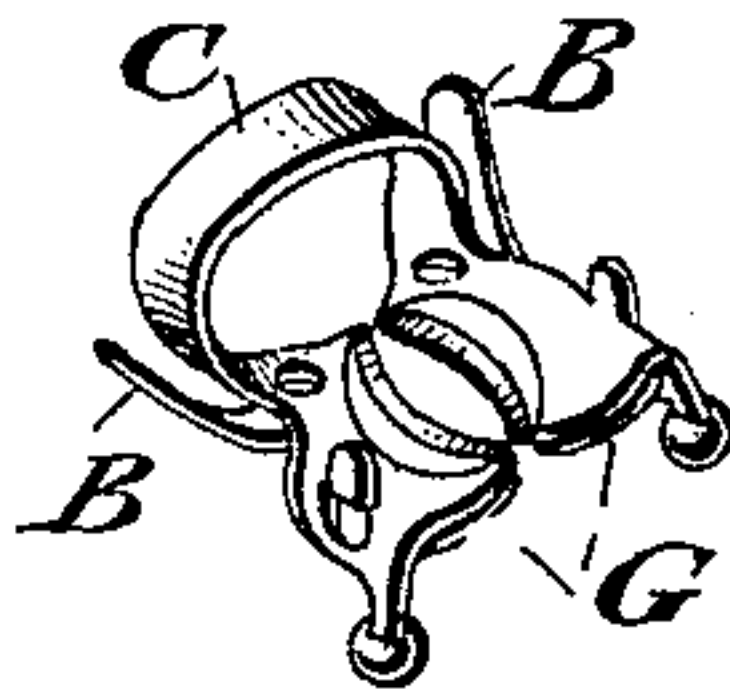
*Fig. 2.*



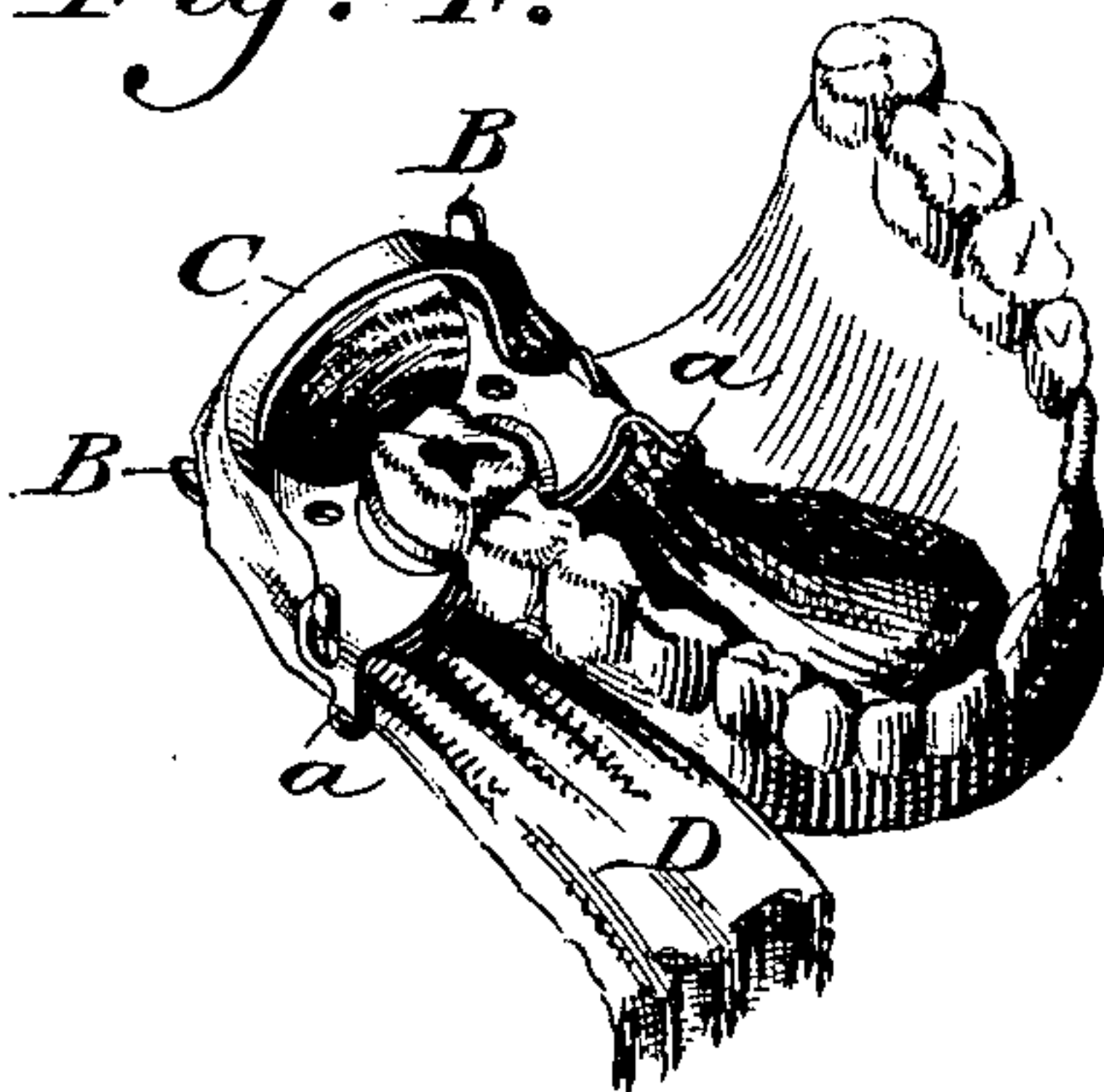
*Fig. 6.*



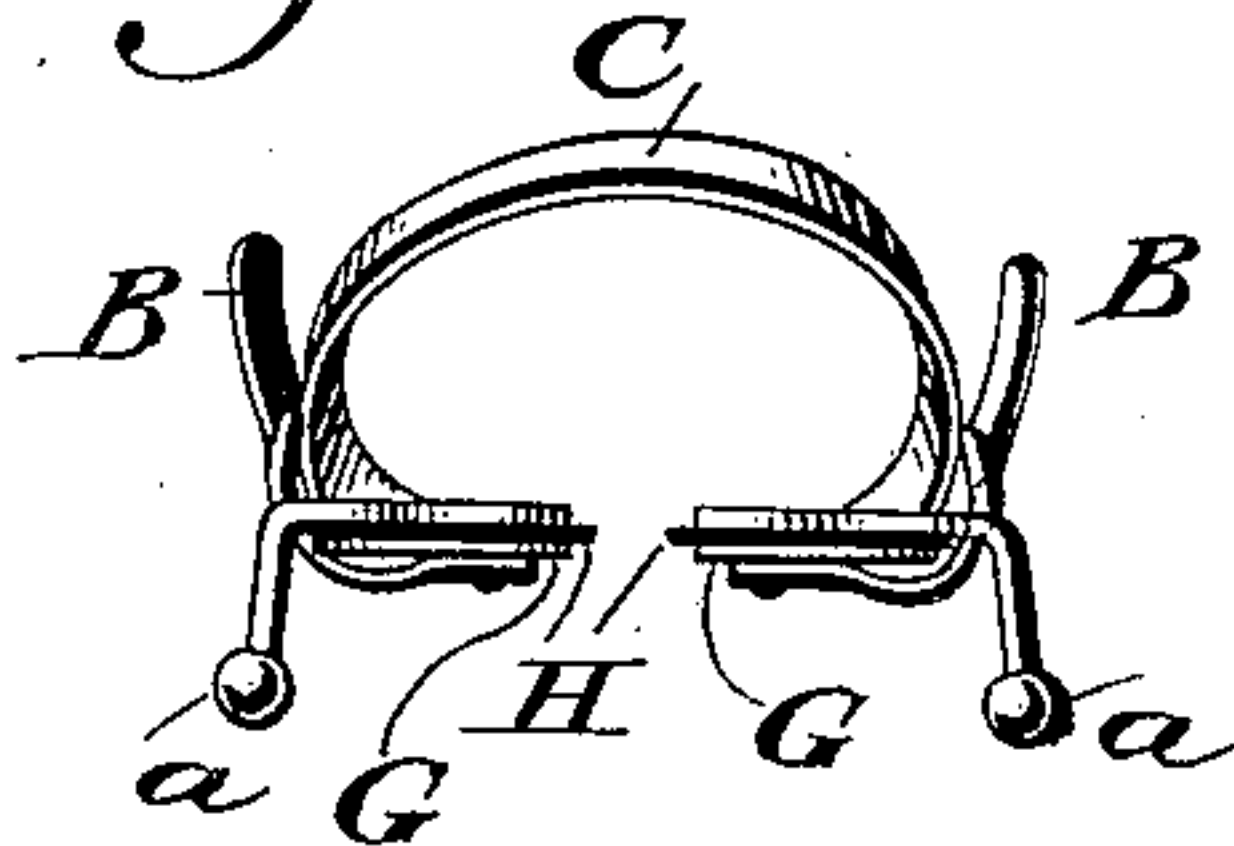
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES W. IVORY, OF PHILADELPHIA, PENNSYLVANIA.

## RUBBER-DAM CLAMP.

SPECIFICATION forming part of Letters Patent No. 435,228, dated August 26, 1890.

Application filed December 21, 1889, Serial No. 334,503. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES W. IVORY, a subject of the Queen of Great Britain, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Rubber-Dam Clamps and Napkin-Carriers, which improvement is fully set forth in the following specification and accompanying drawings.

10 This invention consists of a rubber-dam or napkin carrier provided with spring attachments for holding and carrying a napkin or absorbing cotton, punk, or bibulous paper into the mouth with the clamp, thereby avoiding  
15 the operation of adjusting the napkin and afterward mounting the clamp in position, as will be more fully hereinafter explained.

20 The invention further consists of constructing the base of the clamp of two thicknesses of metal and interposing an elastic material between the same for a purpose more fully hereinafter set forth.

25 Figure 1 represents a perspective view of an inverted clamp or holder embodying my invention. Fig. 2 represents a similar view of a varied form of clamp with the attachment applied thereto. Fig. 3 represents a view of the clamp in a reverse position, showing the same mode of applying the attachment and the base of the clamp as constructed  
30 of two thicknesses of metal. Fig. 4 represents a perspective view of clamp, showing a piece of material held by the attachment therein and applied in position around a tooth. Fig. 5 represents a front view of a clamp and attachment, showing the interposed elastic material in the base thereof. Fig. 6 represents a perspective view of a clamp with a modified form of the attachment applied  
40 thereto, and showing in dotted lines a piece of material held therein.

Similar letters of reference indicate corresponding parts in the several figures.

45 Referring to the drawings, A designates an ordinary rubber-dam clamp, Fig. 1, with spring-arms B, pivoted to the lower part of the base of the clamp and projecting upward on each side of the bow C of the same. Between these springs and the bow is placed a napkin  
50 D, or piece of bibulous paper or other absorbing material, which is looped around back of

the bow and caught between the bow and the spring-arms B, and thus held intact with said clamp. The napkin is carried into the mouth with the clamp, where it remains in its position while the operation is performed and is removed with the clamp. This arrangement is very advantageous, as it is difficult to arrange a napkin in the mouth and then apply the clamp.

60 As shown in Fig. 6, the arms B are secured to the upper side of the base of the clamp and have loops b formed therewith, that lie below the said base. The form shown in Figs. 2, 3, 4, and 5 is an ordinary napkin-clamp, 65 and is constructed with depending projections a, which embrace the napkin or bibulous material D, held by the arms B, and draw the same under the base of the clamp and closely to the teeth. When the clamp shown in Fig. 70 6 is employed, the napkin or bibulous material is inserted in the loops b of the arm B, and thereby held under the base of the clamp. As seen in Figs. 3 and 5, the base of the clamp has a metal strip or plate G applied thereto, 75 between which and said table is interposed strips of elastic material H, whose inner edges project beyond the adjacent edges of the clamp. This construction insures a firm slightly-yielding engagement of the clamp 80 with a tooth, thereby avoiding direct metallic contact and in a measure forming a dam to prevent saliva from entering the cavity of the tooth being treated.

85 To mount the clamp and attachment in position, spreading forceps are inserted in the bow C, as usual, whereby the said clamp and napkin or bibulous material carried thereby are simultaneously fixed in position, and the napkin thereby prevented from interfering 90 with the operation and allowing light to have unobstructed access to the teeth.

The clamp may also be used as a rubber-dam clamp, the rubber being placed on a tooth and the clamp afterward mounted there- 95 over, thus holding the unengaged rubber away from the teeth.

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

100 1. A dental clamp having arms pivotally attached to the base thereof and projecting



therefrom to hold and carry a napkin or piece of bibulous material, substantially as described.

2. A dental clamp having arms pivotally  
5 attached to the base thereof and formed with loops, said arms extending laterally from said base and adapted to hold and carry a napkin or piece of bibulous material, substantially as described.

10 3. A dental clamp having a base with depending projections and arms attached to said

base and extending laterally therefrom, said parts being combined substantially as described.

4. A dental clamp having a base constructed 15 of two thicknesses of metal, with an interposed elastic material between the same, substantially as described.

JAMES W. IVORY.

Witnesses:

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