

(No Model.)

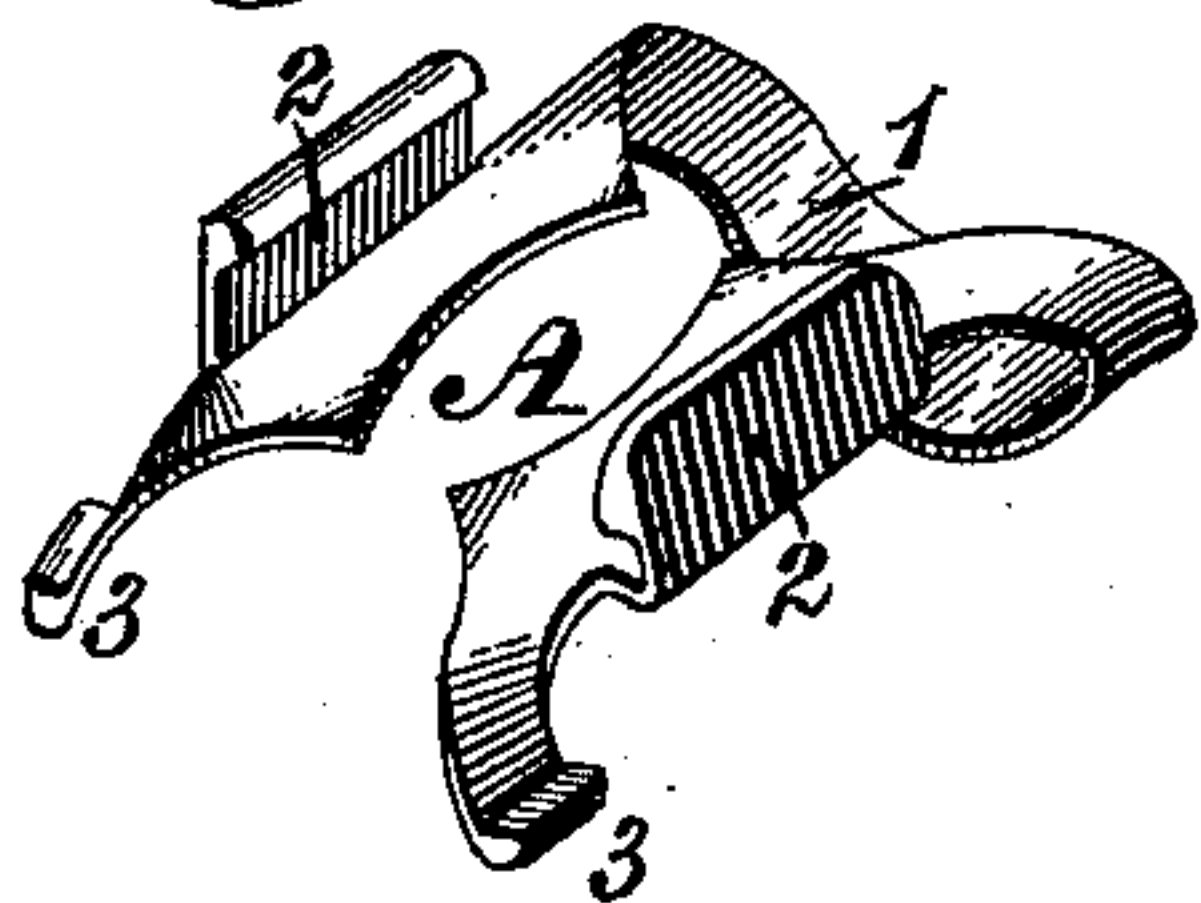
J. W. IVORY.

RUBBER DAM ADJUSTER AND CLAMP.

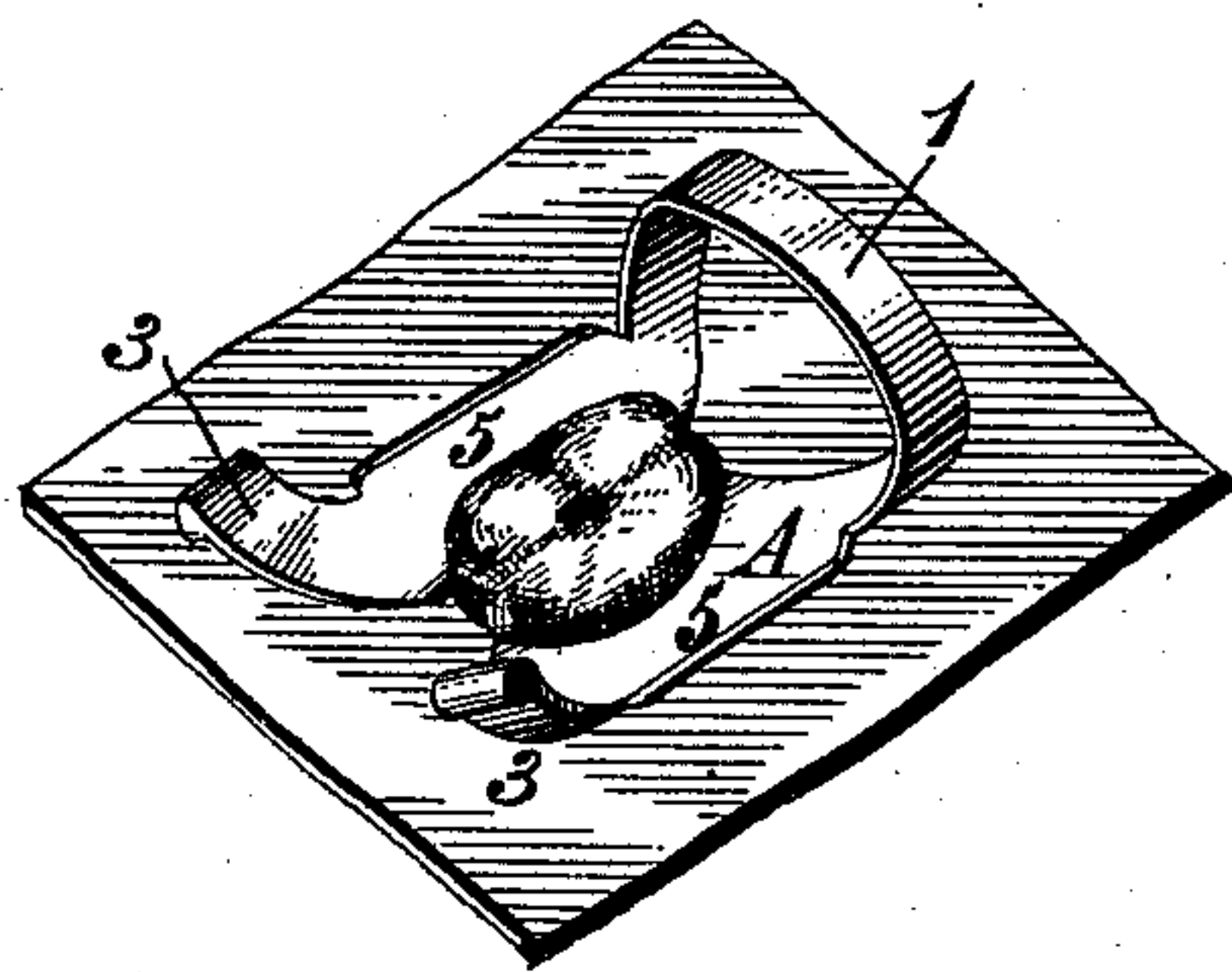
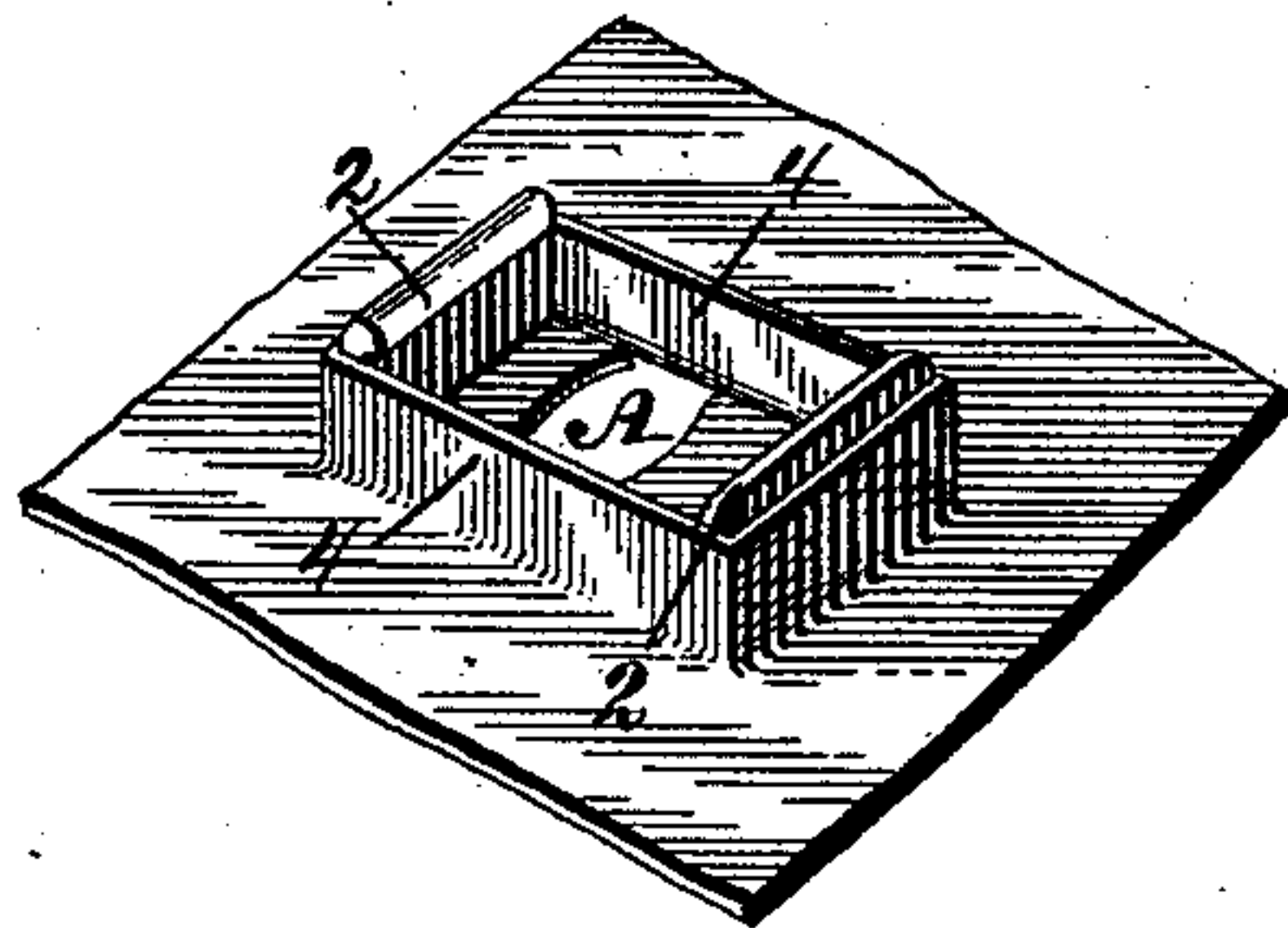
No. 384,578.

Patented June 12, 1888.

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES W. IVORY, OF PHILADELPHIA, PENNSYLVANIA.

## RUBBER-DAM ADJUSTER AND CLAMP.

SPECIFICATION forming part of Letters Patent No. 384,578, dated June 12, 1888.

Application filed January 19, 1888. Serial No. 261,216. (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 Adjusters and Clamps, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists in providing a rubber-dam clamp with means for adjusting the dam upon a tooth and retaining the same in position during an operation, besides assisting to hold the same in such manner that the light is not obscured, said means being hereinafter fully set forth and definitely claimed.

Figure 1 represents a perspective view of a rubber-dam adjuster and clamp embodying my invention. Figs. 2 and 3 represent perspective views of opposite faces thereof, including a piece of the dam, the clamp and dam being in position on a tooth in Fig. 3.

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

Referring to the drawings, A represents the jaws of a rubber-dam clamp, the same being connected by the bowed spring 1, these features, broadly considered, being well known. On the sides of the jaws are arms 2, and on the frontal ends of said jaws are arms 3, said arms 2 3 projecting in opposite directions, the projections being upward and downward relatively to the jaw, to the tooth of which the clamp is applied. The arms 2 are separated such distance as not to strike the gum when the jaws are clamped on a tooth. The arms 3 project from the front of the jaws so as to pass on the sides of the anterior tooth.

The operation is as follows: An opening is made in the dam, as usual, and the arms 2 are inserted therein, said opening being enlarged by stretching the dam so as to receive both of said arms, it being seen that the walls of the opening are thrown up, forming flanges 4, which extend from arm to arm. When the clamp is fitted on a tooth, both flanges 4 readily enter between the adjacent teeth, thus avoiding two distinct manipulations to insert said flanges. The dam is then stripped,

thus fully embracing the tooth, while the clamp retains its position on the tooth, securely holding the dam thereon. During the application of the dam to the clamp or of the latter to the tooth the arms 3 prevent the dam from being carried over the side edges, 5, of the jaws, which action, if occasioned, would interfere with the practical working of the clamp inasmuch that the front wall of the opening in the dam would lose its position and one of the flanges 4 would not be formed. The arms 3 also serve to hold the dam away from the clamp at the front thereof, the same as the spring-bow does at the back, thus preventing the light from being obscured. When the dam is adjusted around the tooth, the arms 2 assist to keep the same out of the way of the operator, and are also adapted to hold a napkin when used in lieu of the dam, the napkin being placed around the arms, and thus retaining its position.

In another application filed by me November 21, 1887, and bearing Serial No. 255,759, and being for a combined rubber-dam clamp and napkin-holder, a device is shown and described having arms and lips which project in different directions. So far as the same or similar features are shown, they are not claimed herein, being claimed in said application referred to above.

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

1. A dental rubber dam adjuster and clamp having jaws and arms projecting upwardly or downwardly from the frontal ends thereof, so as to pass on the sides of the anterior tooth, substantially as described.

2. A dental rubber dam adjuster and clamp having jaws with arms on the sides thereof and arms on the frontal ends thereof, the two sets of arms projecting upwardly and downwardly, as the case may be, in opposite directions, or approximately so, substantially as and for the purpose set forth.

JAMES W. IVORY.

Witnesses:

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