

No. 791,563.

PATENTED JUNE 6, 1905.

R. F. LUDWIG.
RUBBER DAM HOLDER.
APPLICATION FILED MAY 7, 1904.

Fig. 1.

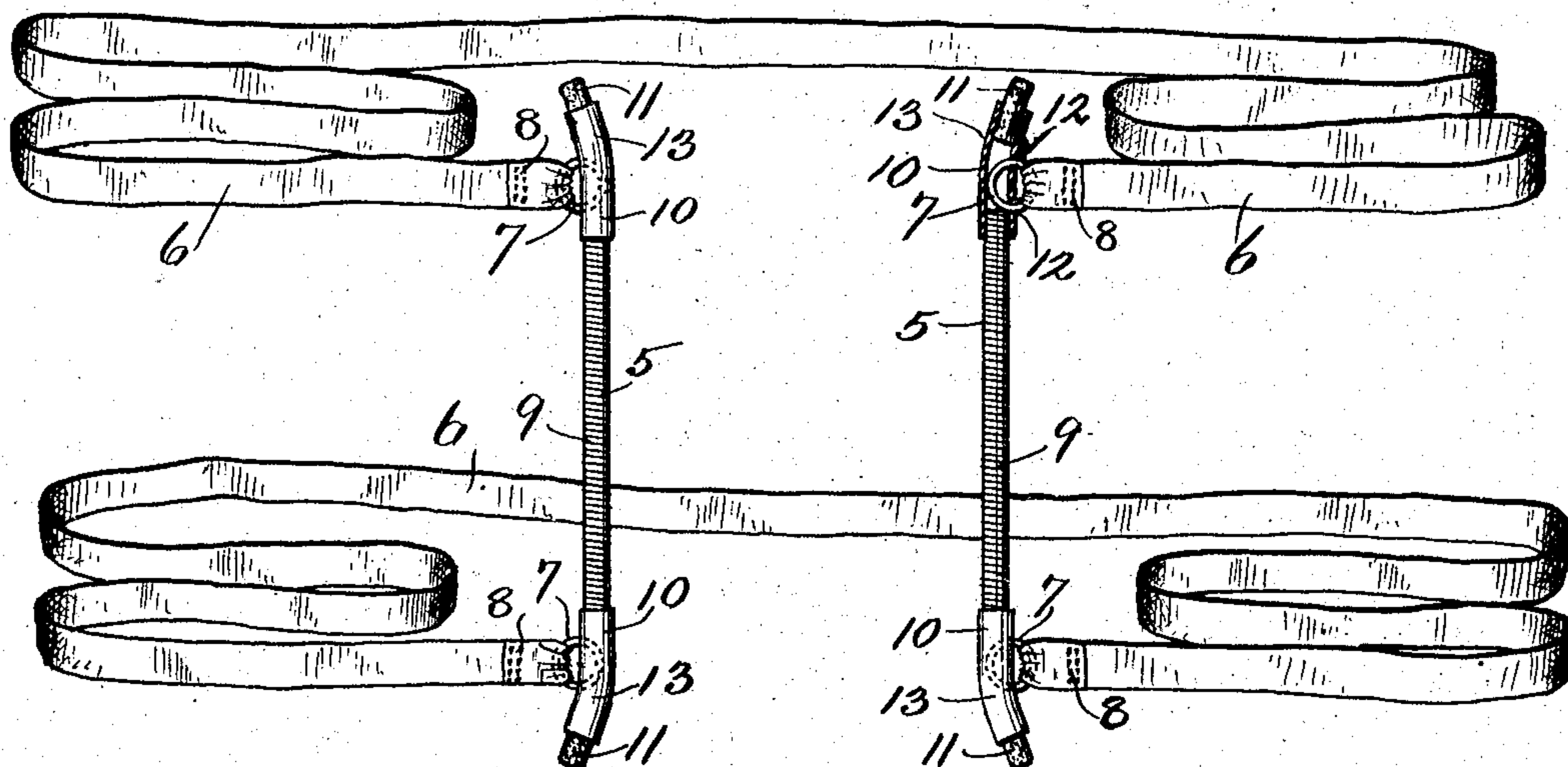
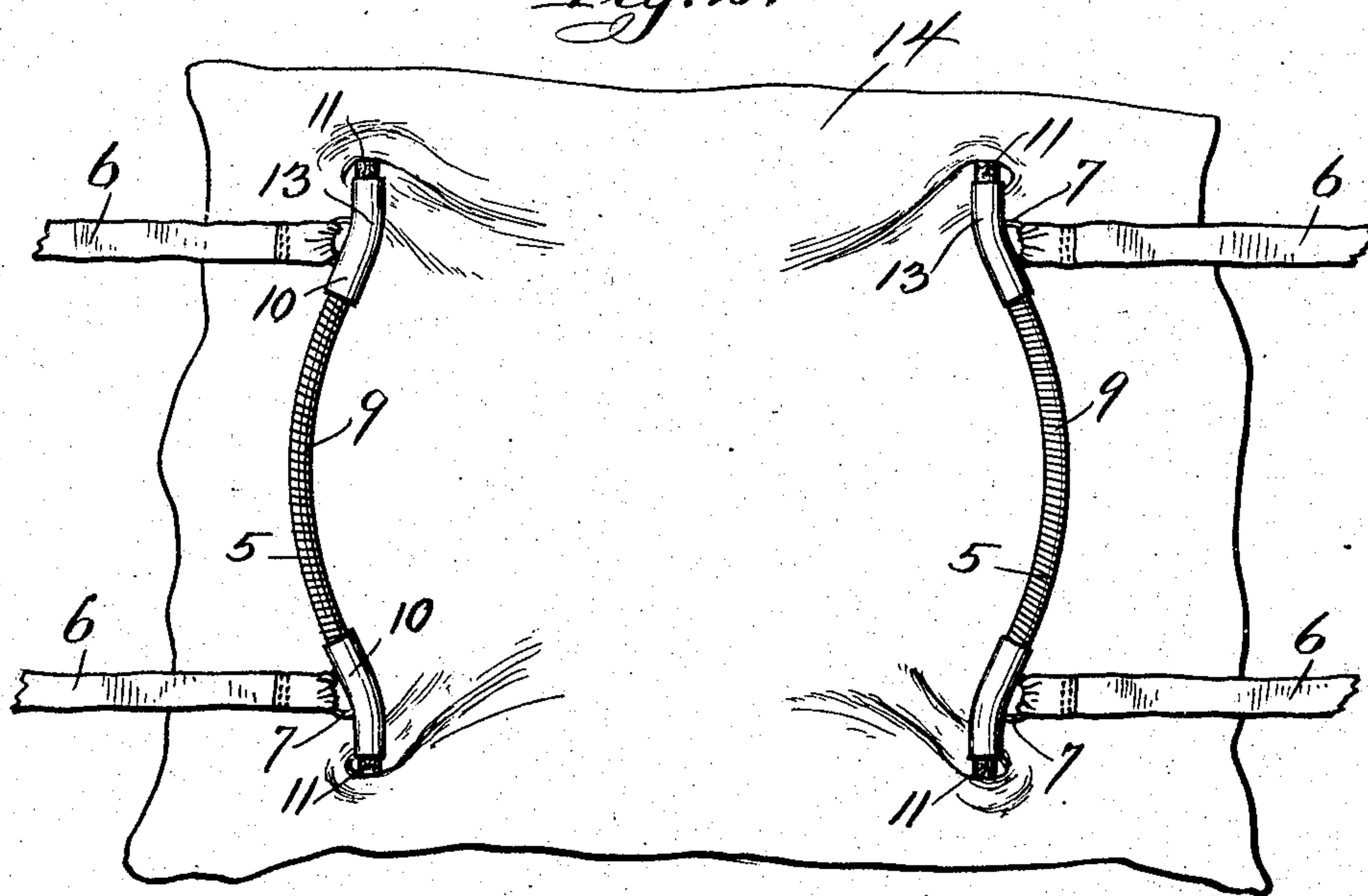


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ROSCOE F. LUDWIG, OF CHICAGO, ILLINOIS.

RUBBER-DAM HOLDER.

SPECIFICATION forming part of Letters Patent No. 791,563, dated June 6, 1905.

Application filed May 7, 1904. Serial No. 206,951.

To all whom it may concern:

Be it known that I, ROSCOE F. LUDWIG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Rubber-Dam Holder, of which the following is a specification.

My invention relates to improvements in rubber-dam holders which have elastic bands attached thereto that are placed around the patient's head; and the objects of my invention are, first, to provide a neat, cheap, and durable holder; second, to afford facilities for attaching the holder to the dam without any danger of it becoming detached or mutilating the dam, and other objects which will become apparent from the description to follow. I attain these objects by the construction illustrated in the accompanying drawings.

Heretofore considerable difficulty was experienced to attach the holder to the dam without any danger of mutilating the dam or becoming detached therefrom. These difficulties are almost entirely overcome by my invention.

Another feature of my invention is that the elastic bands, which are the only parts that occasionally need to be replaced, are so attached that they can be replaced by new bands very easily and quickly.

In the drawings, Figure 1 is a view of a holder constructed in accordance with my invention, and Fig. 2 is a view of the same as it appears when attached to a rubber dam.

Similar reference characters refer to similar parts throughout both views.

The holder in general consists of two bars 5 and two elastic bands 6. The elastic bands 6 are preferably made of the ordinary flat elastic and attached to the rings 7, provided on the bars 5, by being looped therethrough and the end stitched, as at 8. The middle and greater portion of the bars 5 is made of flexible material, preferably a tightly-coiled wire spring 9, the ends of which are soldered into short tubes 10, forming the ends of the bars 5. Into the free ends of the tubes 10 are fitted tips or cushions 11, made of any soft material which will yield some under pressure and are designed to contact with the rubber

dam. The tubes 10 are also provided with two small perforations 12, through which the rings 7 are passed, and are soldered securely in place at the same time the spring 9 and tube 10 are soldered together. The ends of the tubes 10 are preferably slightly bent at 13 toward the rings 7.

In operation the rubber dam 14 is stretched over the cushion-tips 13, as shown in Fig. 2, and the bands 6 are passed around the head of the patient or around the head-rest of the chair occupied by the patient. As seen in Fig. 2, the dam will exert a constant elastic pull on the end of the bars 5 in one direction, (*i. e.*, toward the center of the dam,) while the bands 6 will exert a constant elastic pull on the bars 5 in the opposite direction, which will cause the flexible middle portion of each bar to be bent in the direction of the pull exerted by the bands 6. This bend in the bars 5 serves to hold the rubber dam away from the face of the patient and may also serve as a part over which another portion of the dam may be stretched.

It will be noted that the bends in the tubes 10 at 13 are of such a degree that the extreme ends of the tubes 10 are at right angles to the line of pull exerted on them by the rubber dam when the device is in use.

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

1. In a dam-holder the combination of a flexible bar normally straight provided with a curved portion and a band; said band secured to the concave side of the curved portion so that when the holder is applied to a dam and a pull is applied on the band the flexible bar will be bent to bring the extreme end of the curved portion into substantially the same axial alinement as was previously occupied by the flexible bar.

2. In a dam-holder the combination of a coiled spring provided at each end with a tubular extension, a protruding rubber tip secured in each tubular extension, and elastic bands secured to said tubular extensions.

3. In a dam-holder the combination of a bar provided at each end with a tubular extension, a protruding cushion-tip secured in

each tubular extension, and means for securing an elastic band to said tubular extensions.

4. In a dam-holder, a coiled spring having its ends secured in tubular extensions, metal
5 rings secured in said tubular extensions, protruding cushion-tips secured in said tubular extensions and elastic bands secured in said metal rings.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 3d day of May, 1904, at Chicago, Illinois.

ROSCOE F. LUDWIG.

Witnesses:

C. H. LUDWIG,
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