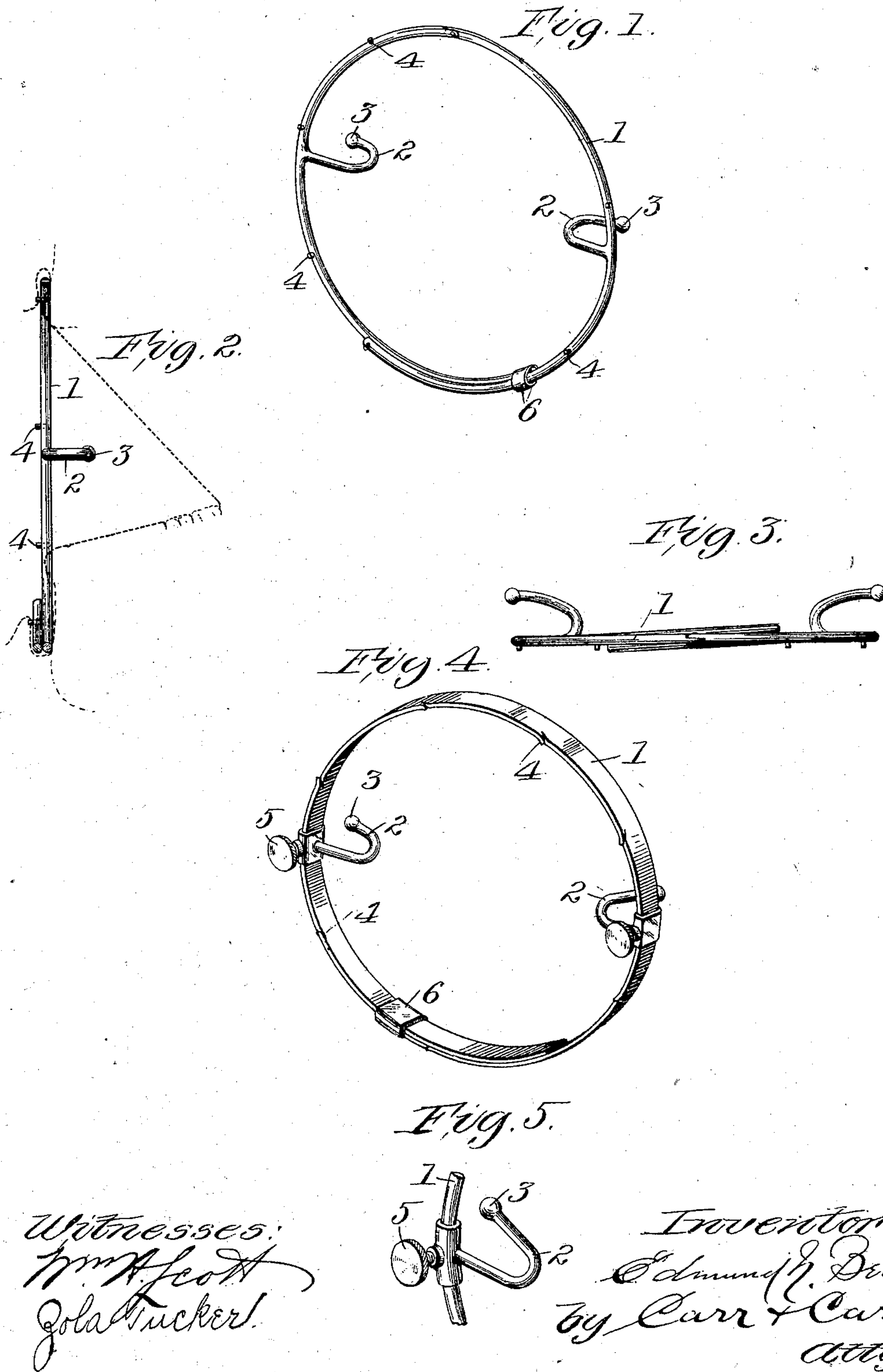


No. 702,394.

Patented June 17, 1902.

E. N. BEALL.
RUBBER DAM HOLDER.
(Application filed Mar. 27, 1902.)

(No Model.)



UNITED STATES PATENT OFFICE.

EDMUND N. BEALL, OF ST. LOUIS, MISSOURI.

RUBBER-DAM HOLDER.

SPECIFICATION forming part of Letters Patent No. 702,394, dated June 17, 1902.

Application filed March 27, 1902. Serial No. 100,243. (No model.)

To all whom it may concern:

Be it known that I, EDMUND N. BEALL, a resident of the city of St. Louis, State of Missouri, have invented certain new and useful
5 Improvements in Dam-Holders, of which the following is a specification.

My invention relates to dam-holders, and has for its principal objects to make the holder sanitary, to facilitate its use, to expose the
10 teeth to better advantage, and to secure other advantages hereinafter stated.

It consists in the body portion provided with hooks adapted to engage and be supported by the ends of the mouth. It also
15 consists in the parts and in the arrangement and combination of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification, and wherein like
20 symbols refer to like parts wherever they occur, Figure 1 is a perspective view of my holder. Fig. 2 is a cross-section thereof with the dam shown in operative position in dotted lines. Fig. 3 is an edge view thereof. Fig. 4 is a
25 perspective view of a modification, and Fig. 5 is a detail of the hook arranged to slide on the frame.

My device comprises a skeleton frame 1, which constitutes a support for hooks 2.
30 These hooks are mounted on opposite sides of said frame and consist of reversely-turned pieces, which extend from their point of mounting toward each other, respectively, and are thence bent sidewise and then back-
35 wardly, terminating in rounded enlargements 3. These hooks are designed to be inserted at the ends of the mouth for the double purpose of distending the mouth and constituting means for securing the frame in position.
40 For this purpose it is preferable to make said frame of two semicircular pieces hinged together at the top, as shown in Fig. 1, or to make the frame of a single circular strip of resilient material, as shown in Fig. 4. In
45 either case the parts are so proportioned that the bends of the respective loops are slightly farther apart than the width of the mouth. In case the frame is not resilient the side of the mouth must be stretched over the ends
50 of the loops, whereas in the case of the sectional or resilient frame the hooks are first

inserted into the mouth and then separated therein. The frame 1 is also provided with studs or other fastening device formed in any
suitable manner, the purpose of said fasten- 55
ing device being to engage and hold the sheet of rubber which constitutes the dam.

In the construction shown in Figs. 4 and 5 the hooks are mounted on bands or tubes arranged to slide on the frame, such bands or
60 tubes being provided with such screws 5 for binding the same against the frame at any desired point. The overlapping ends of the body portion are equipped with a friction-band 6, adapted to bind and lock them in any
65 adjusted position.

In use the two hooks 2 are inserted into the mouth, so as to distend the ends thereof. In this position the hooks hold the frame in position entirely surrounding the mouth, and
70 the rubber dam is then secured to the fastening devices on the holder and the dam is then ready to perform its usual function.

Obviously divers changes may be made in the construction of my device, and I do not
75 wish to restrict myself to the details hereinbefore set forth—as, for instance, the hooks may be made adjustable and of any suitable shape, and, if desired, more than two hooks may be employed on said frame. 80

What I claim is—

1. A dam-holder comprising a body portion having hooks thereon adapted to engage the mouth, substantially as described.

2. A dam-holder comprising a body portion 85
having adjustable hooks thereon adapted to engage the mouth, substantially as described.

3. A dam-holder comprising a flexible body portion having hooks thereon for engaging the mouth, substantially as described. 90

4. A dam-holder comprising a body portion having fastening devices for holding a rubber dam and also having hooks thereon adapted to hold said body portion in position, substantially as described. 95

5. A dam-holder comprising a body portion and hooks thereon adapted to engage the mouth, said body portion being arranged to vary the distance between said hooks, substantially as described. 100

6. A dam-holder comprising a body portion and hooks thereon adapted to engage the

mouth, said body portion being arranged to vary the distance between said hooks, and a device for locking said body portion as desired, substantially as described.

- 5 7. A dam-holder comprising a body portion, hooks adjustably secured on said body portion and adapted to engage the ends of the

mouth, and studs on said body portion for engaging the dam, substantially as described.

EDMUND N. BEALL.

In presence of—

WILLIAM P. CARR,
ZOLA TUCKER.