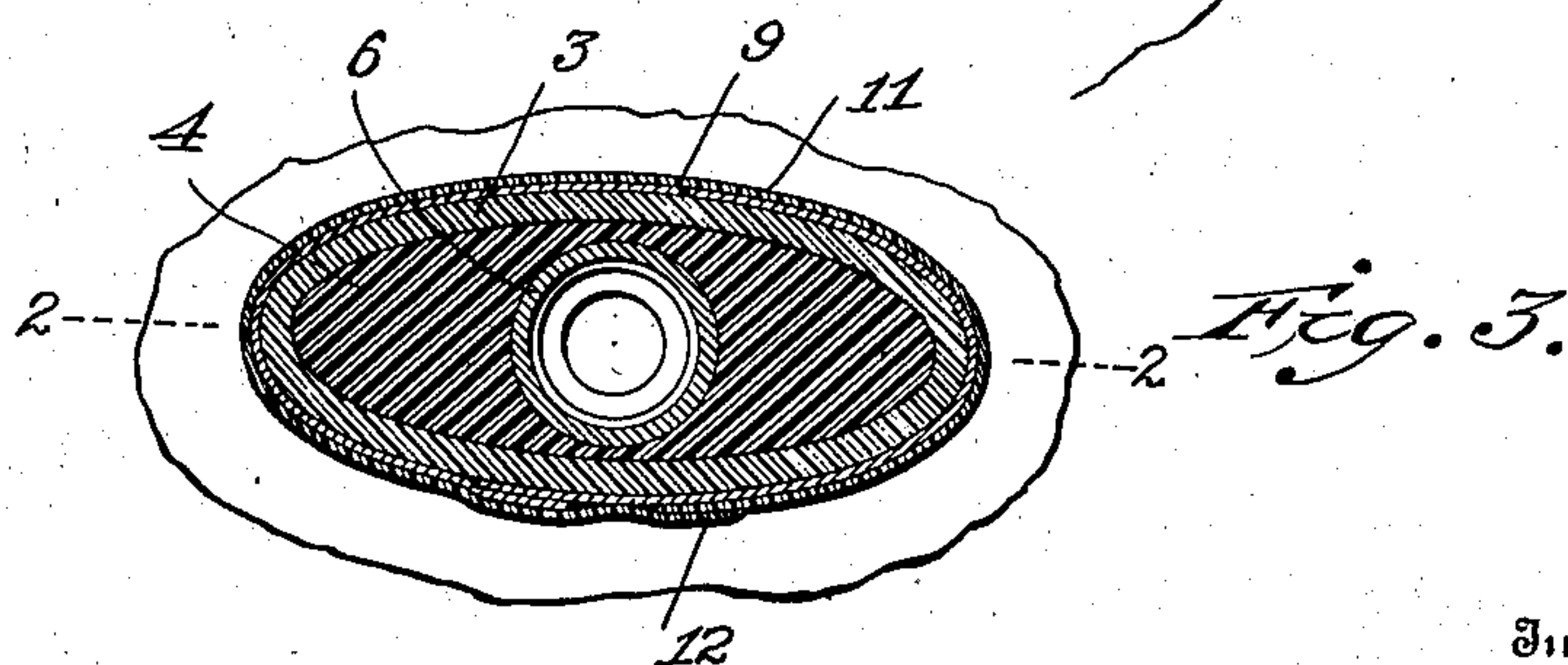
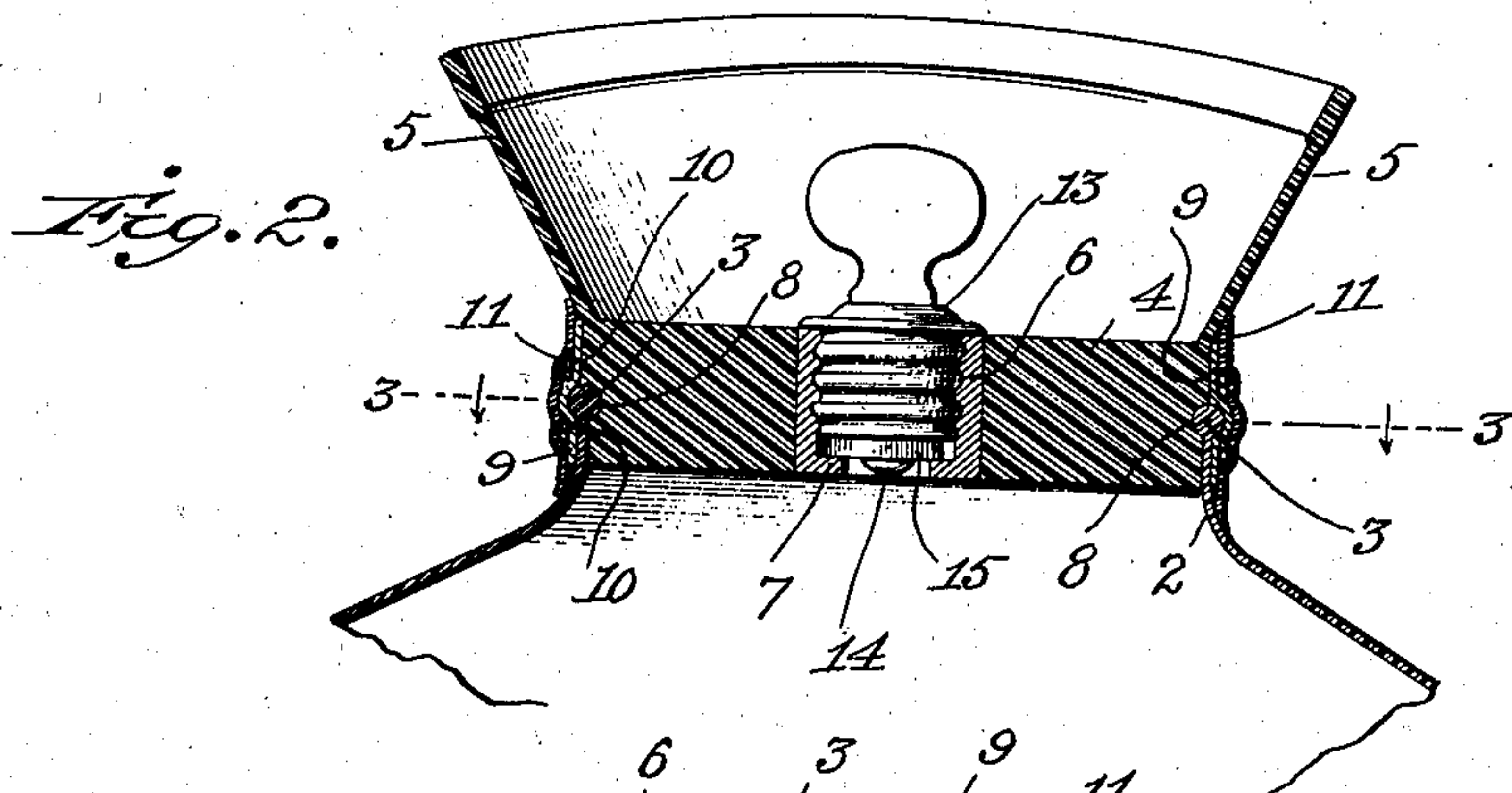
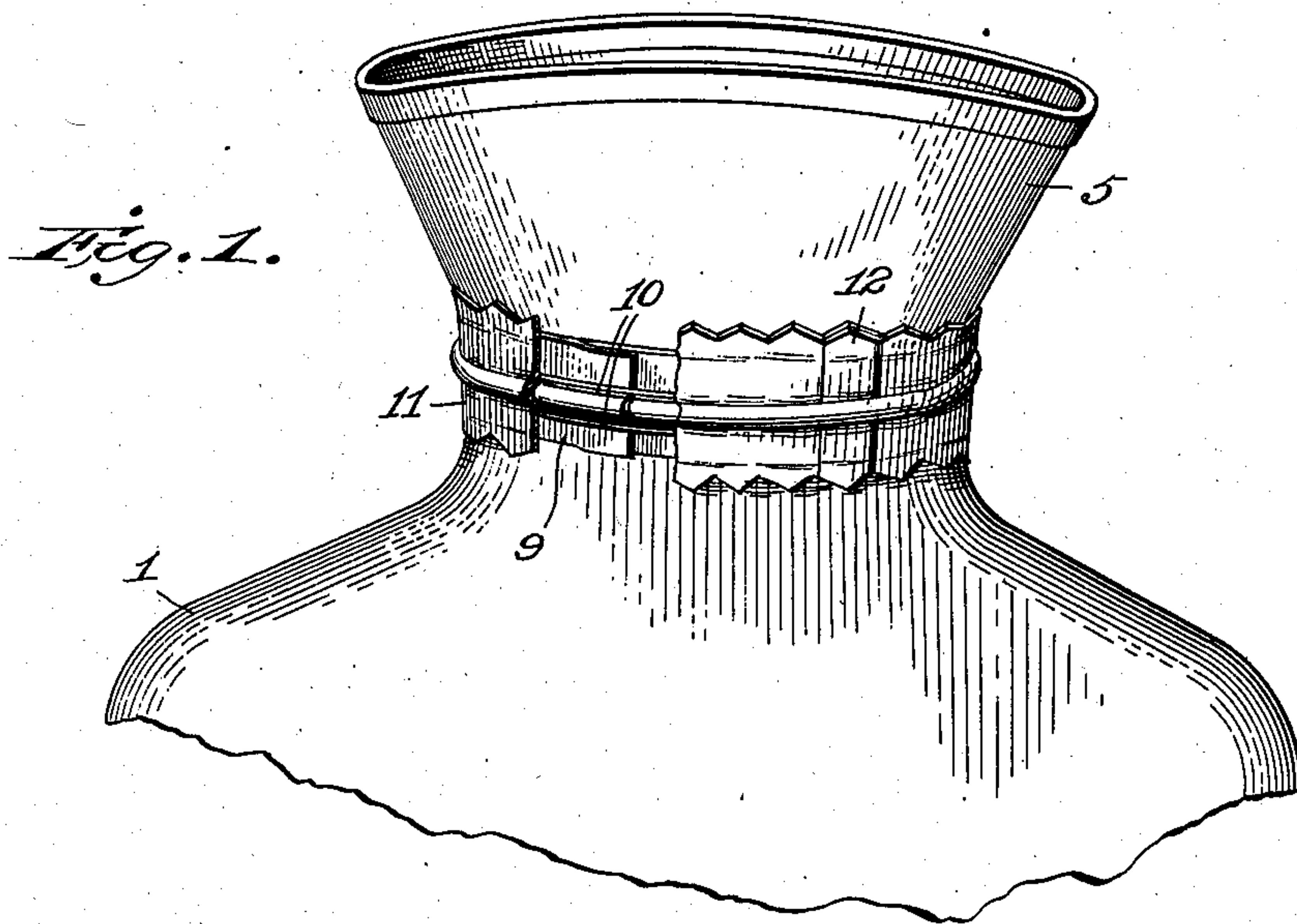


No. 815,366.

PATENTED MAR. 20, 1906.

T. W. MILLER.
WATER BAG OR BOTTLE.
APPLICATION FILED NOV. 10, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS W. MILLER, OF AKRON, OHIO.

WATER BAG OR BOTTLE.

No. 815,366.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed November 10, 1905. Serial No. 286,763.

To all whom it may concern:

Be it known that I, THOMAS W. MILLER, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented new and useful Improvements in Water Bags or Bottles, of which the following is a specification.

My invention relates to water bags or bottles formed of rubber, and has for its object to provide a seamless bag or bottle of this character embodying certain improvements in the construction of the neck, the funnel-shaped top, a partial closure for the neck, and the stopper, as will be hereinafter more definitely pointed out and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the upper portion of my improved bag or bottle and its funnel-shaped top, the connecting means between the two being partially broken away. Fig. 2 is a central vertical sectional view of the same on the line 2 2, Fig. 3. Fig. 3 is a horizontal sectional view on the line 3 3, Fig. 2.

Similar numerals of reference denote corresponding parts in the several views.

In the said drawings the reference numeral 1 denotes the flexible rubber body portion of the water bag or bottle, the same being formed seamless by the well-known dipping process, said bag or bottle terminating at its upper end in a contracted neck 2, having its upper edge formed or rolled into a bead 3.

The partial closure 4 for the bag or bottle neck 2 is formed, preferably by molding, of soft rubber and has formed integral therewith the flexible flaring funnel-shaped top 5. Said partial closure in the process of manufacture has molded therein the metallic thimble 6, interiorly screw-threaded and provided with an interior annular shoulder 7 at its base, as shown. Said partial closure 4 is also formed exteriorly with an annular depression 8, adapted to receive and retain the bead 3 of the bag or bottle neck.

In assembling the parts the bead 3 of the bag or bottle neck 2 is sprung into the depression 8 in the partial closure 4, and the parts are securely cemented together with a suitable self-curing cement. A strip of friction fabric 9 is then drawn tightly around the parts, as shown, and is preferably more firmly held in place by a wire wrapping 10. To finish the article, I then cement around the bag

or bottle neck and partial closure and over the friction fabric 9 and wire wrapping 10 a strip of ornamental rubber 11, preferably harmonizing in color with that of the bag or bottle and its funnel. Said strip 11 may either be lapped, as shown at 12 in Fig. 1, or it may be formed in an endless band and sprung and cemented into position.

While I prefer to employ the wire wrapping 10 to retain the parts firmly in position, the same is not essential, as it has been found that the cementing of the parts and the friction fabric 9 and rubber strip 11 very securely retain the bag or bottle neck and partial closure 4 together.

To seal the bag or bottle when filled with hot water or the like, I employ a metallic or other stopper 13, having attached thereto at its lower end by means of a screw 14 a rubber washer 15, which by its contact with the interior annular shoulder 7 of thimble 6 affords an effective water-tight closure.

By my improved construction I provide a bag or bottle formed, with the exception of the thimble 6, entirely of soft rubber, the construction being such, owing to the fact that both the upper and lower edges of the thimble 6 are flush with the body of the partial closure 4, that a complete drainage of the bag or bottle is obtained when it is desired to empty the same, as well as a complete drainage of the funnel 5 during filling.

While I prefer to form the partial closure 4 of soft rubber, the same may, if desired, be formed of semihard rubber or of soft rubber stiffened in any suitable manner—e. g., by using cotton duck—the essential feature of the same being that it is formed integral with the flexible rubber funnel 5.

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

1. A water bag or bottle embodying a flexible rubber body portion, a rubber partial closure for the neck of the same, a flexible rubber funnel-shaped top formed integral with said partial closure, and means for permanently uniting said partial closure and bag or bottle neck.

2. A water bag or bottle embodying a flexible rubber body portion, a rubber partial closure for the neck of the same, and an unyielding stopper-receiving thimble permanently located in said partial closure.

3. A water bag or bottle embodying a flexible rubber body portion, a rubber partial clo-

sure for the neck of the same, and an unyielding stopper-receiving thimble permanently located in said partial closure and terminating flush with the upper and under sides of said partial closure.

4. A water bag or bottle embodying a flexible rubber body portion having a contracted neck termination in an annular bead, a rubber partial closure formed with an annular depression receiving said bead, a flexible rubber funnel formed integral with said partial closure, and a strip of friction fabric covering and retaining said bead in position.

5. A water bag or bottle embodying a flexible rubber body portion having a contracted neck terminating in an annular bead, a rubber partial closure formed with an annular depression receiving said bead, a flexible rubber funnel formed integral with said partial closure, a strip of friction fabric covering and

retaining said bead in position, and a finishing-strip covering said friction fabric.

6. A water bag or bottle embodying a flexible rubber body portion having a contracted neck terminating in an annular bead, a rubber partial closure formed with an annular depression receiving said bead, a flexible rubber funnel formed integral with said partial closure, a strip of friction fabric covering and retaining said bead in position, a wire wrapping around said friction fabric, and a finishing-strip covering said friction fabric and wire wrapping.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

THOMAS W. MILLER.

Witnesses:

I. LEROY MILLER,
J. D. SLATER.