

No. 619,619.

Patented Feb. 14, 1899.

W. H. ROBINSON.
FIRE EXTINGUISHER.

(Application filed Jan. 17, 1898.)

(No Model.)

Fig. 1.

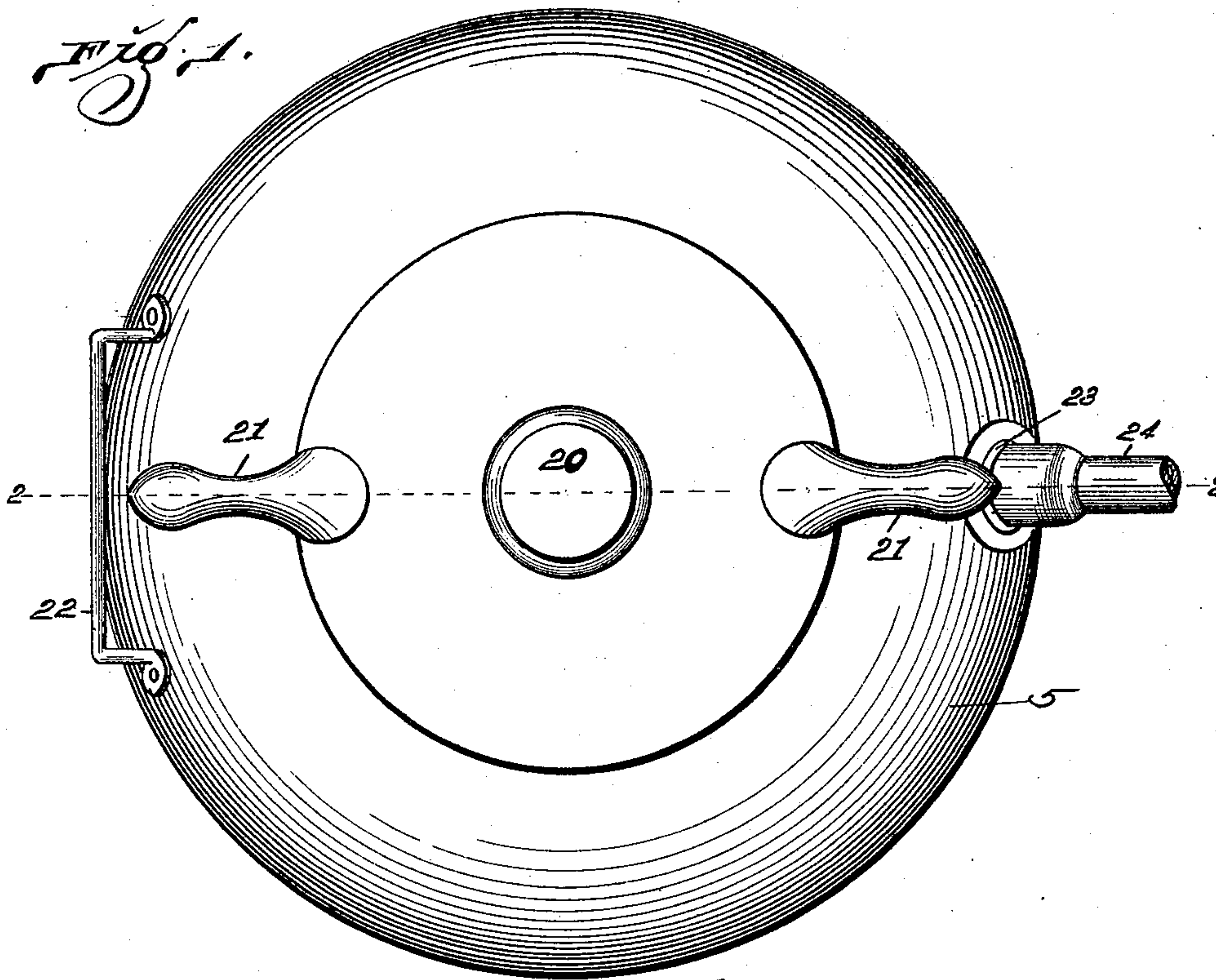


Fig. 2.

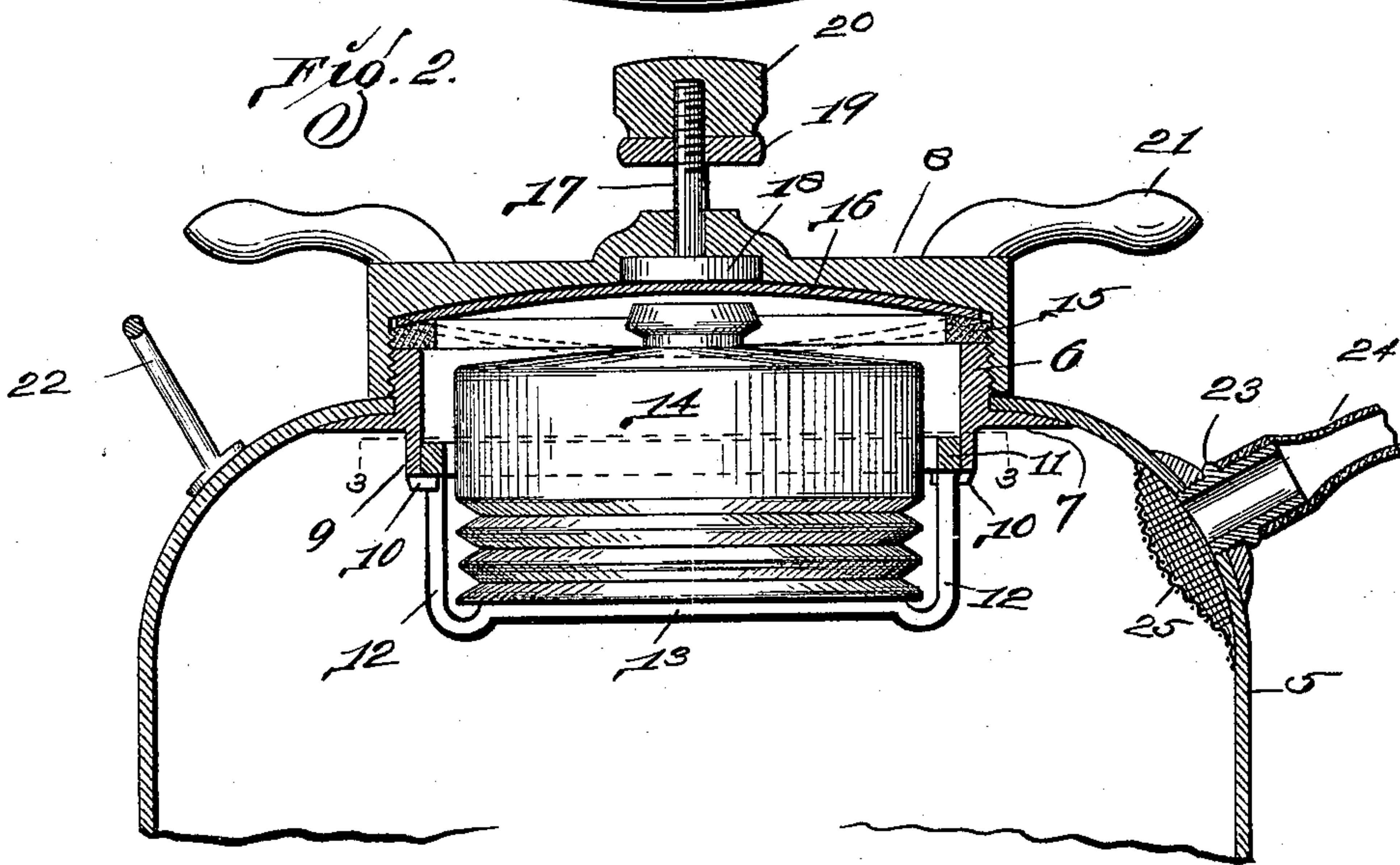
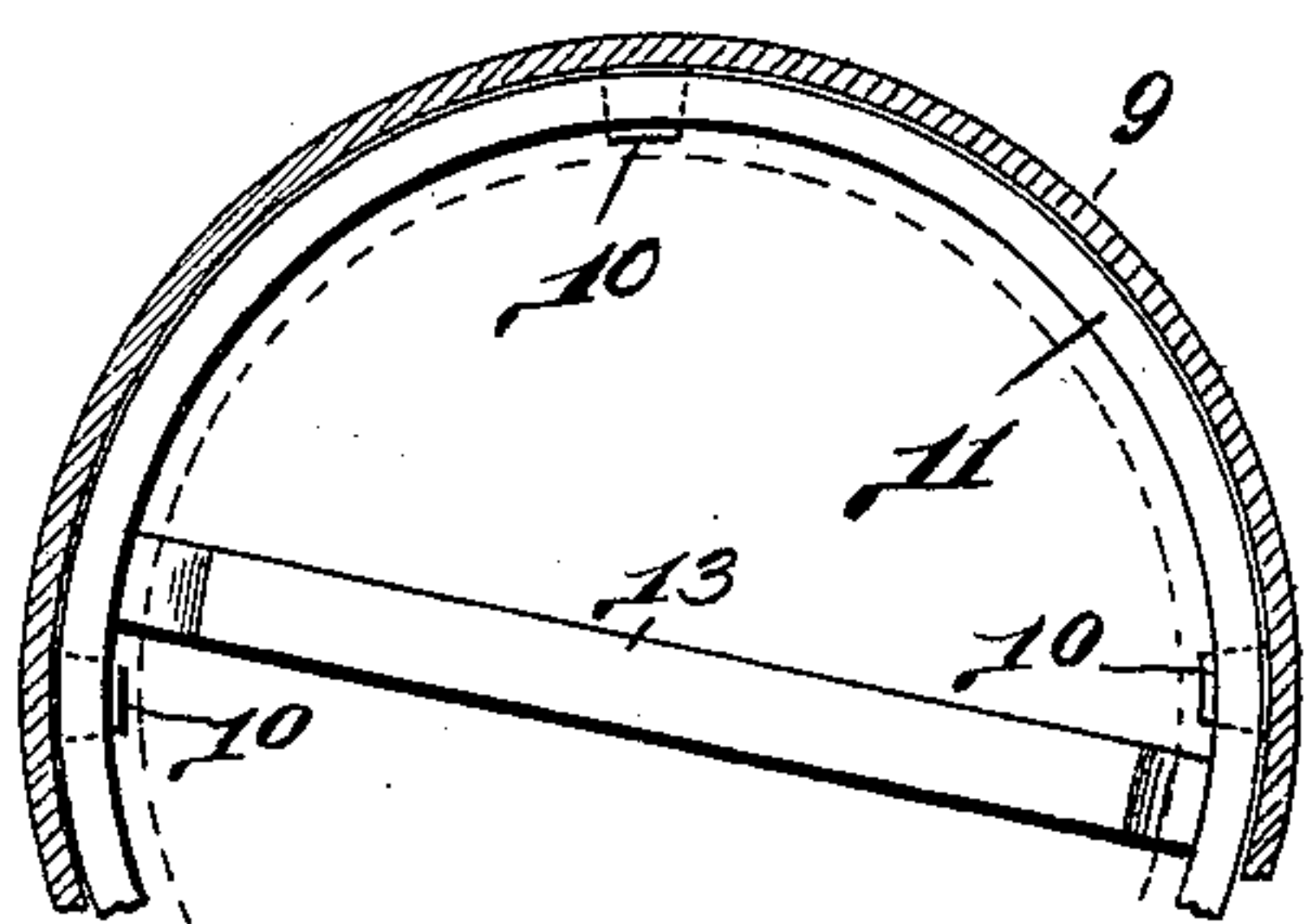


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM H. ROBINSON, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ELLA B. ROBINSON, OF SAME PLACE.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 619,619, dated February 14, 1899.

Application filed January 17, 1898. Serial No. 667,013. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. ROBINSON, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Fire-Extinguishers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to fire-extinguishers; and it consists of the novel construction, combination, and arrangement of parts herein-after shown, described, and claimed.

Figure 1 is a top plan view of my improved fire-extinguisher. Fig. 2 is a vertical central section taken approximately on the line 2 2 of Fig. 1, parts being broken away. Fig. 3 is a horizontal section taken approximately on the line 3 3 of Fig. 2.

Referring by numerals to the drawings, the tank 5 is cylindrical in plan and of the ordinary construction, having a rounded upper end, in the center of which is a vertical opening. An exteriorly-screw-threaded ring 6 is designed to be inserted through said opening and has a horizontal flange 7 projecting from its lower edge. The ring 6 is inserted upwardly through the opening, thus bringing the flange 7 against the inner face of the top of the tank, and said flange is secured in position by means of solder or any other suitable means, thus forming a nipple, upon which the cap 8 is screw-seated, said cap closing the upper end of the tank. A flange 9 extends downwardly from the ring 6, and the arms 10 extend downwardly and inwardly from said flange 9. The ring 11 fits loosely within the ring 6 and within the flange 9, said ring resting upon the arms 10. The arms 12 extend downwardly from opposite sides of the ring 11, and the lower ends of said arms 12 are connected by the bar 13, thus forming a rack, in which the acid-bottle 14 is loosely mounted. The acid-bottle 14 is constructed to be broken, and after being filled is sealed and placed in the rack. A gasket or packing ring 15 is placed upon the upper edge of the ring 6, inside of the cap 8. A yielding concavo-convex disk-shaped plate 16 is placed with its edge resting upon the gasket 15 and clamped between said gasket and the cap 8 by screwing down the cap. The bolt 17 is slidingly mount-

ed in a vertical position through the center of the cap 8 and has a flat head 18, resting upon the upper face and central portion of the yielding plate 16, there being a recess in the lower face of the cap to receive said head. The upper end of the sliding bolt is screw-threaded. A jam-nut 19 is placed upon said bolt, and the head 20 is screw-seated upon said bolt, said head 20 being adjusted up and down and held in position by the jam-nut 19 to regulate the stroke of the sliding bolt. Handles 21 project upwardly and outwardly from the cap 8 for operating said cap, and a handle 22 is attached to the tank 5 for manipulating the fire-extinguisher.

The nipple 23 is screw-seated in the tank 5 on the opposite side from the handle 22 and communicates with the interior thereof. A hose 24 leads from the nipple 23, and the screen 25 is placed inside of the tank to cover the passage through the nipple 23.

The sliding bolt 17 is held normally elevated by the tension of the yielding plate 16. When it is desired to discharge the fire-extinguisher, the tank is inverted, bringing the head 20 in contact with the ground or floor and pushing the bolt 17 inwardly, thus swinging the plate 16 inwardly and breaking the acid-bottle 14. The pressure within the tank generated by the commingling of the contents of the tank with the contents of the acid-bottle will press the plate 16 to its normal position after the bottle is broken. The edge of the yielding plate 16 is held yieldingly in position by the pressure of the gasket 15 toward the cap 8, and when the sliding bolt is operated to swing the center of the yielding plate downwardly, as indicated in dotted lines, the edge of the plate will draw inwardly, thus allowing sufficient motion at the center of the plate to break the bottle, and the pressure within the tank will return the plate to its normal position.

I claim—

A fire-extinguisher, constructed with a suitable tank, a ring located in the upper end of said tank, a flange integral with and projecting downwardly from said ring, integral lugs projecting toward one another from the under side of said flange, a removable ring resting upon said lugs, arms integral with and

extending downwardly from said last-mentioned ring, a bar connecting the lower end of said downwardly-pending arms, a cap located upon the first-mentioned ring for closing the tank, a yielding plate carried by the underside of the cap, a bolt operating through said cap above said plate, and a bottle sustained by the transverse bar that connects the downwardly-pending arms, substantially as specified. 10

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. ROBINSON.

Witnesses:

ALBERT J. MCCAULEY,
EDWARD E. LONGAN.