

No. 754,705.

PATENTED MAR. 15, 1904.

W. S. REYNOLDS.
BROOM MOISTENER.

APPLICATION FILED JAN. 29, 1903.

NO MODEL.

Fig. 1.

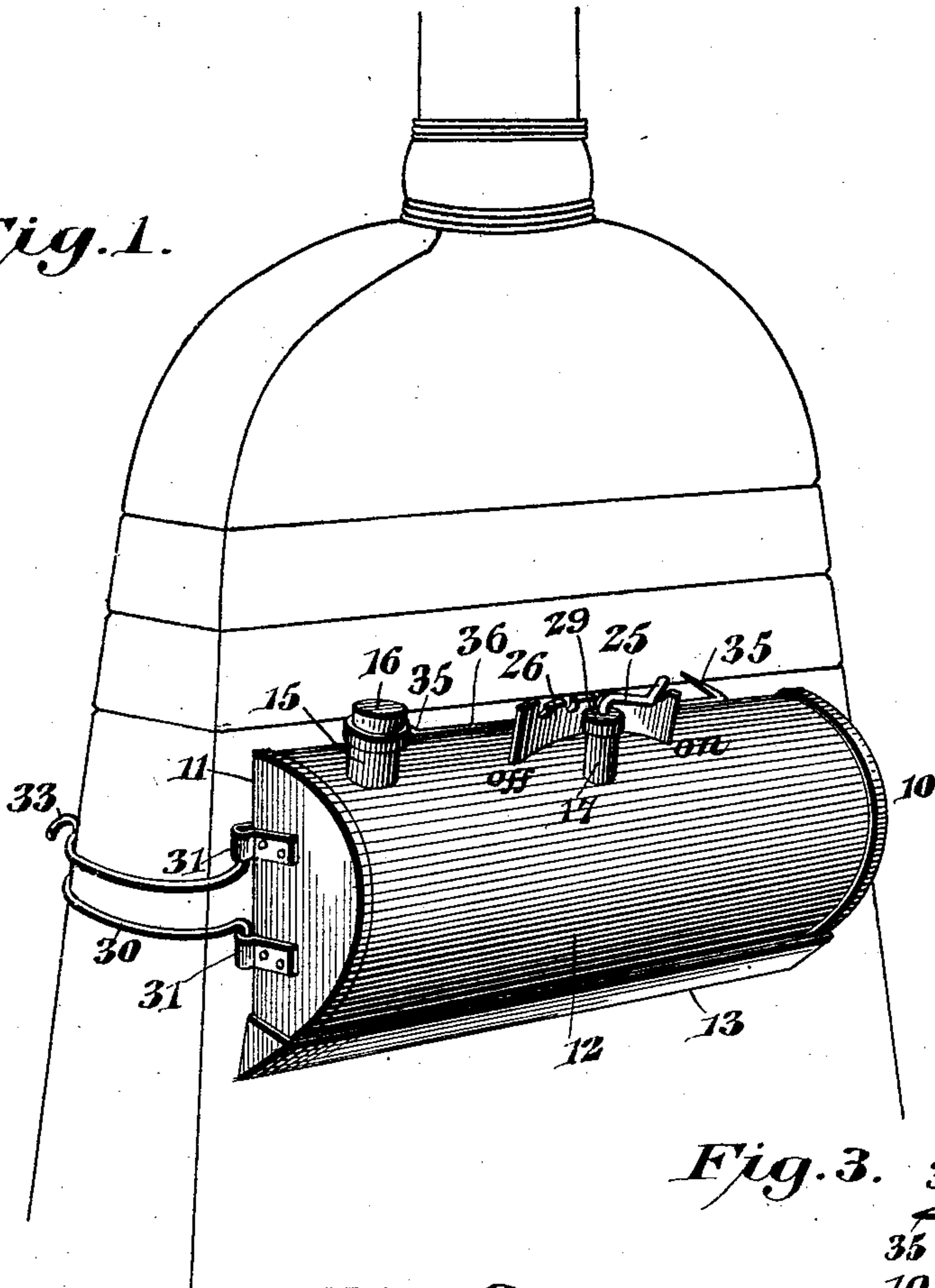


Fig. 2.

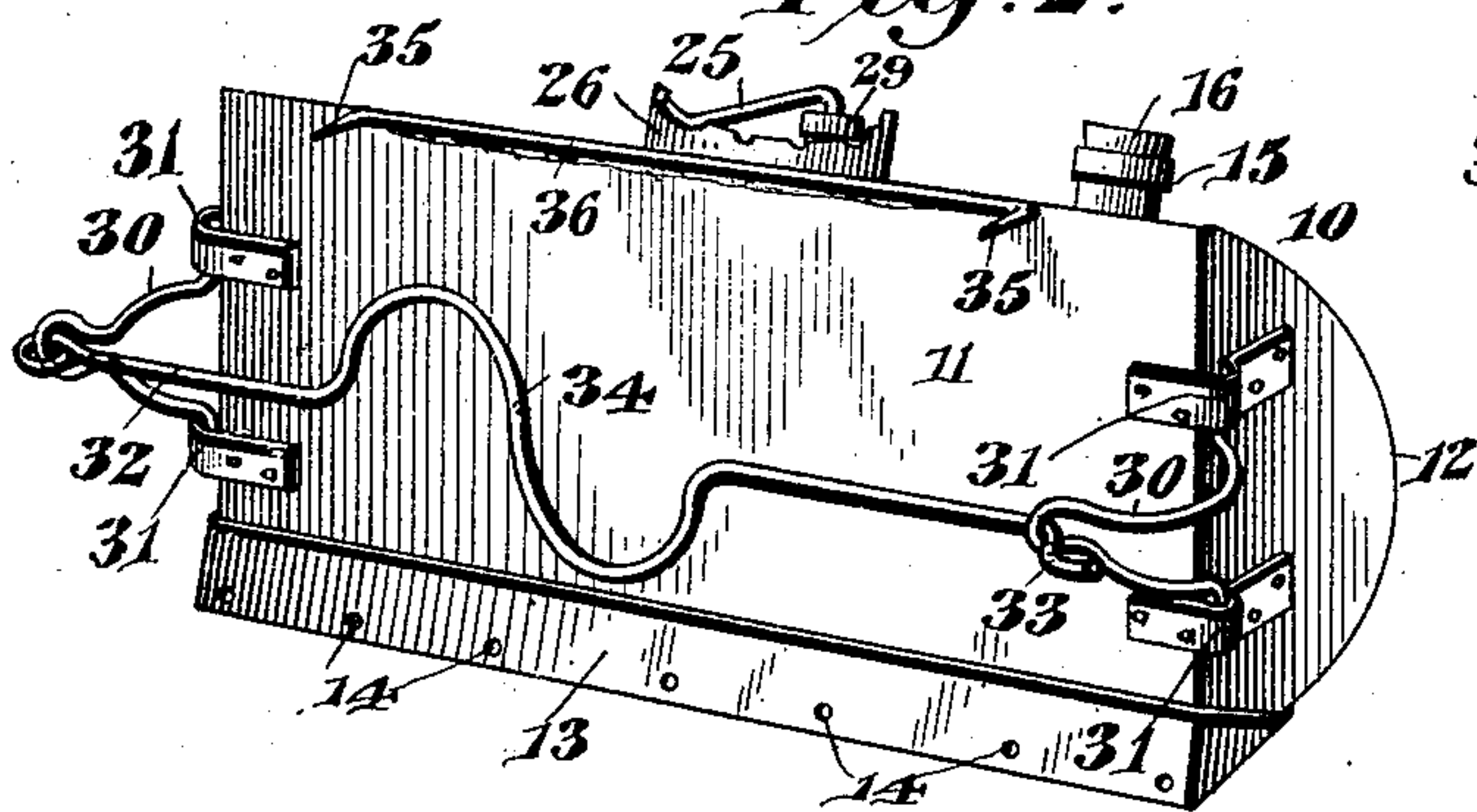


Fig. 3.

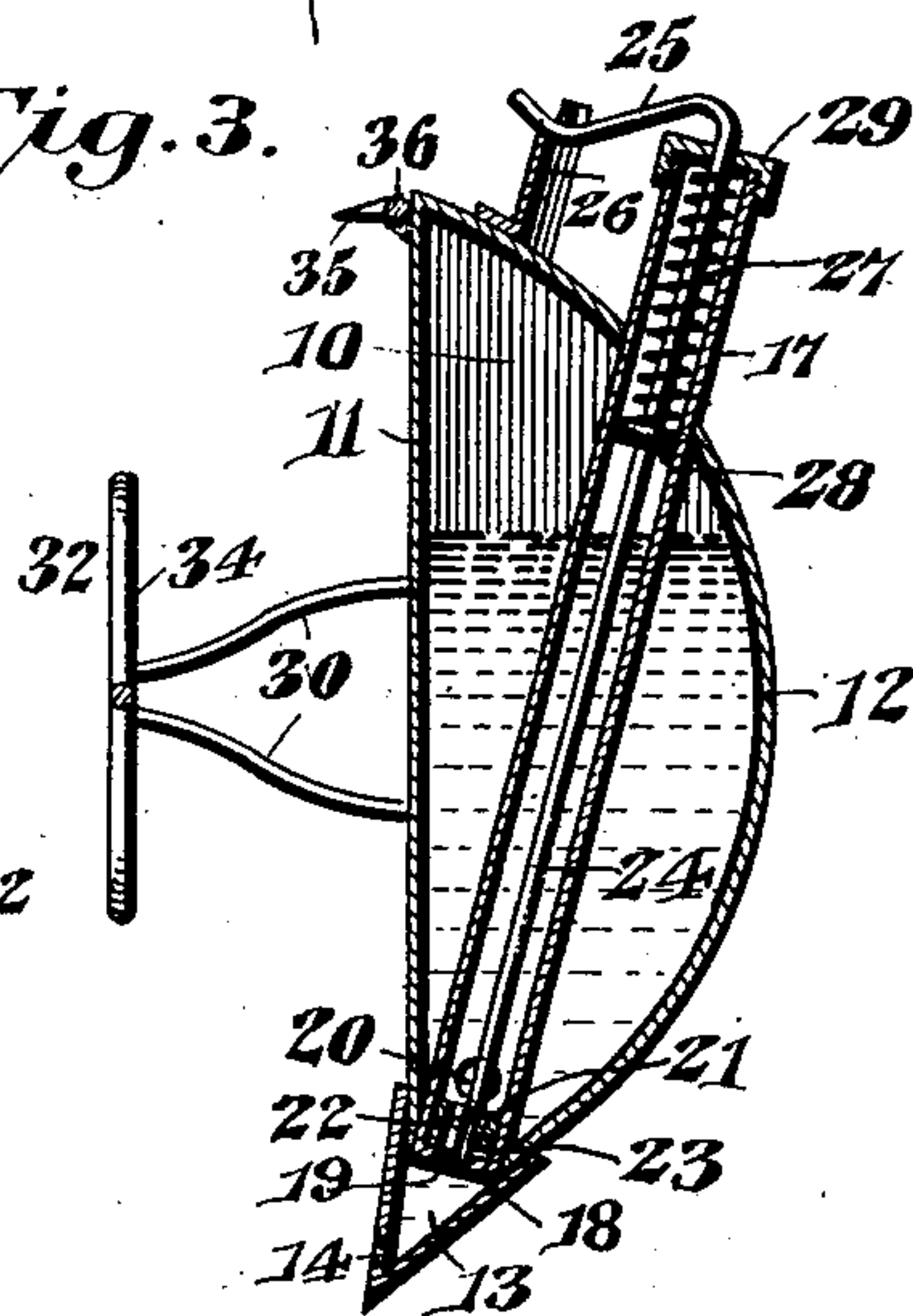
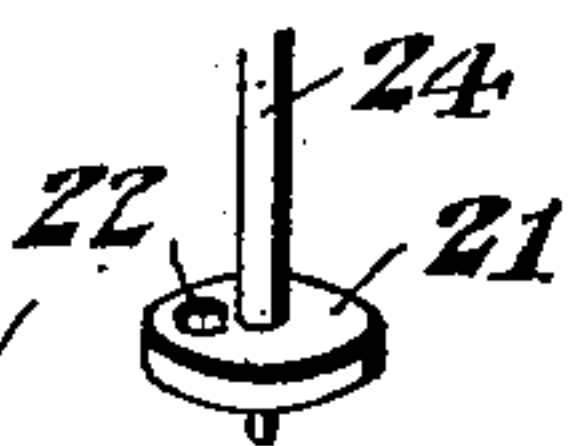


Fig. 4.

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BROOM-MOISTENER.

SPECIFICATION forming part of Letters Patent No. 754,705, dated March 15, 1904.

Application filed January 29, 1903. Serial No. 141,058. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. REYNOLDS, a citizen of the United States, residing at Dayton, in the county of Yamhill and State of Oregon, have invented a new and useful Broom-Moistener, of which the following is a specification.

The present invention relates to a device arranged to be attached to a broom and supply fluid therethrough in order to moisten it to prevent the raising of dust while sweeping.

One of the objects of the invention is to provide a structure which can be readily applied to a broom and securely fastened thereto without interfering with the bending of said broom in the usual manner during the sweeping operation.

It is also the object to provide novel means for controlling the supply of fluid to the broom, said means being very simple and efficient and having a regulating device by which the amount of flow may be varied, this device also indicating the position of the valve and constituting holding means therefor.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the same, indicating its position upon a broom. Fig. 2 is another perspective view of the moistener, showing the opposite side of the same. Fig. 3 is a vertical sectional view, and Fig. 4 is a detail perspective view, of the valve employed.

Similar reference-numerals indicate corresponding parts in all figures of the drawings.

In the present embodiment a reservoir 10 is employed, which is in the form of a casing having a flat rear wall 11 and a convexed front or outer wall 12. A distributing-compartment 13 is located longitudinally along the lower end of the reservoir and tapers toward its bottom, as shown in Fig. 3. The compartment 13 consists of an inverted cap which receives the reservoir, the bottom of the reservoir forming the top wall of the cap when the parts are assembled. The rear wall of this compartment is provided contiguous to its lower end with a series of orifices 14, which are preferably very small. The reservoir 10 is arranged to be filled through a nipple 15, pro-

jecting through its upper end, and closed by a cap 16 of any desirable construction. A tube 17 extends from the bottom of the reservoir through the top of the same and preferably projects some distance above the upper portion of the wall 12. The bottom of the tube is closed by a wall 18, which serves as a partition between the compartment 13 and the reservoir 10, or, in other words, constitutes a part of the bottom of said reservoir. Through this wall is formed a discharge-opening 19, which is thus inclosed by the tube and constitutes the means of communication between the reservoir 10 and the compartment 13, said tube having an opening 20 contiguous to its lower end.

Rotatably mounted within the lower end of the tube and at one side of the discharge-opening 19 is a disk-valve 21, that is thus movable over the discharge-opening and is provided with a port 22, arranged to be moved into and out of alinement with said opening upon the rotation of the valve. A packing-washer 23 is preferably interposed between the valve 21 and the bottom 18 and has an opening therethrough which is in alinement with the discharge-opening 19. The valve is actuated by means of a stem 24, secured thereto and extending longitudinally through the tube, projecting from the upper end thereof and having an offset spring-handle 25, the free end of which is arranged to engage a rack-plate 26, suitably secured to the top of the reservoir about the projecting end of the tube. The valve 21 is held down upon the washer by means of a coiled spring 27, the lower end of which bears upon an outstanding flange 28, secured to the same, the upper end bearing against a cap 29, secured upon and closing the upper end of the tube 17.

For the purpose of fastening the moistener to a broom a pair of loops 30 are hinged to the ends of the reservoir by having the ends of said loops offset and engaged in eyes 31, fastened at the corners of the reservoir. To one of these loops is pivoted a keeper-bar 32, having at its other end a hook 33, that detachably engages the other loop, the intermediate portion of the bar having a transversely-disposed serpentine bend 34, which affords a

bearing enlargement. Spurs 35 project from the upper edge of the reservoir and are preferably formed by sharpening and bending rearwardly the ends of a wire 36, that is suitably fastened longitudinally along the upper corner of the reservoir.

In applying the device to a broom the rear wall 11 of the reservoir is placed flat against one side of the broom and the keeper-bar is extended across the opposite side, the free end thereof being engaged with the loop, as indicated in Fig. 1. The spurs are embedded in the broom just above one of the lines of stitching. As a result the moistener is firmly fastened in place, but the broom-head may give freely because of the pivotal connections between the loops and the keeper-bar. At the same time the enlarged portion of said keeper-bar prevents the same turning so as to release the hook from its loop. Upon turning the valve to open position it will be apparent that the liquid, whether oil or water, will flow from the reservoir into the distributing-compartment and through the escape-orifices thereof upon the broom. The amount of this flow can be regulated, as described, and will be indicated by the position of the handle 25 upon the rack, said handle, and consequently the valve, being held by the rack against accidental movement. The broom is thus kept in moistened condition, and the raising of dust when sweeping is to a great extent obviated. It will be apparent that the structure is simple and can be applied to any ordinary broom. If found necessary, the valve may be easily removed by unscrewing the cap and withdrawing it through the tube.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the class described comprising a reservoir provided at its bottom with an opening, a compartment extending longitudinally of the reservoir and provided with discharge-openings, said compartment being located beneath the bottom of the reservoir with the said bottom forming its top wall, a tube provided with a lateral orifice and extending through the top of the reservoir and having its lower end surrounding the opening of the bottom of the reservoir, a valve rotatably mounted in the lower end of the tube and resting flat upon the bottom of the reservoir and provided with an opening, a valve-stem connected with the valve and projecting from the upper end of the tube, and a notched flange mounted on the reservoir and receiving the projecting portion of the stem, substantially as described.

2. A device of the class described comprising a tapering reservoir provided at its bottom with an opening, a lower compartment consisting of a tapered inverted cap receiving the bottom of the reservoir and provided with discharge-openings, a tube provided with a lateral orifice and extending through the top of the reservoir and having its lower end surrounding the opening of the bottom of the same, a valve rotatably mounted at the lower end of the tube and provided with an opening, a stem connected with the valve and projecting from the top of the tube, a spring for yieldably holding the valve, and means mounted on the reservoir for engagement with the projecting portion of the handle for locking the valve in its adjusted position, said spring permitting the stem to be engaged with and disengaged from the said means, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM S. REYNOLDS.

Witnesses:

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D. I. ASBURY.