No. 687,751. Patented Dec. 3, 1901.

R. L. HERMANN & J. R. MASON.

NOZZLE AND ROSE SPRINKLER.

(Application filed Jan. 5, 1901.)

(No Model.)

FIG. 1.

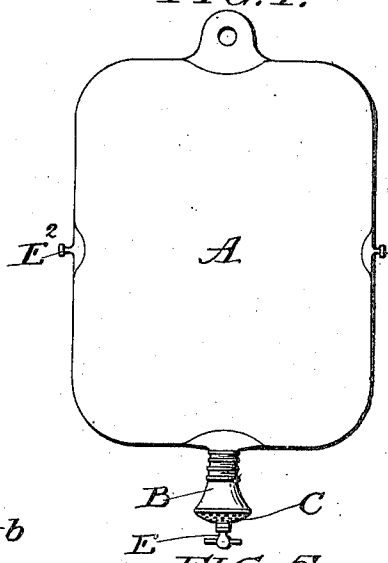


FIG. 2.

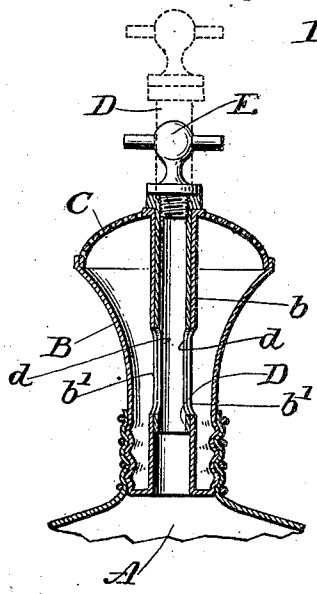


FIG. 4.

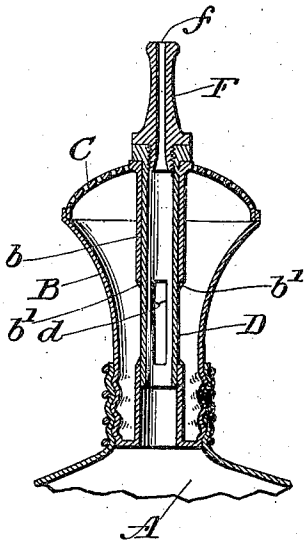


FIG. 5.

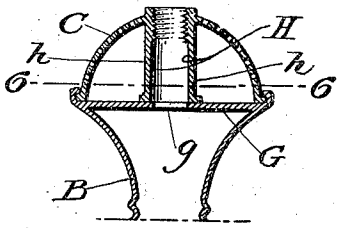


FIG. 6.

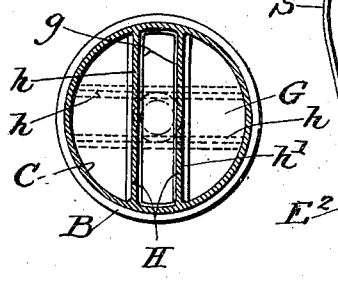


FIG. 3.

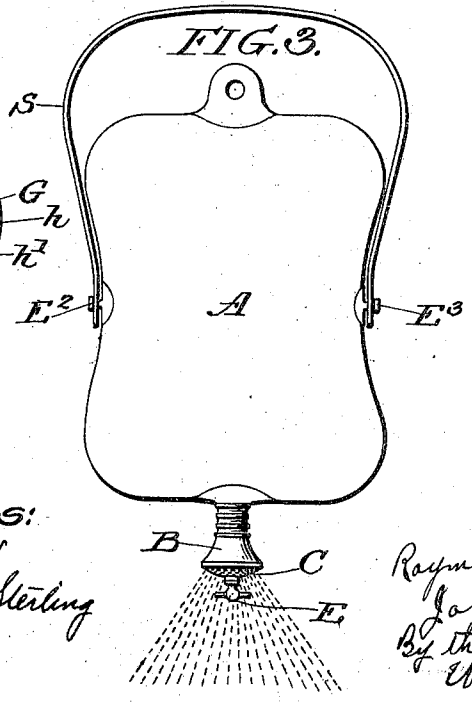
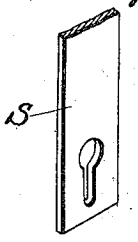


FIG. 7.



WITNESSES:
John R. McGrath
Bowman S. Sterling

INVENTORS:
Raymond L. Hermann
John R. Mason
By their attorney
Walter W. Calmore

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RAYMOND L. HERMANN AND JOHN R. MASON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS OF ONE-FOURTH TO JOHN R. McINTYRE, OF PHILADELPHIA, PENNSYLVANIA.

NOZZLE AND ROSE-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 687,751, dated December 3, 1901.

Application filed January 5, 1901. Serial No. 42,266. (No model.)

To all whom it may concern:

Be it known that we, RAYMOND L. HERMANN and JOHN R. MASON, citizens of the United States of America, and residents of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Nozzles and Rose-Sprinklers, of which the following is a specification.

Our invention relates to improvements in nozzles and rose-sprinklers; and it consists in the construction and arrangement of the several parts thereof whereby the same may be used as a bath-spray or a syringe, as may be desired.

The nature of our invention will be fully set out hereinafter in the specification and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 illustrates a side elevation of a water-bag embodying the improvements forming the subject-matter of this invention. Fig. 2 shows a vertical section of the nozzle, together with a portion of the bag. Fig. 3 represents a vertical section of bag with a spring attachment for spraying the water through the nozzle. Fig. 4 shows a vertical section of the nozzle arranged as a syringe. Fig. 5 illustrates a similar section of the nozzle slightly modified. Fig. 6 is a section on the line 6 6 of Fig. 5, and Fig. 7 is a detached perspective view of one of the ends of the spring.

Referring to the letters of reference indicating the several parts of the device, A represents a water-bag consisting of a hollow receptacle formed of rubber or other suitable material.

B represents the nozzle; C, the perforated cap thereof; D, the sleeve or hollow shaft controlling the opening in the center of the nozzle, and E the plug for closing the opening in the hollow shaft.

As shown in Fig. 2 of the drawings, the nozzle B is provided centrally with a tube *b*, having openings *b' b'*, which form communications between the perforated cap C and the bag A.

The sleeve D, as shown in Fig. 2, is also provided with openings *d d*, which are adapted to register with the openings *b'* and *b'* in the tube *b*. It will be understood that while the openings *d d* are preferred they are not necessarily essential as a means for opening and closing the ports or openings *b' b'*, as the same object may be accomplished by raising and lowering the hollow shaft D, as shown in dotted lines in Fig. 2. At the sides of the water-bag are arranged buttons E^2 and E^3, which are placed to receive the slotted ends of the spring S. These slots (indicated by the letter S) are of greater width at the top to receive the head of the button and narrow down to engage the shank, so that the weight of the bag will retain the buttons in place. The object of the spring S is to collapse the bag when the same is used as a spray, as illustrated in Fig. 3.

In Fig. 4 we have illustrated the nozzle when used as a syringe. In this case the openings *b'* and *b'* are closed, cutting off communication between the perforated cap C and the bag A, and in place of the plug E is inserted a branch F, provided with an opening *f*, through which the contents of the bag may be discharged by pressure in a manner similar to that shown in Fig. 3.

In Figs. 5 and 6 we have shown a slight modification of the nozzle, in which case the nozzle B is partly closed at the top by a cover G, having an opening *g*, which registers with an opening H in the perforated cap C. This opening is formed by partition-walls *h* and *h'*, which divide the cap into three parts. The perforated cap in this case being rotatable, the same will cause the center compartment to register with the bag when placed in the position shown in Figs. 5 and 6 and cut off communication with the spray; but when the perforated cap is turned so that the partitions *h* and *h'* are at right angles, as indicated by dotted lines in Fig. 6, the contents of the bag will pass through the opening *g* into the outer partitions in the cap and through the perforations.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A combined nozzle and sprinkler comprising in combination a conical body portion

provided at the top with a multiplicity of small openings and closed at the bottom, a tube extending throughout the entire length of the body portion provided midway between the ends thereof with slotted openings, and a second tube located within the first-mentioned tube provided with corresponding openings, adapted to register with the openings in the first-mentioned tube the second-mentioned tube being provided at the top with a threaded opening adapted to receive a jet-nozzle, substantially as specified.

2. A combined nozzle and sprinkler comprising in combination, a conical body portion provided at the top with a reticulated cap and closed at the bottom a tube *b*, extending through the length of the body portion having slotted openings *b'* and *b'*, and a tube D, sliding within the tube *b*, having openings *d* and *d*, adapted to register with the openings *b'* and *b'* substantially as specified.

3. A combination nozzle and sprinkler comprising in combination, a conical body portion or nozzle provided at the top with a reticulated cap and closed at the bottom, a tube *b*, extending through the length of the body portion and having slotted openings midway between its ends, a tube D, fitted within the tube *b*, having corresponding openings and a branch pipe F, detachably secured to the top of the tube D, substantially as specified.

Signed at Philadelphia this 15th day of December, 1900.

RAYMOND L. HERMANN.
JOHN R. MASON.

Witnesses:
WILLIAM E. STOKES,
JOHN R. MCINTYRE.