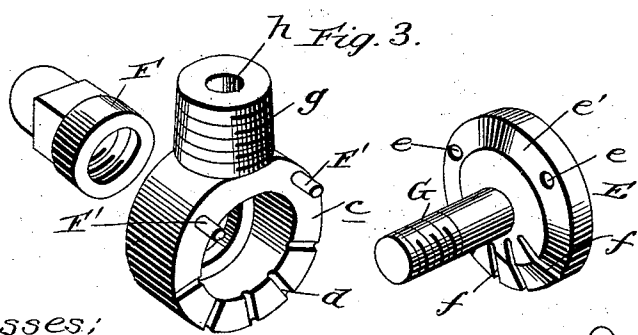
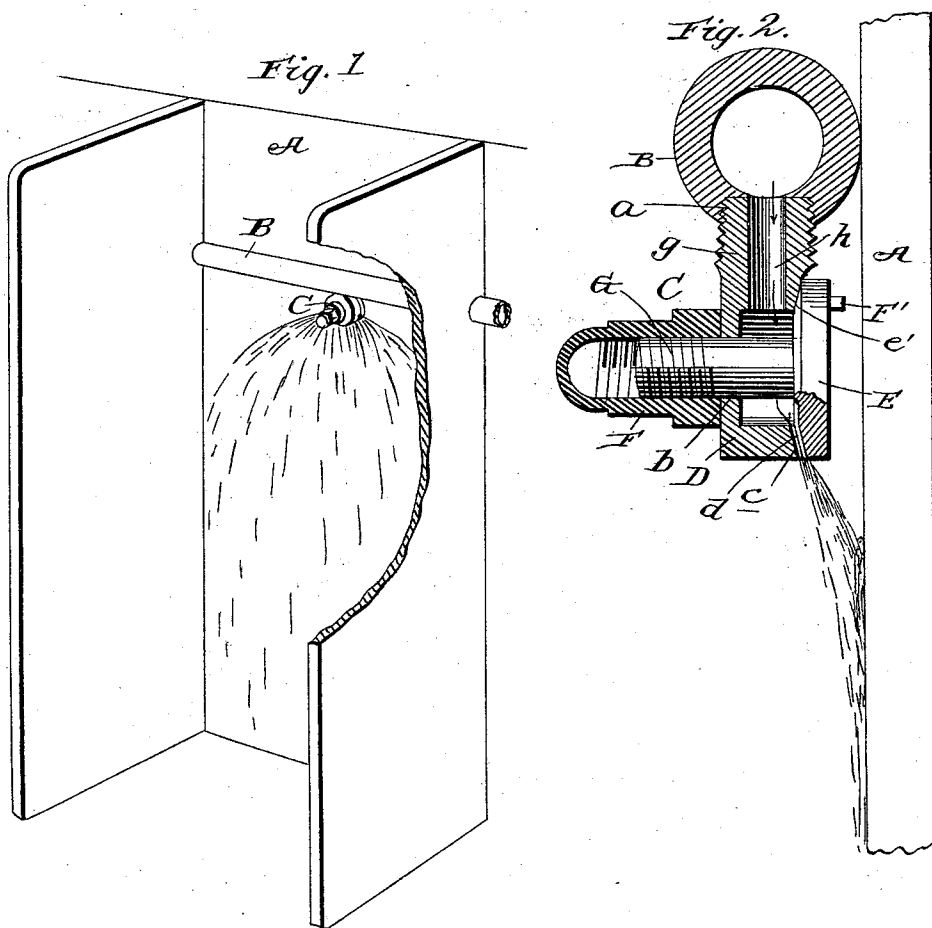


(No Model.)

J. H. SAVILL
SPRAY.

No. 537,236.

Patented Apr. 9, 1895.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH H. SAVILL, OF PHILADELPHIA, PENNSYLVANIA.

SPRAY.

SPECIFICATION forming part of Letters Patent No. 537,236, dated April 9, 1895.

Application filed November 10, 1894. Serial No. 528,432. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. SAVILL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sprays; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in that class of sprays which are employed to cleanse slab urinals, and it has for its general object to provide a spray nozzle for such purpose, of a cheap and simple construction, and one which may be readily adjusted to enable the water to cleanse its discharge aperture or apertures of dirt, &c., which is likely to clog up said aperture or apertures and thereby impair the usefulness of the nozzle.

Other objects and advantages of the invention will be fully understood from the following description and claim when taken in connection with the annexed drawings, in which—

Figure 1, is a perspective view of a slab urinal equipped with my improvements. Fig. 2, is a vertical section on an enlarged scale illustrating the nozzle in conjunction with the supply pipe and a portion of the urinal slab, and Fig. 3, comprises perspective views of the parts that go to make up my improved nozzle.

Referring by letter to said drawings:—A, indicates a urinal slab.

B, indicates the water supply pipe which is generally arranged in a horizontal position at a point adjacent to the upper end of the slab and is provided with a screw tapped aperture *a*, and C, indicates my improved spray nozzle. This nozzle C, may be made in any suitable number of parts, but I prefer in practice to form it of the body D, the cap E, and the nut F, better illustrated in Fig. 3.

The body D, which is preferably of a circular form and chambered as shown, has one of its sides open and a central aperture *b*, in its opposite side, and it is provided in the edge *c*, of its open side, which is beveled inwardly as better illustrated in Fig. 2, with five (more or less) radially disposed grooves *d*, which extend the full width of said edge and are designed for a purpose presently described. The body D, is furthermore provided with

the guide studs F', which extend laterally from its edge *c*; and on these guide studs is designed to be mounted the cap E, which has apertures *e*, to receive the studs as shown in Fig. 2. This cap E, has its inner side beveled, as shown at *e'*, in conformity to the beveled edge *c*, of the body, and it is provided in said side with radial grooves *f*, which are designed to register with the grooves *d*, in the edge of the body and form discharge or jet apertures. Said cap E, is connected with the body by the lateral bolt or stem G, and this bolt or stem which is threaded is designed and adapted to extend through the chamber and aperture *h*, of the body and be provided with the nut F, which serves to hold the cap in its proper position.

The body D, of my nozzle is provided with an externally-threaded branch *g*, designed to engage the threaded aperture *a*, in the pipe B, and in the said branch *g*, is formed a bore *h*, for the passage of water from the pipe B, to the interior of the nozzle.

In the practice of my invention, the nozzle is connected to the under side of the supply pipe with the cap E, contiguous to the urinal slab A, and when the nozzle is in this position, it will be seen that the water, by reason of the beveled edge of the body and the correspondingly beveled side of the cap, will be discharged through the jet apertures at an angle to the slab and striking the same will serve to cleanse it and keep it in a clean and wholesome state. When any one or more of the jet apertures are choked by dirt so as to impair the usefulness of the nozzle, as frequently happens in this class of devices, it is simply necessary to loosen the nut F, when the pressure of water acting against the cap E, will force said cap away from the body so as to separate the grooves forming the jet apertures and will quickly remove the dirt, &c., from said grooves. When the cap is moved away from the body for the purpose above stated, the studs F', serve to guide and hold the cap in its proper relative position so that when the nut is turned to draw the cap against the body, the grooves *d*, *f*, of the body and cap will register to form the jet or discharge apertures. Thus it will be seen that the nozzle may be easily kept in an efficient condition, and as a result the whole surface of the slab

will be subjected at all times to the action of the water and will consequently be kept in a clean and wholesome condition.

In some cases, the narrow grooves *d*, and *f*, of the body D, and cap E, may be dispensed with and said body and cap may be provided with one or two grooves of great width designed to register when the cap is drawn against the body and form elongated discharge openings adapted to spray the water in sheets against the urinal slab.

Having described my invention, what I claim is—

A spray nozzle comprising a body having one of its sides open and a central aperture *b*,

in its opposite side and also having a groove in its edge, and a lateral guide stud *F'*, a cap having an aperture to receive the guide stud *F'*, of the body and a groove adapted to register with the groove of the body and also having a threaded stem adapted to extend through the open side and aperture *b*, of the body, and a nut mounted on the end of said stem, substantially as specified.

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

JOSEPH H. SAVILL.

Witnesses:

W. SAVILL,

GEO. W. CLEMENT.