(No Model.)

H. G. JOHNSON.

ATTACHMENT FOR BROOMS.

No. 566,519. Patented Aug. 25, 1896.

Fig. 1.

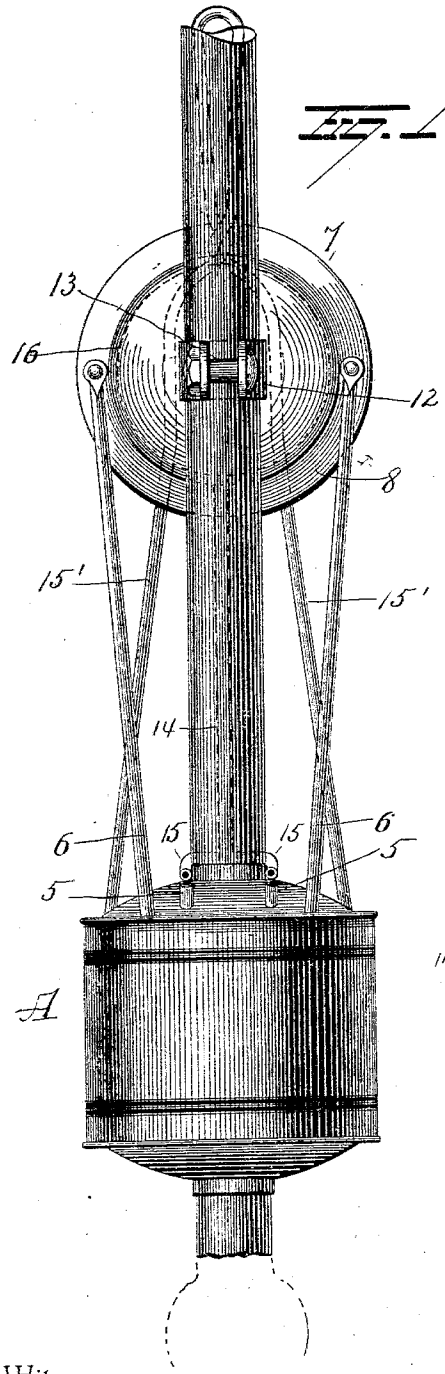
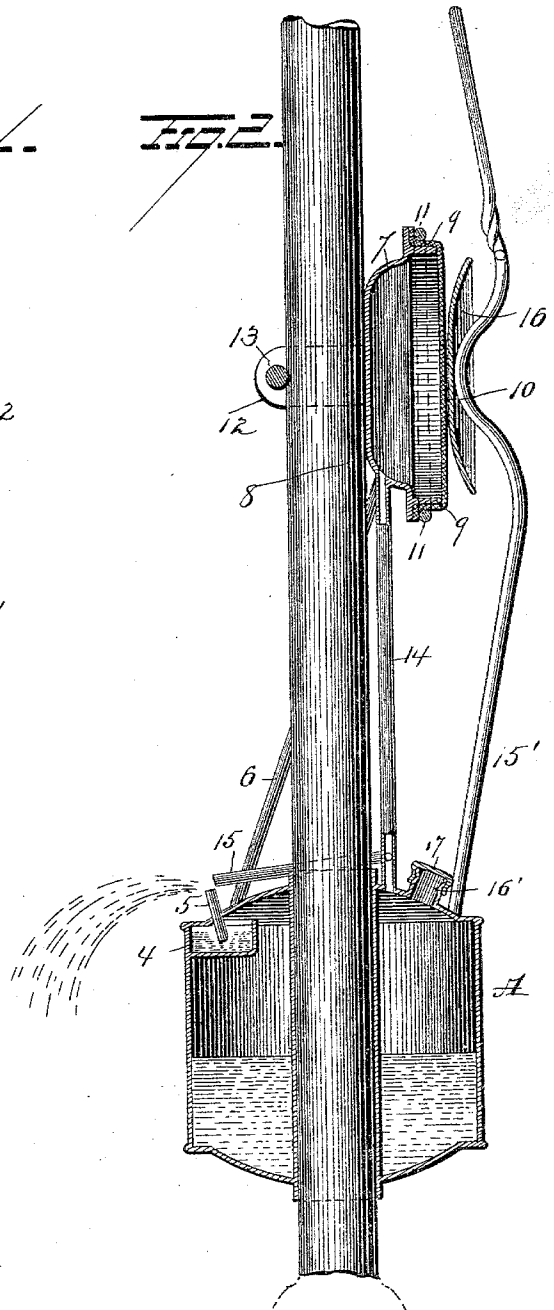


Fig. 2.



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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR BROOMS.

SPECIFICATION forming part of Letters Patent No. 566,519, dated August 25, 1896.

Application filed April 13, 1896. Serial No. 587,337. (No model.)

To all whom it may concern:

Be it known that I, HANS G. JOHNSON, of Waukon, in the county of Allamakee and State of Iowa, have invented certain new and useful Improvements in Attachments for Brooms; and I do hereby 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 an improvement in attachments for brooms, the object being to provide a simple, cheap, and durable atomizer adapted to be attached to the handle of any ordinary broom for spraying the floor in advance of the broom and for settling any dust arising from the operation of sweeping.

With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a view of my improvement attached to the handle of an ordinary broom, and Fig. 2 is a detached sectional view of the same.

A represents a closed reservoir provided centrally with a tube extending through its top and bottom for the passage of a broom-handle, and also provided near its top and to one side with a supplemental reservoir 4, adapted to be supplied with water or a disinfecting solution or powder in a manner to be hereinafter described. The reservoir is preferably situated near the top of said main reservoir, and is in direct communication with the discharge-pipes 5 5, the lower ends of which terminate just above the bottom of the supplemental reservoir. To the top of reservoir A are secured the lower ends of brace-rods 6 6, while the upper ends of the latter are secured to the back plate of bellows 7. These braces are designed to support the reservoir when the latter is in its inoperative position on the broom-handle. Bellows 7 consist of a metallic back plate 8, provided with an annular grooved flange 9 and a yielding or elastic diaphragm 10, which latter is secured to said back plate by the ring 11. To the rear face of back plate 10 is secured a spring-clamp 12, provided with a thumb-screw 13 for securing said clamp to the broom-handle. This clamp not only acts as means of support for bellows 7, but also locks the reservoir against vertical movement on the broom-handle.

Reservoir A and bellows 7 are connected by the air-pipe 14, which latter is provided at a point near its juncture with top of reservoir A with the branch pipes 15 15, the discharge ends of which are in close proximity to the discharge ends of pipes 5 5, which, as before stated, project upwardly through the top of reservoir A.

Secured to the sides of reservoir A is the lever 15′, which is preferably made from a single piece of wire bent in the form shown, the bent portion thereof being provided with a metal plate 16, through the medium of which the diaphragm 10 of bellows 7 is compressed.

To place my attachment on a broom-handle, the free end of the broom is passed through the tube 1 until the desired relative position is secured. The reservoir is then locked to the broom-handle by tightening thumb-screw 13. The use of my attachment on a broom involves no extra labor on the sweeper or operator other than the filling of reservoir A, which is very slight and is accomplished by pouring the water or other liquid or powder used through opening 16′, said opening when in its normal position being closed by the screw-cap 17.

In operation the motion of the broom to and fro causes a portion of the liquid contained in the main reservoir to be thrown into supplemental reservoir 4, and the continued motion of said broom will continue to furnish the supplemental reservoir with the required amount of liquid or powder. The liquid in reservoir 4 is then forced up through discharge-pipes 5 5 by the pressure of air forced into the reservoir by the bellows 7. This air-pressure on the inside of the reservoir causes the liquid to rise in the discharge-pipes, while the blast from the branch pipes blows it in the form of a spray over the carpet or floor, and not only operates to prevent dust from rising, but also causes any dust that may rise to be quickly settled by the

spray. If desired, a disinfecting solution or powder can be employed in the reservoir instead of water.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding my invention, and hence I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described; but,

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

1. An attachment for brooms consisting of a reservoir, a bellows, an air-pipe leading from the bellows into the reservoir, discharge-pipe leading out of the reservoir, and branch pipe leading from the air-pipe and terminating in proximity to the outer end of the discharge-pipe for spreading the material escaping from the discharge-pipe, substantially as set forth.

2. An attachment for brooms consisting of a reservoir, a bellows, a pipe connecting the said reservoir and bellows, discharge-pipe, and lever for operating the bellows to create a pressure or discharge of air, substantially as set forth.

3. An attachment for brooms, consisting of a main reservoir and a supplemental reservoir, a bellows, an air-pipe connecting the bellows and main reservoir, discharge-pipes leading from the supplemental reservoir and means for spraying the liquid or powder when discharged, substantially as set forth.

4. An attachment for brooms, consisting of a main reservoir and a supplemental reservoir, a bellows, an air-pipe connecting the bellows and main reservoir, discharge-pipes leading from the supplemental reservoir and branch pipes connected with the air-pipe for spraying the liquid as it is discharged, substantially as set forth.

5. A broom attachment, consisting of a reservoir provided with a central passageway and a supplemental reservoir, a bellows, a handle for compressing the bellows, an air-pipe connecting the bellows and main reservoir, discharge-pipes leading from the supplemental reservoir, branch pipes connected with the air-pipe for spraying the liquid as it is discharged and a spring-clamp for securing the attachment to a broom-handle, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HANS G. JOHNSON.

Witnesses:
G. A. BAKKUM,
A. O. TWEET.