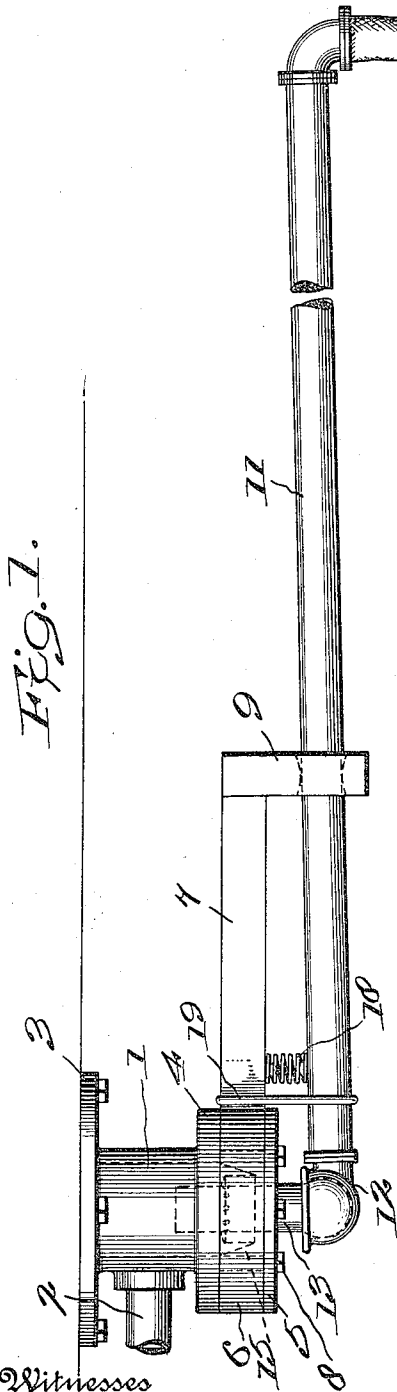


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WASHING APPARATUS.
APPLICATION FILED NOV. 6, 1914.

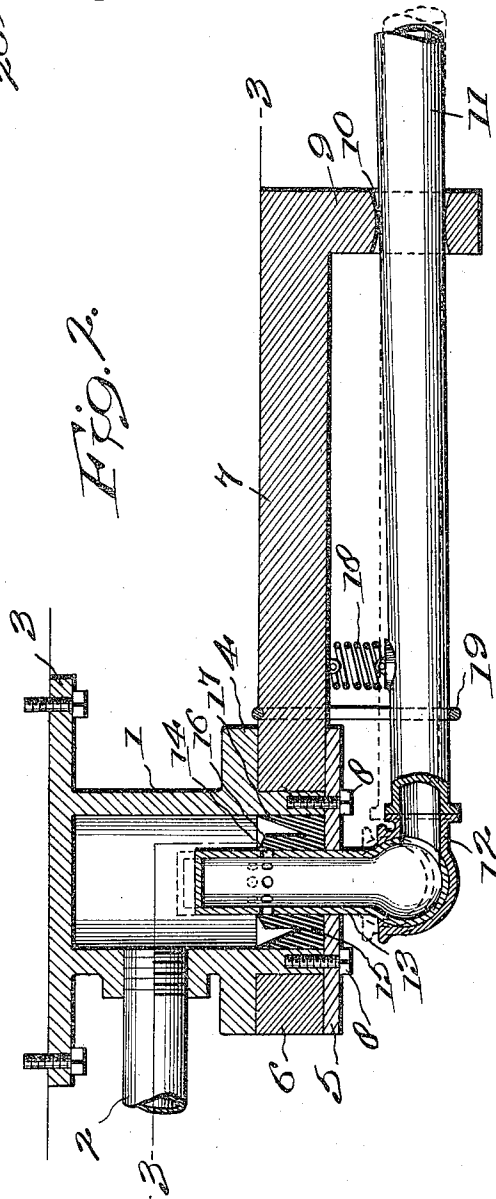
1,153,823.

Patented Sept. 14, 1915.

2 SHEETS—SHEET 1.



Witnesses
Edwin J. Bellev.
R. J. Mawhinney.

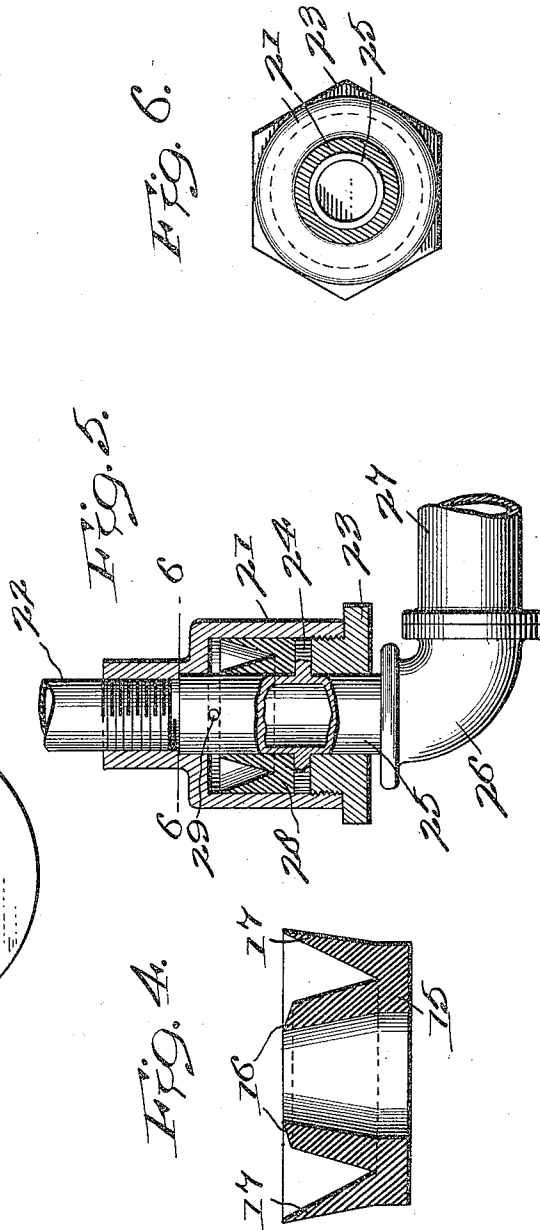
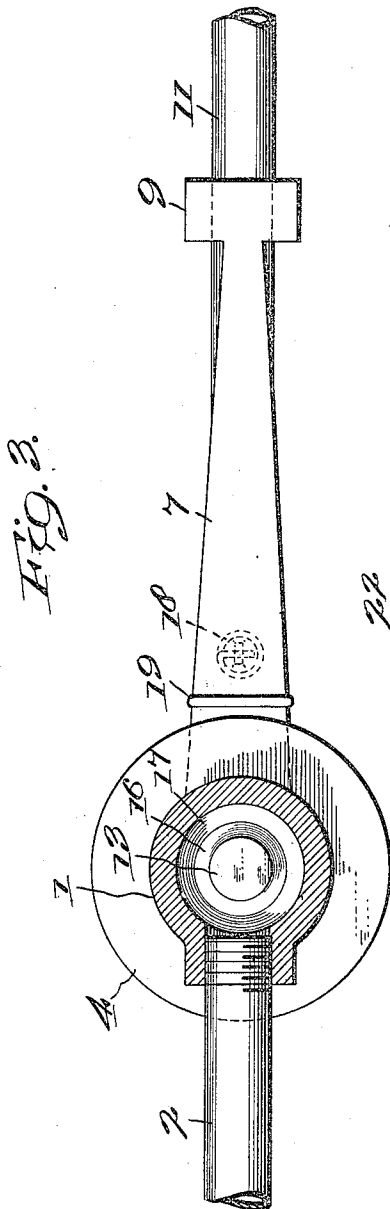


Inventor
W. S. Pierce,
by Wilkinson, Gustaf Mackay
Attorneys.

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2 SHEETS—SHEET 2.



Witnesses
Edwin J. Baller.
A. J. Mawhinney.

Inventor
W. S. Pierce.
By Wilkinson, Gustaf, Mackay
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM S. PIERCE, OF FRANKLIN, PENNSYLVANIA.

WASHING APPARATUS.

1,153,823.

Specification of Letters Patent. Patented Sept. 14, 1915.

Application filed November 6, 1914: Serial No. 870,650.

To all whom it may concern:

Be it known that I, WILLIAM S. PIERCE, a citizen of the United States, residing at Franklin, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Washing Apparatus; 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.

The present invention relates to improvements in washing apparatus, and consists more particularly in washing apparatus adapted for attachment to ceilings in stables and like places where the apparatus is to be used, and which permits the delivery hose to be swung to all parts of the stable:

It is an object of the present invention to provide an improved washing apparatus of this character with which will be associated an automatic valve for checking the flow of the water when the apparatus is out of use, and which will unseat when the delivery hose is grasped and pulled downward.

Another object of the present invention resides in providing an improved washing apparatus for use in cleaning vehicles, or for like purposes, and which will be constituted of a minimum of parts so as to be simple in construction and convenient of operation.

With these and other objects in view the invention consists in the novel details of construction and combinations of parts more fully hereinafter disclosed and particularly pointed out in the claims.

In the accompanying drawings forming a part of this application, and in which similar reference symbols indicate corresponding parts in the several views: Figure 1 is a side elevational view of a washing apparatus constructed in accordance with the present invention. Fig. 2 is a vertical central section view of the same on an enlarged scale. Fig. 3 is a cross sectional view taken on the line 3—3 of Fig. 2. Fig. 4 is a cross sectional view of the gasket employed in the present invention. Fig. 5 is a vertical central sectional view of a modified form of apparatus wherein the automatic valve is dispensed with; and Fig. 6 is a sectional view taken on the line 6—6 of Fig. 5.

Referring more particularly to Figs. 1 to 4, inclusive, of the drawings, wherein one embodiment of the present invention is illus-

trated, 1 designates a casing or shell in communication with mains, or other source of fluid supply, through a connection 2, and constructed with a flange 3 whereby the apparatus may be attached to and supported from the ceiling of a stable, or other place, where the same is to be used. The casing 1 is further cast, or otherwise provided with a flange 4 cooperating with an apertured disk or plate 5, to confine and support for rotation a bearing 6 formed on one end of an arm 7. The plate 5 is secured to the casing 1 by screws, bolts, or other suitable means 8, to permit of the removal of the same to give access to the interior of the casing for purposes of cleaning, replacing, and substituting parts, etc. The arm 7, as advantageously disclosed in Fig. 2, is constructed at its outer free end to provide a hanger 9, formed with an opening 10 having curved walls, as shown, to constitute a rocking bearing for a pipe 11. The pipe 11 is, at one end, connected by means of an elbow 12 to a hollow cylindrical valve body 13, closed at its upper end, as indicated, and provided with an annular series of perforations 14, through which the fluid may pass from the casing 1 into the pipe 11. The valve body 13 is slidable through the opening in the plate 5, and through a gasket 15, which coöperates with the perforations 14 to check the flow of the water when the valve body is moved into the position shown in Fig. 2. Referring more particularly to Fig. 4, the gasket 15 is preferably constructed of a tapered annulus or collar of flexible or resilient material, formed with a reversely tapered opening, as shown, and with a substantially V-shaped annular groove separating the upper portion of the gasket into a pair of concentric annular walls 16 and 17. The wall 16 is relatively thick and uniform, and is adapted to embrace the valve body 13, while the wall 17 is tapered and arranged to engage the interior wall of the casing 1. It will be understood that the tapered form of the gasket 15 operates to cause the same to fit snugly within the casing and tightly embrace the valve body 13, so as to form an effectual water and air seal thereabout; and the V-shaped groove provides for admitting the fluid, which, by its weight and pressure, contributes to force the walls 16 and 17 into close engagement with the valve body 13 of the casing 1, respectively. The pipe 11 is normally acted

upon by a spring 18, arranged between the same and the arm 7, to move the pipe to engage a stirrup 19 supported from the arm 7, when the perforations 14 in the valve body 13 will be in the position shown in Fig. 2. A hose or other connection 20, is attached to the outer free end of the pipe 11 and is arranged to be pulled downward to oscillate the pipe 11 against the action of the spring 18 and move the valve body 13 into the position shown in dotted lines in Fig. 2, when the perforations 14 will clear the gasket 15 and permit the flow of the water from the casing 1 into the pipe 11 and hose 20, as will be understood. The hose 20 may be pulled to swing the arm 7 about its bearing 6 and move to any part of the stable; and when released the spring 18 will come into play and return the pipe 11 to engage the stirrup 19 and close the valve.

Referring more particularly to Figs. 5 and 6 of the drawings, the casing 21 is in communication with the fluid source through a connection 22, and may be secured in a ceiling or other support in any suitable manner. The lower end of the casing 21 is inclosed by a cap 23, which constitutes a bearing for a flange 24 formed on a pipe section 25. The pipe section 25 is connected through an elbow 26 to a horizontal pipe 27, corresponding to the pipe 11, shown in Fig. 1, and to which the hose is attached. The pipe section 25 is revoluble on the cap 23, and is embraced by a gasket 28 substantially similar in construction to the gasket shown in Fig. 4, and employed in conjunction with my preferred form of apparatus. The pipe section 25 has a bearing in the upper reduced head of the casing 21, as shown, and is provided with a perforation 29, for the passage of the fluid into the casing whereby the same operates to expand the walls of the gasket 28, as above described and as will now be understood.

In the modified form of my invention it will be understood that I dispense with the valve arrangement, the fluid being cut off by a valve located in the connection 22. The construction permits swinging of the horizontal pipe 27 to move the hose into any part of the stable desired, and provides an effectual joint for preventing leakage about the revoluble connection.

Although I have described the invention as an apparatus for washing, it will be understood that I do not desire to restrict the same to this or any particular use, as the ap-

paratus may be used in connection with air, gas, oil, steam, or other fluid.

I have illustrated and described preferred and satisfactory constructions, but obviously changes could be made in the herein described apparatus which could be used without departing from the spirit of my invention.

I claim:

1. The combination with a casing in communication with a source of fluid supply, and a hollow valve body mounted to reciprocate in said casing and provided with a plurality of fluid passages therein, of a gasket mounted in said casing and coöperating with said fluid passages to close the outlet therethrough, said gasket constructed of a single circular block of resilient material comprising an annular solid base, and an upper portion having normally flaring exterior and interior walls, respectively, for snugly fitting said casing and valve body, said upper portion being formed with a circular V-shaped groove dividing the same to provide an outer tapering annulus, and an inner concentric annulus provided with a beveled upper edge and constructed relatively thick and uniform to counteract the tendency of the pressure to force the material thereof into said fluid passages, substantially as described.

2. The combination with a casing in communication with a source of fluid supply, and a hollow valve body mounted to move in said casing and provided with fluid passage therein, of a gasket mounted in said casing and coöperating with the fluid passages in said valve body to control the outlet therethrough, said gasket constructed of a single circular block of resilient material comprising an annular solid base, and an upper portion having normally flaring exterior and interior walls, respectively, for snugly fitting said casing and valve body, said upper portion being formed with a circular V-shaped groove dividing the same to provide an interior and an exterior annulus to receive the fluid pressure for expanding the same against the respective parts, substantially as described.

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

WILLIAM S. PIERCE.

Witnesses:

JOHN L. NESBIT,
MARGARET MARTIN.