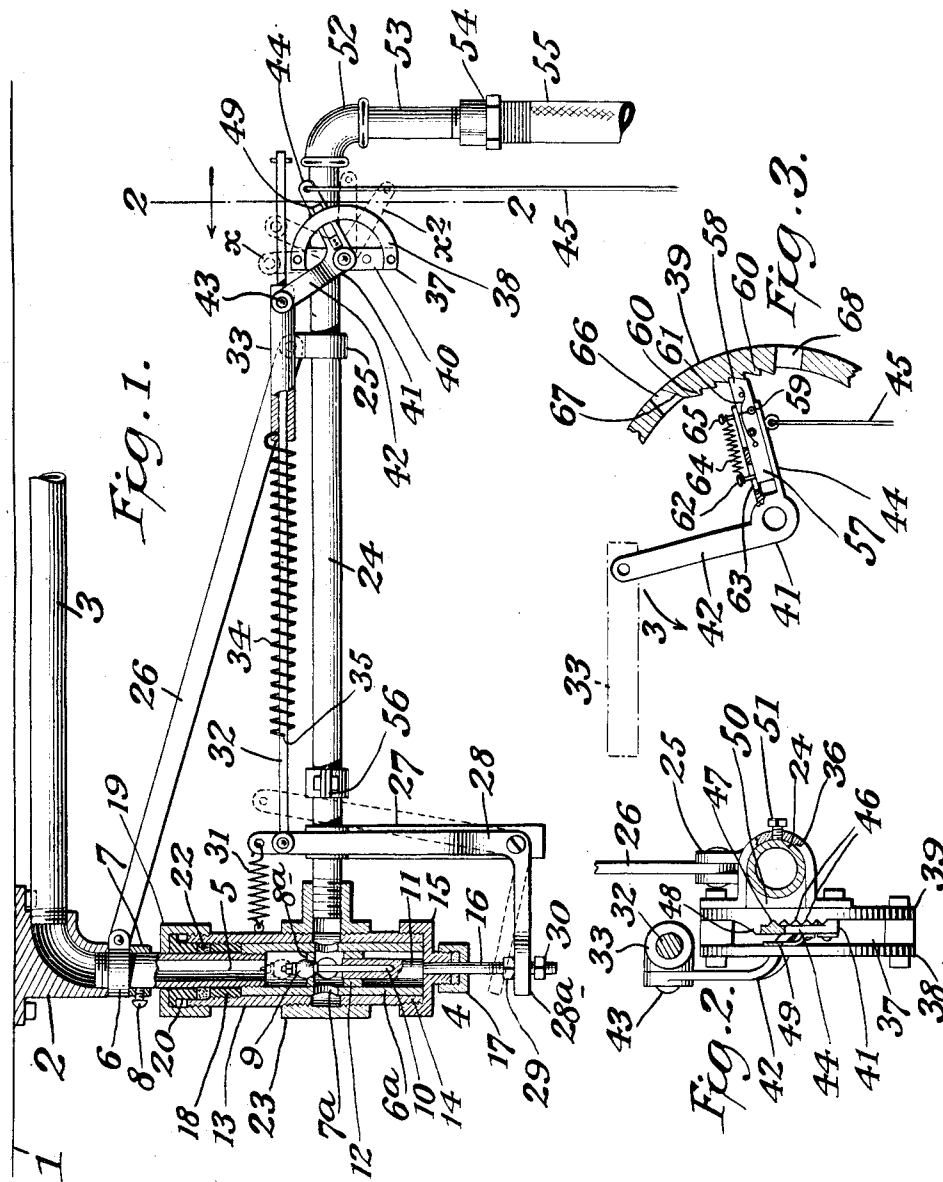


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CARRIAGE WASHING APPARATUS.
APPLICATION FILED MAY 23, 1912.

1,050,318.

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UNITED STATES PATENT OFFICE.

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CARRIAGE-WASHING APPARATUS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH WEISS, a citizen of the United States, and residing at Weehawken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Carriage-Washing Apparatus, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to apparatus for washing carriages and other vehicles and the object thereof is to provide an improved apparatus of this class which may be installed in a carriage house, or in any building or structure where such apparatus is required or may be used, a further object being to provide an apparatus of the class specified which is simple in construction and convenient and efficient in operation and easily manipulated; and with these and other objects in view the invention consists in an apparatus of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification of which the accompanying drawing forms a part, in which the separate parts of my invention are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a sectional side view showing the main parts of my improved apparatus and showing the same suspended from an overhead support; Fig. 2 a section on the line 2—2 of Fig. 1 and on an enlarged scale, and Fig. 3 a sectional view showing a detail of the apparatus and showing a modification thereof.

In the practice of my invention, as shown in the drawing, I secure to a ceiling or any suitable overhead support 1, an elbow coupling 2 with which is connected a water supply pipe 3, which pipe may be connected with a hydrant or any suitable source of water supply. Suspended from the coupling 2 is a hanger 4 which is of the following construction. A pipe 5 is screwed into the coupling 2 and provided with a rotatable collar 6 held in place by a ring 7 provided with a set screw 8. Screwed onto the lower end of the pipe 5 is a supplemental pipe 6^a provided centrally with circularly arranged ports or passages 7^a, any desired number of which may be employed, and placed in the pipe 6^a above the ports

or passages 7^a is a valve seat 8^a having a central port or passage adapted to be closed by a valve 9 having a stem 10 which extends downwardly below the ports or passages 7^a and enters a vertically movable plunger 11 which is centered in the pipe 6^a by a collar 12. The upper end portion of the supplemental pipe 6^a is inclosed by a sleeve 13 which extends above said pipe and the lower end portion thereof by a sleeve 14, and the lower end of said pipe and said sleeve 14 are provided with a cap 15, and the plunger 11 is provided with a stem 16 which passes downwardly through said cap and through a gland or stuffing box 17 connected therewith. Screwed into the sleeve 13 is a collar 18 and the upper end of said sleeve is provided with a gland or cap 19 which incloses a sliding collar 20 between which and the collar 18 is placed a packing 22. The sleeves 13 and 14 are connected centrally of the supplemental pipe 6^a by a T-coupling 23 into which said sleeves are screwed and this completes the construction of the hanger 4.

Screwed into the coupling 23 is a discharge pipe 24 provided at a predetermined distance from said coupling with a collar 25 with which is loosely connected a brace 26 which is also connected with the collar 6. Connected with the pipe 24 adjacent to the hanger 4 is a hanger bracket 27 with the lower end portion of which is connected a bell crank lever 28 the shorter arm of which is forked at 28^a, and the stem 16 of the plunger 11 passes downwardly there-through and is provided with two set nuts 29 and 30. The longer arm of the lever 28 extends above the pipe 24 and connected therewith is a spiral spring 31 which is also connected with the hanger 4. A rod 32 is connected with the longer arm of the lever 28 above the pipe 24 and extends longitudinally of said pipe approximately the full length thereof and mounted thereon is a sliding sleeve 33 with which is connected a spiral spring 34 which is stronger than the spring 31, and through which the rod 32 passes, and said spring is connected with said rod at 35.

Connected with the pipe 24 outwardly of the collar 25 is a yoke 36 to which is secured a double quadrant head 37 consisting of two parts 38 and 39, and the head 37 is provided with a vertically arranged cross bar 40 to which is pivoted a bell-crank 41

one arm of which is connected with the sleeve 33 at 43, and the other arm 44 of which is provided with a pull device 45 consisting of a rope, cord, wire or other device, by which said crank may be operated. The part 39 of the head 37 is provided with V-shaped recesses 46, and the arm 44 of the bell-crank 41 is provided with a tooth 47 adapted to enter said recess and the part 39 of the head 37 is provided with a stop 48 to limit the upward movement of said arm, and secured to the arm 44 is a spring 49 which bears on the inner side of the part 38 of the head 37 and forces said arm in the opposite direction so that the tooth 47 thereof will enter one of the recesses 46 under all conditions. In order to properly secure the head 37 to the pipe 24 a filler block 50 is placed in the yoke 36 and a set screw 51 is passed through said yoke and bears on said pipe.

The outer end of the pipe 24 is provided with an elbow coupling 52 with which is connected a supplemental pipe 53 having a coupling 54 with which is or may be connected a hose 55 through which the water for use in washing carriages or other vehicles is delivered, and in practice the hose 55 may be connected with the usual nozzle or sprayer or other attachments as desired.

The hanger 4 with the exception of the pipe 5 and the supplemental pipe 6^a are rotatable, or in other words all the rest of said hanger is rotatable on said pipes and the delivery or discharge pipe 24 with all the parts connected therewith is adapted to swing or to be turned therewith, and is adapted to swing or be turned in a horizontal plane so as to reach any part of the place, room or compartment in which the apparatus is installed for the purpose of washing carriages or other vehicles in any place or position in which they may be put.

Connected with the pipe 24 is a stop device 56 and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawing and the following statement. The amount of water passing through the pipe 24 and through the hose 55 depends upon the position of the valve 9. This valve is so formed that it extends downwardly through the port or passage in the valve seat 8^a, and may be raised slightly so as to open said port or passage slightly, or to a further extent so as to open said port or passage still further, or it may be raised so as to completely open said port or passage and allow the free passage of water therethrough. A slight pull on the pull device 45 will raise the valve 9 from its seat and the arm 44 of the bell-crank 41 will be moved one step, and another pull or a stronger pull on said hanger will move the arm 42 of the bell-crank 41 into the position

shown at X, in which position the valve 9 will be entirely open, but it will be understood that the movement of the arm 42 of the bell-crank 41 may be stopped at any desired position, between that shown in full lines in Fig. 1 and the dotted position shown at X. Whenever it is desired to close the valve 9 a quick hard pull is given on the pull device 45. This throws the arm 44 of the bell-crank 41 into the position shown at X² and causes the tooth 47 of said arm to move below the recesses 46 in the part 39 of the head 37 and puts the spring 34 under tension, the movement of the lever 28 being limited by the stop 56. A quick release of the pull device 45 at this time will cause the spring 34 to re-act and the bell-crank 41 will be thrown back into the position shown in full lines in Fig. 1 and the arm 44 of said bell-crank will strike the stop 48.

In the construction shown in Fig. 3 the arm 44 of the bell-crank 41 is made hollow, and mounted therein is a plunger 57 having a nose 58 pivoted to said plunger at 59 and the nose 58 operates in connection with ratchet teeth 60 formed on the part 39. The nose 58 of the plunger 57 is yieldingly held in alinement with said plunger by a spring 61 and connected with the inner end portion of said plunger is a pin 62 which passes out through a slot 63 in the top of the arm 44 and is connected with a tension spring 64 secured to the end portion of said arm at 65. The spring 64 normally serves to force the plunger 57 outwardly so that the nose 58 thereof will engage the teeth 60. The part 39 of the head 37 is provided above the teeth 60 with an aperture 66 provided with a cam face 67 and below said teeth 60 is another aperture 68. With this construction the valve 9 may be operated as hereinbefore described in giving the operation of the parts shown in Fig. 1. The releasing of the bell-crank 41 is accomplished by a strong pull on the pull device 45 which throws the nose piece 58, of the plunger 57 into the space 68. If now, the pull device 45 be released the nose piece 58, the hinge 59 of which is outside of the arm 44 will be opened downwardly and the bell-crank 41 will be quickly turned in the direction of the arrow 3 and the nose piece 58 will be thrown up opposite the aperture 66 when the spring 61 will throw it back into operative position, and a downward pull on the pull device 45 will cause said nose piece to move over the cam face 67 and assume its normal operative position in connection with the first tooth 60 of the ratchet teeth in the head member 39.

Other forms of construction may be used for controlling the flow of water through the pipe 24, and changes in and modifications of the other parts of my improved apparatus may be made, within the scope of the

appended claims, without departing from the spirit of my invention or sacrificing its advantages.

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

1. In a carriage washing apparatus, a rotatable hanger through which water is adapted to pass, said hanger being provided with a valve, a delivery pipe connected with said hanger and adapted to receive water therefrom, a pull crank connected with said pipe, a support connected with said pipe adjacent to said hanger, a crank lever connected with said support and in operative connection with said valve, a spring connected with said lever for holding said valve in a closed position, a rod connected with said lever, a sleeve movably mounted on said rod and with which said pull crank is connected, and a spiral spring connected with said sleeve and through which said rod passes, said spring being also connected with said rod adjacent to said lever.

2. In a carriage washing apparatus, a water delivery pipe connected with a rotatable hanger through which water is adapted to pass, said hanger being provided with

a valve, a bell crank connected with said pipe and in operative connection with said valve, said bell crank being provided with a ratchet device for controlling the operation thereof, and means for moving said bell crank by hand.

3. A carriage washing apparatus, comprising a rotatable hanger through which water is adapted to pass, said hanger being provided with a valve, a delivery pipe connected with said hanger and adapted to turn in a horizontal plane therewith, a bell crank connected with said pipe and in operative connection with said valve, a ratchet device for controlling the operation of said bell crank, and a hand-operated pull device for moving said bell crank in one direction, the movement of said crank in the opposite direction being effected automatically.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 18th day of May 1912.

JOSEPH WEISS.

Witnesses:

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