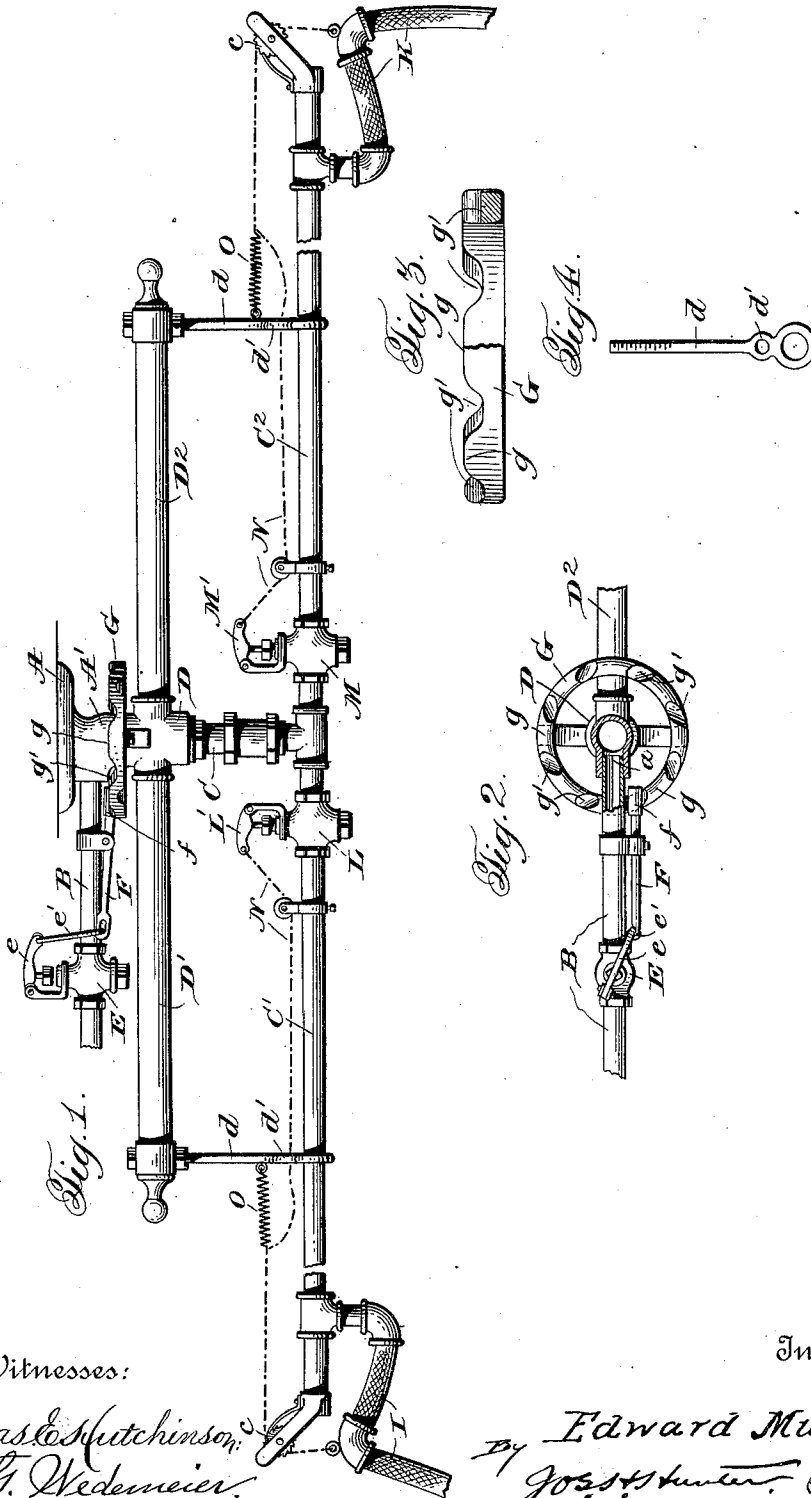


E. MULLER.
VEHICLE WASHER.

APPLICATION FILED JULY 18, 1912. RENEWED SEPT. 10, 1913.

1,090,640.

Patented Mar. 17, 1914.



Witnesses:

James Hutchinson,
G. Wedemeier.

Inventor:

Edward Muller
J. S. Hunter, Attorney.

UNITED STATES PATENT OFFICE.

EDWARD MULLER, OF EAST NEW DURHAM, NEW JERSEY.

VEHICLE-WASHER.

1,090,640.

Specification of Letters Patent.

Patented Mar. 17, 1914.

Application filed July 18, 1912, Serial No. 710,200. Renewed September 10, 1913. Serial No. 789,173.

To all whom it may concern:

Be it known that I, EDWARD MULLER, citizen of the United States, residing at East New Durham, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Vehicle-Washers, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to an improvement in carriage or vehicle washers, and more particularly to that type of carriage or vehicle washers in which the water delivery pipe is swiveled to a water supply pipe
15 which is fixedly secured to a ceiling or overhead support.

One of the objects of the present invention is the provision of a device of this character in which the movement of the delivery pipe relative to the water supply pipe is utilized to control the flow of water through the delivery pipe.

20 A further object of the present invention is the provision of an improved device of this character of a simple and efficient construction, in which a plurality of delivery pipes are provided, thus enabling several operators to use the same machine.

25 Other objects of the invention will be apparent from the detailed description hereinafter, when read in connection with the accompanying drawings forming a part hereof, wherein a convenient embodiment of the invention is illustrated, and wherein like characters of reference refer to similar parts in the several views.

30 In the drawings: Figure 1 is a side elevation of the improved vehicle or carriage washer; Fig. 2 is a fragmentary top plan view, with parts shown in section: Fig. 3 is a side elevation with parts shown in section, of the ring for actuating the water inlet valve, and Fig. 4 is a detail view of one of the hangers which are used to assist
35 in supporting the water supply pipes.

Referring now more particularly to the drawings, A designates a supporting plate which is adapted to be bolted or otherwise attached to a ceiling or other overhead support, and from which depends a downwardly extending pipe A' which is provided with a laterally disposed inlet opening a to which is connected a fixed water supply pipe B. Swiveled in the downwardly extending pipe A' is a pipe C, to the lower ends of which are coupled the inner ends

of oppositely extending delivery pipes C' and C². Rotatably mounted on the exterior of the downwardly extending pipe A' is a collar D, and rigidly connected at their inner ends in any suitable manner to the collar D are oppositely extending arms D' and D² which are adapted to directly overlie the delivery pipes C' and C². Depending from the outer ends of the arms D' and D² are suitable hangers d which are provided at the lower ends thereof with portions which are fashioned to embrace the delivery pipes C' and C². The hangers d serve to assist in supporting the delivery pipes C' and C² and take the strain off the pipe C which is swiveled in the downwardly extending pipe A'. The upper ends of the hangers d are conveniently connected to the arms D' and D² by means which will permit the hangers to be adjusted longitudinally. Positioned within the water supply pipe B is a valve E which controls the flow of water to the swinging delivery pipes C' and C². The valve E may be of any suitable construction, and in the form of the invention illustrated, in the drawings, I have shown a reciprocating valve, the stem of which projects upwardly through the valve casing and is adapted to be actuated by an arm e which
60 fulcrums to the valve casing and overlies the projecting ends of the valve stem, which arm is connected by a suitable link e' with one end of a lever F which is fulcrumed intermediate its ends to a suitable support secured to the water supply pipe B. The valve E is provided with a suitable spring e² which serves to normally hold the valve in its closed position, and the outer end of the lever F in its elevated position.
65 70 75 80 85 90 95

Secured to the upper portion of the collar D and rotatable therewith, is a ring G, the upper surface of which underlies the inner end of the lever F. The upper surface of the ring G is provided with a plurality of alternately arranged high and low portions g and g' such portions being conveniently formed by providing a plurality of spaced grooves in the upper surface of the ring. The construction thus described is such that when the inner end of the lever F rests in one of the depressions formed in the ring G, the valve E will be maintained by its spring in its closed position. The ring G may be secured in position in any desired manner. In the embodiment of the invention illustrated, I have shown such ring as
100 105 110

provided with a plurality of depending lugs which are bolted or otherwise secured to the collar D and the arms D' and D² which project therefrom. If the collar D is rotated by shifting either of the delivery pipes C' and C², the inner end of the lever F will be caused to ride upon one of the high portions *g* of the ring G, which will depress the outer end of the lever a sufficient distance to effect the opening of the valve, thus permitting water to pass from the water supply pipe B to the pipe C and from thence to the delivery pipes C' and C². It will thus be seen that the flow of water to the delivery pipes can be readily controlled by a very slight movement of the delivery pipes in either direction. The high portions *g* of the ring are provided with relatively flat upper surfaces of such a length as to prevent accidental disengagement of the inner ends of the lever F after the same has been moved thereon. To prevent wear between the parts, the inner end of the lever F is conveniently provided with a friction roller *f* which is adapted to move over the high and low portions of the ring G. Connected to the outer end of the delivery pipe C' is a hose I, which may be of any well known construction, and connected to the outer end of the delivery pipe C² is a similar hose K. The flow of water through the delivery pipe C' is controlled by a valve L and the flow of water through the delivery pipe C² is controlled by a valve M. The valves L and M may be of any convenient construction, and in the form of the invention illustrated in the drawing, I have shown reciprocating valves, the stems of which project upwardly through the valve casings and are adapted to be actuated by levers L' and M', which are fulcrumed to the valve casings and overlie the projecting ends of the valve stems. The valves L and M are of such a construction that they are normally held closed and are opened by depressing the levers L' and M'.

In the construction as thus far disclosed, it will be noted that when the valve E in the water supply pipe is open, water is permitted to pass to both of the delivery pipes, and means is provided for independently actuating the valves L and M, so that the operator at each hose can control the discharge of water therethrough. To this end, the cables N N are utilized, the inner ends of which are connected to the free ends of the levers L' and M', which cables pass under suitable guide pulleys secured to the delivery pipes C' and C² through suitable guide eyes *d'* formed in the hangers *d* and over suitable pulleys *c* supported at the ends of the delivery pipes C' and C², the free ends of said cable being connected to the hose I and K which are connected to the outer ends of the delivery pipes C' and C².

I prefer to construct the pulleys *c* at the ends of the delivery pipes C' and C² in the manner shown in my Patent No. 1,022,042, dated April 2, 1912, so that the valves may, if desired, be maintained in their open positions. Connected to the cables N N outwardly of the connection of the delivery pipes C' and C² with the hangers *d* are springs O O, the free ends of which are connected to said hangers.

To use the device, as above described, either of the delivery pipes is first shifted laterally a sufficient extent to cause the inner end of the lever F to ride upon one of the high portions *g* of the ring G, thus opening the valve E and permitting water to flow to the delivery pipes C' and C². If either of the operators then desires water from the hose, it is only necessary to pull upon the hose, which by pulling upon one of the cables, N N, causes the valve in the delivery pipe to be opened and thus allowing water to flow through the hose. To cut off the flow the operator need only release the pull on the hose, when the valve in the delivery pipe will be again closed, or the flow may be cut off by shifting the delivery pipe laterally until the inner end of the lever F passes off of one of the high portions *g* of the ring B and onto one of the low portions thereof which will cause the closing of the valve E in the water supply pipe. Of course, in this latter event, the flow of water to both the delivery pipes is cut off.

From the above described construction, it will be seen that the hose I and K can be used together or independently as desired, and that by reason of the fact that the ring G is provided with a plurality of high and low portions, for cooperation with the valve operating lever F, the delivery pipes can be used in practically any position to which they may be adjusted.

While I have illustrated the device as provided with two delivery pipes, it is obvious that more may be employed if desired, or that only one delivery pipe may be utilized if desired. In this latter event, the valve in the delivery pipe may be dispensed with and the flow of water therethrough controlled solely by the movement of the delivery pipe relative to the inlet pipe.

While a convenient embodiment of the invention is illustrated in the accompanying drawings, it will be understood that many changes may be made in the form and construction therein shown without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:—

1. In a device of the character described, a fixed inlet pipe, a laterally disposed delivery pipe rotatably connected thereto, a valve in the inlet pipe, an operating member for said valve, and a plurality of members rotatable

with said delivery pipe and positioned to engage said actuating member upon rotation of the delivery pipe.

2. In a device of the character described, a fixed inlet pipe, a laterally disposed delivery pipe rotatably connected thereto, a valve in said inlet pipe, an operating lever for said valve, and an annular member rotatable with said delivery pipe and provided with a plurality of portions fashioned to engage said lever and shift the same to a position to open the valve in the inlet pipe upon rotation of said delivery pipe.

3. In a device of the character described, a fixed downwardly extending inlet pipe, a delivery pipe rotatably connected to said inlet pipe, an annular member rotatable with the delivery pipe and surrounding the inlet pipe, said annular member being provided with a plurality of raised portions, and a valve in the inlet pipe, said valve being provided with an operating portion lying in the path of the raised portions of said annular member so as to be actuated thereby upon rotation of the delivery pipe.

4. In a device of the character described, a fixed downwardly extending inlet pipe, a delivery pipe rotatably connected to said inlet pipe, an annular member surrounding the downwardly extending inlet pipe and rotatable with said delivery pipe, said annular member being provided on its upper surface with a plurality of separated raised portions, a valve for controlling the flow of fluid in the inlet pipe, and operating means for said valve including a lever, one end of which is adapted to overlie said annular member so as to be engaged by the raised portions thereof when the delivery pipe is shifted.

5. In a device of the character described, an inlet pipe provided with a downwardly extending portion, a delivery pipe rotatably supported in the downwardly extending portion of said inlet pipe, an arm rotatably supported on the downwardly extending portion of said inlet pipe, and connected to said delivery pipe so as to rotate therewith, a valve for controlling the flow of fluid through the inlet pipe, an operating member for said valve, and an annular member carried by said arm and underlying the operating member of said valve, said annular member being provided with a plurality of separated portions adapted to engage said valve operating member.

6. In a device of the character described, a fixed water inlet pipe, a plurality of delivery pipes rotatably connected thereto, a valve in said fixed inlet pipe, means for automatically operating the valve in the inlet

pipe upon the movement of said delivery pipes relative to said inlet pipe, a valve in each of said delivery pipes, a flexible hose connected to the outlet end of each of said delivery pipes, and a connection between the hose connected to each delivery pipe and the valve in said pipe.

7. In a device of the character described, a fixed water inlet pipe, a delivery pipe rotatably connected thereto, a valve in said inlet pipe, an operating member for said valve, and means rotatable with said delivery pipe and provided with a plurality of portions adapted to engage said valve operating member upon rotation of said delivery pipe.

8. In a device of the character described, a fixed water inlet pipe, a plurality of connected delivery pipes rotatably connected thereto, a valve in said water inlet pipe, an operating member for said valve, means rotatable with the delivery pipes, and provided with a plurality of portions adapted to successively engage the operating member of the valve in the inlet pipe upon rotation of the delivery pipes, a valve in each of said delivery pipes and independent operating means for each of said delivery pipe valves.

9. In a device of the character described, a fixed water inlet pipe, a plurality of connected delivery pipes rotatably connected to said water inlet pipe, a valve in said water inlet pipe, an operating lever for said valve, an annular member rotatable with the delivery pipes and overlying one end of the operating lever for said valve, said annular member being provided with a plurality of high and low portions on the surface thereof, means for normally holding the valve in the inlet pipe in its closed position, and the operating lever thereof in engagement with said annular member, a valve in each of said delivery pipes, and an independent operating means for each of said delivery pipe valves.

10. In a device of the character described, a water inlet pipe, a delivery pipe rotatably connected thereto, a valve in said inlet pipe, an annular member rotatable with the delivery pipe and provided on its surface with a plurality of separated elongated raised portions having substantially flat upper surfaces, and an operating member for the valve in the inlet pipe normally engaging the surface of said annular member.

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

EDWARD MULLER.

Witnesses:

JOHN DIPPEL,
CHARLES WOLETZ.