J. D. CHAPMAN & W. R. MCATEE.

ROTARY WASHER FOR VEHICLES.

APPLICATION FILED JUNE 21, 1905.


Rotary Washer for Vehicles.

No. 820,475.


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To all whom it may concern:

Be it known that we, Jay D. Chapman and William R. McAtee, citizens of the United States, residing at Oil City, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Rotary Washers for Vehicles, of which the following is a specification, reference being had to the accompanying drawings.

Our invention relates to improvements in devices for washing vehicles; and the object of our invention is to provide a device of this nature which shall be rotatable, and thereby enable the operator to obtain a large radius of action, and which shall be automatic in its action in cutting off the water-supply when the hose is dropped, thereby insuring economy in the use of water.

In the drawings illustrating the principle of our invention and the best mode now known to us of applying that principle, Figure 1 is a side elevation of our new washer. Figure 2 is a central sectional view through the axis of the cylindrical reservoir. Figure 3 is a horizontal sectional view on the line A A, Fig. 1; and Fig. 4 is a detail sectional view showing the swivel-joint.

In the bracket b, projecting from the side of the cylindrical reservoir a, is mounted the rock-shaft c, the inner end of which controls the rotary valve d in the lower end of the inlet-pipe e and upon the outer end of which is the lever f. A hose-pipe g is supported by one end of the lever f and attached by a coupling h to the reservoir a, while a counterweight i is held by a set-screw j in adjusted position upon the other end of the lever f. The limits of the oscillations of the lever f are determined by the bolts k k, Fig. 1. The reservoir a is provided with a drain-cock v, by which it may be emptied when desired.

The above-described apparatus is suspended from the ceiling m, to which the ceiling-flange n is suitably secured, and the mode of suspension is such as to permit the reservoir a to rotate upon its axis. Referring to Fig. 4, it is seen that the reservoir a is formed at its central upper portion with a hollow boss o, in the lower inner portion of which is screwed the upper end of the inlet-pipe e and upon the outer upper portion of which is screwed the sleeve p, the upper end of which is formed with an inwardly-projecting flange q. The sleeve p is held in its adjusted position upon the boss o by means of the set-screw r. The supply-pipe s is screwed into the ceiling-flange n at its upper end, and its lower end projects over the upper end of the boss o into the sleeve p and is formed with an outwardly-projecting flange t, which coats with the inwardly-projecting flange q to form a swivel-joint at this point, about which the reservoir a turns freely, the sleeve p being firmly held upon the boss o by its set-screw r. The packing u insures a water-tight joint.

The operation of the device will now be easily understood. When it is desired to use the apparatus, the hose-pipe g is pulled down slightly against the weight of the counterweight i, thereby rocking the shaft c, so as to open the valve d and permit the water to flow from the inlet-pipe e into the reservoir a and thence through the hose-pipe g. The reservoir a readily turns or swivels about the coupling, (shown in Fig. 4,) thereby giving a large radius of action to the washer. When the hose is released, the counterweight i rocks the lever f and valve d, so as to shut off the water from the inlet-pipe e, thereby securing economy in the use of water.

What we claim is—

1. In combination in a rotary washer for vehicles, a reservoir rotatable upon a supply-pipe leading thereunto; said supply-pipe; a valve controlling the outlet end of said supply-pipe within said reservoir; a hose leading from said reservoir; and automatic mechanism connected with said hose and controlling said valve.

2. In combination in a rotary washer for vehicles, a reservoir rotatable upon a supply-pipe leading thereunto; said supply-pipe; a valve controlling the outlet end of said supply-pipe within said reservoir; a hose leading from said reservoir; and mechanism controlled by said hose for controlling said valve.

3. In combination in a washer for vehicles, a reservoir; a supply-pipe leading thereunto; a valve controlling the outlet from said supply-pipe into said reservoir; a hose leading from said reservoir; and mechanism connected with said hose for controlling said valve.

4. In combination in a vehicle-washer, a reservoir; a supply-pipe leading thereunto; a valve controlling the outlet from said supply-pipe into said reservoir; a hose leading from said reservoir; a counterweighted lever controlled by said hose for controlling said valve; and means connecting said lever and valve.

5. In combination in a vehicle-washer, a reservoir; a supply-pipe leading thereunto; a rotary valve controlling the outlet from said reservoir; a hose leading from said reservoir; and automatic mechanism connected with said hose and controlling said valve.

I declare that I have invented the above-mentioned improvements in the device and that I have neither assigned nor conveyed any interest in said device to any person nor to any corporation except the above-named assignees.

I further declare that the full particulars of my improvements shall be found in the following description, reference being had to the accompanying drawings and to the claims for the property rights I assert as my own.

In testimony whereof, I have signed my name below.

Jay D. Chapman
William R. McAtee
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supply-pipe into said reservoir; a rock-shaft connected with said valve; a hose leading from said reservoir; and a counterweighted lever mounted upon said rock-shaft and connected with said hose.

6. In a vehicle-washer, a fixed water-supply; a conduit rotatably mounted thereon; a hose connected with said conduit; a rotary valve in said conduit; a rock-shaft controlling said valve; and a counterweighted lever mounted upon said rock-shaft and controlled by said hose.

7. In a vehicle-washer, a supply-pipe provided with an outwardly-projecting flange; a reservoir provided with a pipe connection extending upwardly into said supply-pipe; a sleeve secured to said pipe connection and provided with an inwardly-projecting flange which coacts with the flange upon said supply-pipe to form a swivel-joint; an inlet-pipe projecting from said pipe connection into said reservoir; means controlling the outlet from said inlet-pipe; a hose leading from said reservoir; and mechanism controlled by said hose for controlling said means.

JAY D. CHAPMAN.
WILLIAM R. McATEE.

Witnesses:
H. C. GOLDSBOROUGH,
MABEL BOYER.