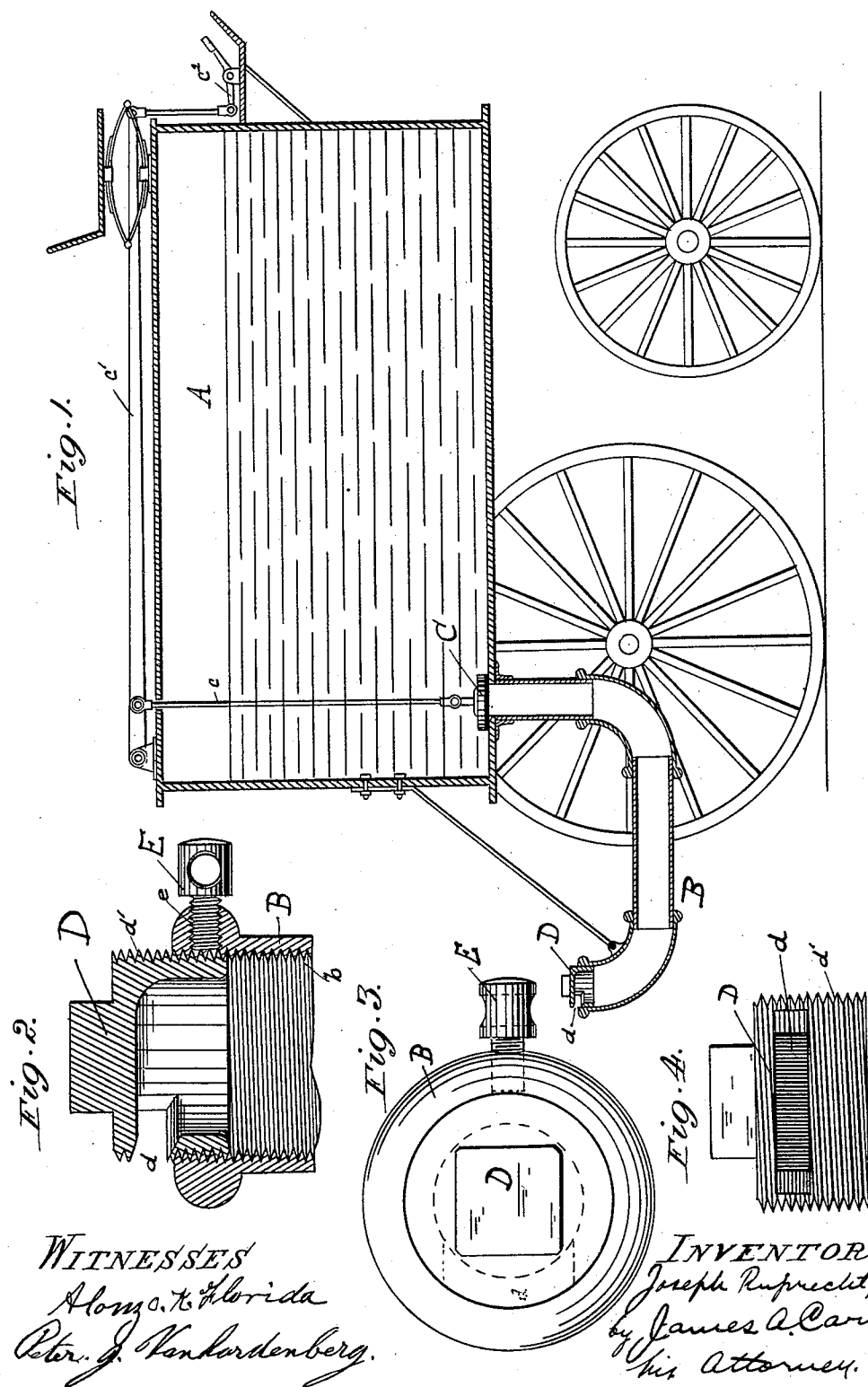


(No Model.)

J. RUPRECHT.
STREET SPRINKLER.

No. 467,303.

Patented Jan. 19, 1892.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOSEPH RUPRECHT, OF ST. LOUIS, MISSOURI.

STREET-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 467,303, dated January 19, 1892.

Application filed March 23, 1891. Serial No. 386,153. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH RUPRECHT, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Street-Sprinklers, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to improvements in street-sprinklers, and has for its objects to increase the area which may be wet by a single sprinkler and to more conveniently regulate the amount of water distributed over this area. I attain these objects by the apparatus illustrated in the drawings, in which—

Figure 1 is a vertical section of my improvement applied to a street-sprinkler, and Fig. 2 is a sectional view of the cap or plug. Figs. 3 and 4 are a plan and elevation, respectively, of the cap or plug.

The tank A is provided with a distributing-pipe B, extending from the bottom or lower portion of the tank downwardly, and then backwardly. The end of this pipe is turned upwardly and screw-threaded. The flow of water through pipe B is controlled by a valve C, which is operated through a series of connected levers c c' c^2 , the last of which is provided with a foot-piece conveniently located to be operated by the driver's foot. A hollow cap or plug D, provided with a thread d' , corresponding to and fitting the thread b on the pipe, closes the end of said pipe. This cap or plug is made in a single piece of cup shape, consisting of the annular part which fits into or onto the end of the distributing-pipe and the end part which closes the open space. This cap or plug is provided with a nut-head integral therewith, by which it may be turned to adjust the effective width of the slot or opening or orifice d . The cap or plug is also provided with a transverse slot or orifice which extends into the interior of said cap or plug in a direction inclined to the direction of the axis of said cap or plug, so that the edges of the slot are higher at the outer surface of the cap or plug than at the inner surface when the cap is in its normal position on the upturned end of pipe B. The length and width of the slot are preferably greater on the inside of the plug or cap than on the outside there-

of, and its outer edges are sharp so as to prevent the water running down the outside of the pipe. The pipe and the cap or plug are screw-threaded to such an extent that by turning the plug D the lower edge of the slot will pass below the top edge of the pipe, and the lower portion of said slot or orifice is closed. By this means the portion of the slot or orifice which is left effective for the distribution of water may be easily adjusted. A set-screw E passes through a threaded hole e near the end of the pipe and abuts against the plug to prevent it being rotated. When used on a street-sprinkler, the cap or plug should be set with the slot or orifice to the rear. When several sprinklers are used on the same wagon, the caps or plugs should be set with their slots or orifices turned outwardly at such an angle that they will not both sprinkle the same area. By directing the water upwardly at an angle it is distributed over a larger area than when it is squirted in a horizontal direction. By turning the end of pipe B upwardly the volume of water in said pipe flows in the general direction in which it finally issues through the slot or orifice d , so that the loss of pressure due to friction and change of direction of the flow is reduced to a minimum. The pipe B need not extend vertically upward at its end; but as the distance to which the water is thrown depends on the angle at which it issues from the slot or orifice the cap or plug must be slotted in a direction to correspond with the upward inclination of the pipe at its end. For instance, if it is found more convenient to cut the slot at right angles to the direction of the axis of the cap or plug the upturned end of pipe B should be inclined forward, so that the water will issue upwardly at an angle. In this last construction the pressure is dissipated by the increase in the change of direction of flow from the tank to the end of the pipe and also by the sharp change of direction of flow at the point of issue. If the end is inclined upwardly less than a right angle, the direction of the slot becomes more nearly parallel with the direction of the end of the pipe and the axis of the cap or plug, so that the slot may be cut through the head of the cap or plug; but in this case some other means of adjust-

ing the effective width of the slot must be used, or interchangeable plugs with different-sized slots may be employed.

As these modifications are obvious from an inspection of the accompanying drawings, I deem it unnecessary to illustrate them separately.

As my invention is applicable to other purposes besides street-sprinkling I do not desire to limit myself to the precise embodiment shown in the drawings.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A tank having a distributing-pipe the end of which is turned upwardly and screw-threaded, and a screw-threaded cap or plug

fitting therewith, said cap or plug being provided in its side with a slot or orifice, substantially as described.

2. A tank having a distributing-pipe the end of which is turned upwardly and provided with a screw-thread, and a screw-threaded cap or plug fitting therein, said cap or plug being provided in its side with a slot or orifice whose external edges are higher than the corresponding inner edges, substantially as described.

JOSEPH RUPRECHT.

Witnesses:

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JAMES A. CARR.