(No Model.)

# LA MOTTE C. ATWOOD & W. T. TREADWAY.

## STREET SPRINKLER.

No. 530,062. Patented Nov. 27, 1894.

*Fig. I.*

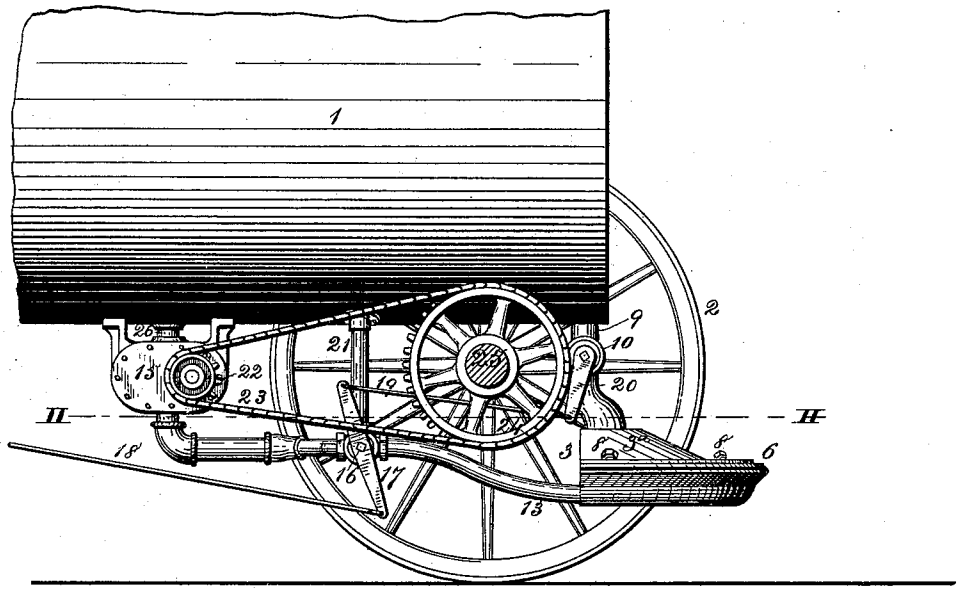



*Fig. II.*

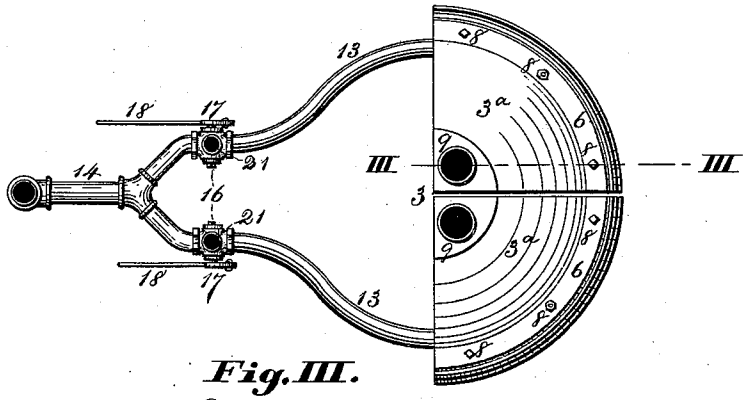
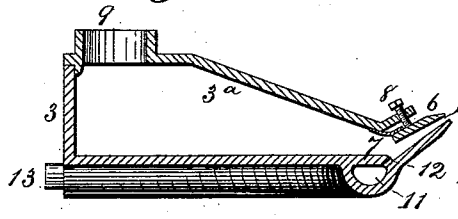



*Fig. III.*

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# UNITED STATES PATENT OFFICE.

LA MOTTE C. ATWOOD AND WILLIAM T. TREADWAY, OF ST. LOUIS, MISSOURI, ASSIGNORS OF ONE-THIRD TO MARGERY WOODSON, OF SAME PLACE.

## STREET-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 530,062, dated November 27, 1894.

Application filed December 1, 1893. Serial No. 492,450. (No model.)

*To all whom it may concern:*

Be it known that we, LA MOTTE C. ATWOOD and WILLIAM T. TREADWAY, of 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 is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This improvement consists principally in combining with a sprinkling nozzle a water-jet having a high velocity, and which is injected into the main spray to increase the velocity of the latter.

The invention also consists in the described means for carrying out the improvement, as set forth in the claims.

Figure I is a side elevation of the device. Fig. II is a detail, horizontal section, taken at II—II, Fig. I. Fig. III is an enlarged, longitudinal section of the nozzle, taken at III—III, Fig. II. Fig. I shows the rear part of a sprinkling wagon, with one wheel removed, the axle shaft being in section.

1 is part of the water reservoir.

2 is one of the hind wheels.

3 is the sprinkler proper, composed of two quadrant shaped chambers $3^a$, having at the rounded edge an upwardly inclined slot 4 for the spray of water, which is thus thrown upward and outward. The top plate or lip 5 of the slot is connected to the flange 6 or body by a flexible strip 7 of rubber, leather or other suitable substance, allowing the adjustment of the plate or lip to widen or narrow the slot. This adjustment of the lip is made by screws 8, by which it is attached to the flange 6.

Each chamber $3^a$ of the sprinkler is connected with the reservoir 1 by a pipe 9, having in it a stop-cock 10, the construction being such that either of the pipes 9 may be stopped without stopping the other. In the lower part of each chamber is a channel or chamber 11 in communication with the main water chamber ($3^a$), by jet holes 12 that are in line with the slot 4, so that water issuing from the holes 12 at a high velocity will accelerate the outward movement of the water through the slot 4. The channels 11 have no place of exit, except the jet holes 12. The channels are supplied with water by pipes 13 that communicate by a pipe 14 with the discharge orifice of a rotary pump 15. The pipes 13 have each a three-way cock 16 turned by a lever 17, one end of which is connected by a rod 18 with a treadle or lever under control of the driver, and the other end connected by a rod 19 with the lever 20 of one of the stop-cocks 10. The construction is such that when either of the cocks 16 is opened or closed, the cock 10 of the same side is opened or closed simultaneously.

Each cock 16 is connected with the main reservoir 1 by a pipe 21, the construction of the three-way cock being such that when the water from the pump is shut off from the channel 11 it passes, through the pipe 21, back into the reservoir 1. The pump is represented of the two headed rotary form, and as driven by a sprocket-wheel 22 on one of the heads connected by a drive chain 23 with a sprocket-wheel 24 on the axle shaft 25. The sprocket wheel 24 may be attached to the hub of one of the ground wheels 2, and the axle 25 made stationary, the wheels turning thereon in the ordinary manner. 26 is the pipe by which the pump is supplied from the reservoir 1.

The operation of the device has been explained in course of the description, but may be briefly stated as follows:—Ordinarily both of the sprays are in operation; but either or both may be shut off at any time, the pipes 9 and 13 of the same side being closed simultaneously.

We claim as new and of our invention—

1. In a sprinkler, the combination with a tank, a spray chamber connected with the tank, and a supplemental chamber having a forced spray, injected into the main spray, substantially as set forth.

2. In a sprinkler, the combination with a tank, a spray chamber connected with the tank, a supplemental chamber also connected with the tank, and a pump driven by the ground wheel and connected with the tank

and supplemental chamber for forcing a spray through the same and into the main spray substantially as and for the purpose set forth.

3. The combination, in a sprinkler, of the chamber $3^a$ connected with the reservoir 1 by a pipe 9 having a cock 10, and the forced jet supplied by a pipe 13 having a cock 16 connected with the cock 10, so that the cocks close and open simultaneously for the purpose set forth.

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In presence of—
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