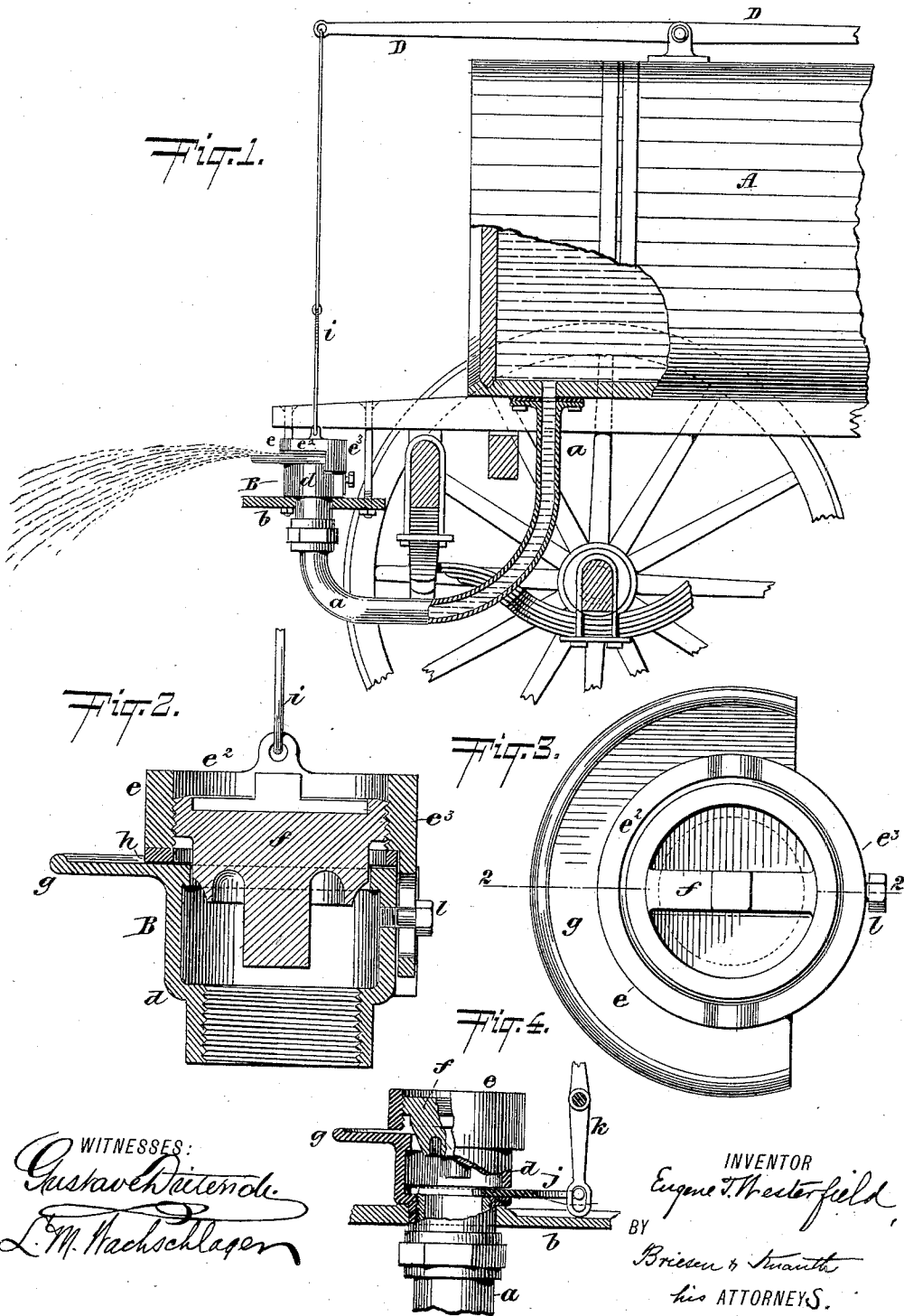


(No Model.)

E. T. WESTERFIELD.
STREET SPRINKLER.

No. 474,465.

Patented May 10, 1892.



WITNESSES:
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UNITED STATES PATENT OFFICE.

EUGENE T. WESTERFIELD, OF NEW YORK, N. Y.

STREET-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 474,465, dated May 10, 1892.

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To all whom it may concern:

Be it known that I, EUGENE T. WESTERFIELD, a resident of the city of New York, in the county and State of New York, have invented an Improvement in Street-Sprinklers, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof, wherein—

Figure 1 is a side view, partly in section, of my improved street-sprinkler. Fig. 2 is an enlarged vertical central section of the sprinkling-nozzle, the line 2 2, Fig. 3, indicating the plane of section. Fig. 3 is a top view of said nozzle; and Fig. 4 is a side view, partly in section, of a modified form of nozzle.

This invention relates to a new construction of nozzle for street-sprinklers; and it consists in the novel combination and arrangement of parts hereinafter more fully described.

In the accompanying drawings, the letter A represents a watering-tank of usual or suitable construction mounted on wheels or otherwise for convenience of transportation. From the tank A extends a water-discharge pipe *a*, which at its discharge end is turned upward, as shown in Fig. 1, and properly connected with a discharge-nozzle B. This nozzle may for convenience of construction and security be further rested upon a platform *b*, which is suspended from the rear part of the truck that carries the tank A. The nozzle B, of which a more complete representation appears in Fig. 2, consists of a lower tube *d*, an upper sleeve *e*, and a central plug *f*. The lower tube *d* is simply an extension of the discharge-pipe *a* and has its upper end throughout on the same plane. It may be provided with a projecting lip *g* to assist in spraying the water; but this lip may be omitted and does not involve any feature of my present invention. The upper sleeve *e* is vertically movable and is so shaped that part of its circumference is shorter than the other part. Thus in Fig. 1 the part marked *e*² is the short portion and the part marked *e*³ is the longer portion of the sleeve *e*. The longer portion of the sleeve *e* (being the portion *e*³) is adapted to overlap the upper part of the tube *d*—that is, to embrace the same—while the shorter portion *e*² is adapted to rest on top of the tube *d*, a packing-ring of leather or the like *h* be-

ing, if desired, attached to the lower end of the short portion *e*². Within the sleeve *e* is the adjustable plug *f*, which can be screwed higher or lower and which, as will be hereinafter shown, regulates by its position the amount of water allowed to reach the outlet-opening. The sleeve *e* can be moved up and down to a greater or less extent by means of a lever D, and to which it is connected, as shown in Fig. 1, by a link or rod *i* or by analogous means.

As far as the mechanism has now been described, it will operate as follows: By turning the plug *f* more or less down the amount of water admitted to the outlet-opening can be regulated, because the plug enters into the tube *d* to the extent indicated in Fig. 2, so as to regulate the flow from *d*. After the amount of water admitted to the outlet has been regulated by the adjustment of the plug the outlet-opening itself can be regulated by raising the sleeve *e* to a greater or less extent, and thus by the use of the adjustable sleeve having the inner adjustable plug I can let a small body of water flow through a large outlet-opening or a large body of water through a small outlet-opening and thus regulate the character of the stream issuing from the sprinkler. The outlet-opening itself is formed whenever the short portion *e*² of the sleeve *e* is lifted away from the upper end of the tube *d*. Instead of constructing the sleeve of one short piece *e*² and one long piece *e*³ it may be constructed of series of short pieces and series of intervening longer pieces with substantially the same effect—that is to say, the longer pieces guide the sleeve in its up-and-down motion and prevent water flowing out where the longer pieces are, the shorter pieces being, when lifted off the tube *d*, the orifice-forming instrumentalities.

In the modification which is shown in Fig. 4 the sleeve *e* is screwed to the tube *d* and contains, also, the adjustable plug *f*. By adjusting the sleeve *e* higher or lower the outlet-orifice will be regulated, and by adjusting the plug *f* the amount of water admitted to the orifice will be regulated. In the modified form shown in Fig. 4 it is desirable to provide the pipe *a* with a shut-off *j*, which can be controlled by a lever K from the driver's seat.

Referring once more to Figs. 2 and 3, I call

attention to a set-screw or pin *l*, which projects from the tube *d* through a slot in the longer portion of the sleeve *e*, so as to limit the up-and-down motion of said sleeve, and prevent its being pulled entirely off the tube *d*.

Having described my invention, I claim—

1. The combination of the water-discharge pipe *a*, terminating in the tube *d*, with a sleeve *e*, means for vertically adjusting the said sleeve, and with an adjustable plug *f* within said sleeve, all arranged so that the size of the outlet-orifice is determined by the motion of the sleeve *e* and the amount of water admitted to said outlet-opening is determined by the plug *f*, substantially as herein shown and described.

2. The combination of the tube *d* with the vertically-movable sleeve *e*, having long por-

tion *e*³ and short portion *e*², the short portion resting on the tube *d*, and with the vertically-movable plug *f* within said sleeve, substantially as and for the purpose specified.

3. The combination of the tube *d* and its projecting pin *l* with the sleeve *e* and means, substantially as described, for raising or lowering it, said sleeve having short portion *e*², and longer portion *e*³, the pin *l* passing through a slot in said longer portion, and with the vertically-adjustable plug *f* within said sleeve, all as and for the purpose herein shown and described.

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Witnesses:

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