No. 630,468. Patented Aug. 8, 1899.

W. QUAYLE.

LAWN SPRINKLER.

(Application filed July 19, 1898.)

(No Model.)

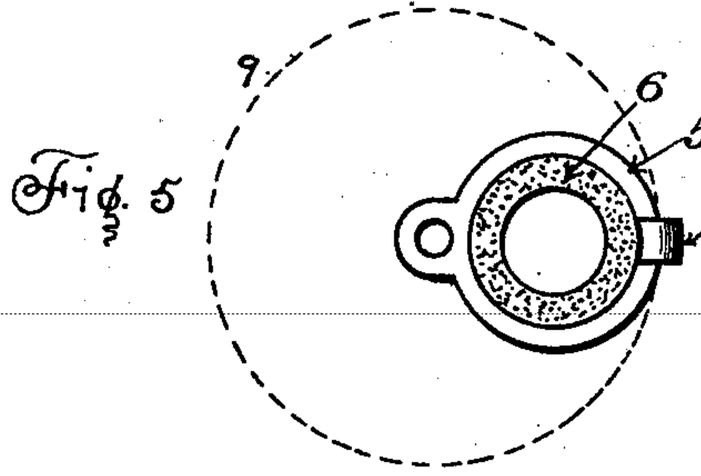

Fig. 5

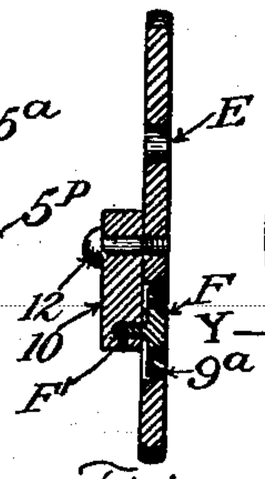

Fig. 4.

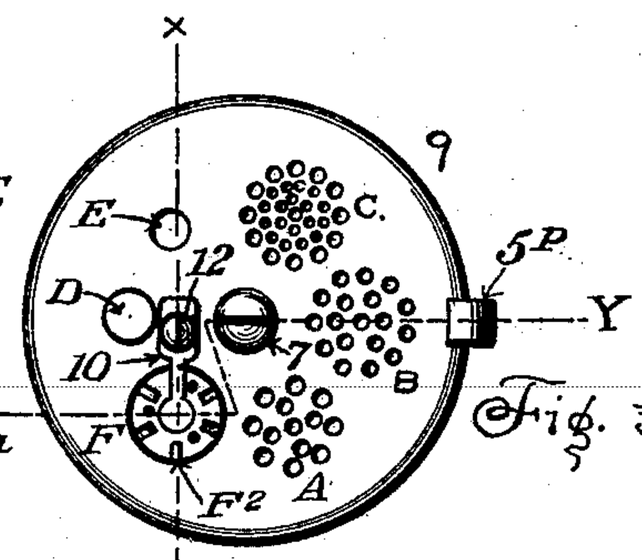

Fig. 3.

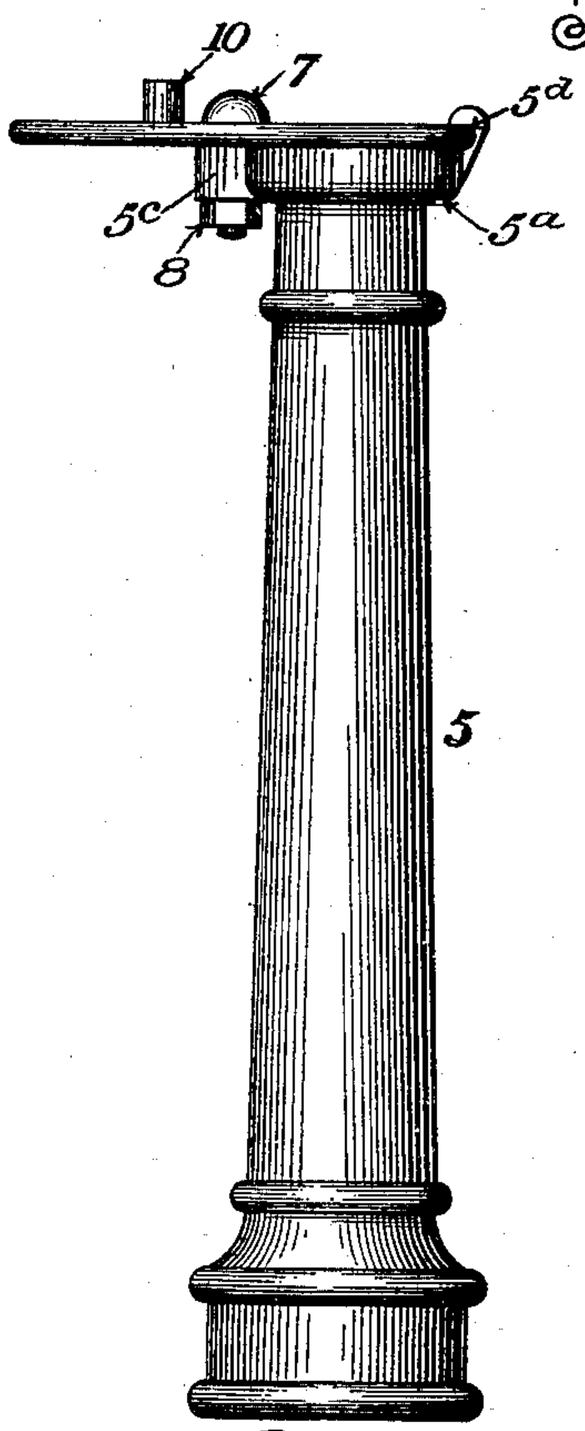

Fig. 1.

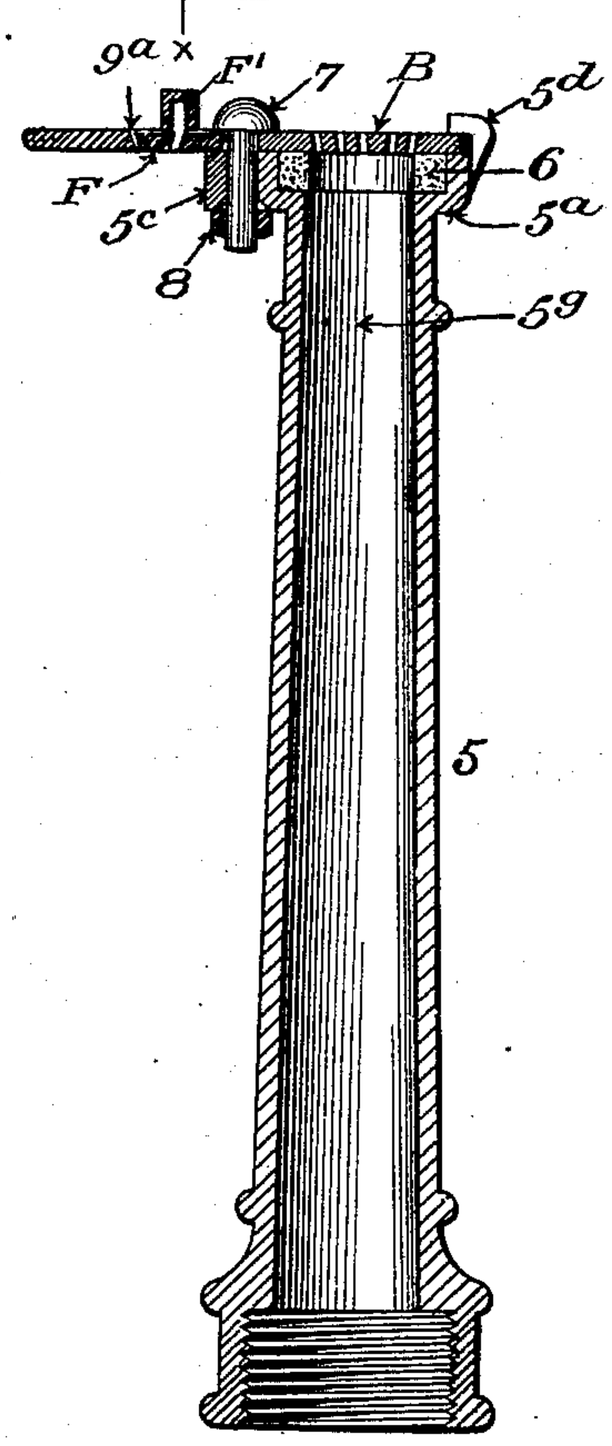

Fig. 2.

Witnesses
Chas. Quayle
Edith Hinsworth.

Inventor
William. Quayle.
By his Attorney
A. J. & S. Bikle

UNITED STATES PATENT OFFICE.

WILLIAM QUAYLE, OF DENVER, COLORADO.

LAWN-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 630,468, dated August 8, 1899.

Application filed July 19, 1898. Serial No. 686,379. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM QUAYLE, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Lawn-Sprinklers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in lawn-sprinklers; and my object is to provide a device of this class which shall be simple in construction, economical in cost, reliable, durable, and efficient in use; and to these ends the invention consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a side elevation of my improved device. Fig. 2 is a longitudinal section taken through the same on the line *y y*, Fig. 3. Fig. 3 is a top end view of the device. Fig. 4 is a section taken on the line *x x*, Fig. 3. Fig. 5 is a top end view of the nozzle with the spray-plate removed, the position of the latter being indicated by dotted lines.

Similar reference characters indicating corresponding parts in the views, let the numeral 5 designate a suitable nozzle adapted to be attached to the hose through which the water passes. The top or discharge end of this nozzle is enlarged, as shown at 5^A, forming a seat for the washer or packing-ring 6. This discharge extremity of the nozzle is formed with a lug 5^C, having a threaded opening registering with a central opening in the spray-plate 9, which is applied to the discharge extremity of the nozzle and held in place by a screw 7, which passes through the apertures in the spray-plate and lug, its lower protruding extremity being provided with a lock-nut 8. The spray-plate is adapted to turn on the screw as a center and is further held in place by a hook-shaped lug 5^D, formed integral with the nozzle and overlapping the edge of the spray-plate. The spray-plate is constructed to vary the form of the water issuing from the nozzle as circumstances may require. It is provided with three sets of spray-orifices A, B, and C, which vary in number and size for the purpose stated. The spray-plate is also provided with two orifices D and E of different sizes, adapted to throw solid streams of water when the plate is properly adjusted. The plate 9 is further provided with a revoluble spray-disk F, located in a suitable opening 9^A, formed in the plate. The edges of the disk F and the opening 9^A are beveled to prevent the disk from falling through the opening. The upper side of the disk is provided with a pivot F′, which engages a socket formed in an arm 10, overlapping the disk and fastened to the plate by a screw 12. The disk F is provided with openings F^2, having inclined walls, whereby as the water passes from the nozzle through the openings the disk is rotated.

The different sets of spray-openings A, B, and C, the orifices D and E, as well as the opening 9^A, and the disk F are all arranged to be brought in line with the channel 5^G of the nozzle as the spray-plate is turned on the screw 7. The packing washer or ring 6 forms a water-tight joint between the spray-plate and the discharge end of the nozzle.

From the foregoing description the use of the device will be readily understood.

In assembling the parts the packing-ring 6 is first placed in position surrounding the discharge-opening of the nozzle. The spray-plate is then placed over the nozzle and shoved under the overlapping portion of the lug 5^D, after which the screw 7 is inserted in the registering openings of the plate and the lug 5^C, the screw being adjusted to allow the plate to turn for the purpose of changing the form of the water issuing from the nozzle, as heretofore explained.

Having thus described my invention, what I claim is—

1. In a lawn-sprinkler the combination with a nozzle, of a spray-plate movably mounted thereon and provided with orifices adapted to be brought into line with the discharge-channel of the nozzle, a disk located in an opening formed in the plate and provided with orifices inclined to cause the rotation of the

disk when engaged by the issuing water, and another arm mounted on the plate and overlapping the disk which is pivoted thereon.

2. The combination with a nozzle having an apertured lug projecting to one side of its discharge-opening, an apertured spray-plate adjustably attached to the nozzle by passing a suitable fastening device through the registering apertures of the plate and lug, the plate being provided with openings adapted to be brought into line with the discharge-channel of the nozzle, a disk located in an opening formed in the spray-plate and provided with orifices inclined to cause the rotation of the disk when engaged by the issuing water, and an arm mounted on the plate and overlapping the disk which is pivoted thereon.

3. A combination with a nozzle having a packing-ring engaging a seat formed around its discharge extremity, of a plate adjustably attached to the nozzle and engaging the packing-ring which forms a tight joint between the plate and the discharge end of the nozzle, said plate being provided with an opening, a disk located in said opening and provided with orifices inclined to cause the rotation of the disk when engaged by the issuing water, and an arm mounted on the plate and overlapping the disk which is pivoted thereon.

4. The combination with a nozzle, of a plate mounted thereon and provided with an opening, a disk located in said opening and provided with orifices inclined to cause the rotation of the disk when engaged by the issuing water, and an arm mounted on the plate and overlapping the disk which is pivoted thereon.

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

WILLIAM QUAYLE.

Witnesses:
A. J. O'BRIEN,
EDITH HIMSWORTH.