(No Model.)

C. ANDERSON.

LAWN SPRINKLER.

No. 535,655. Patented Mar. 12, 1895.

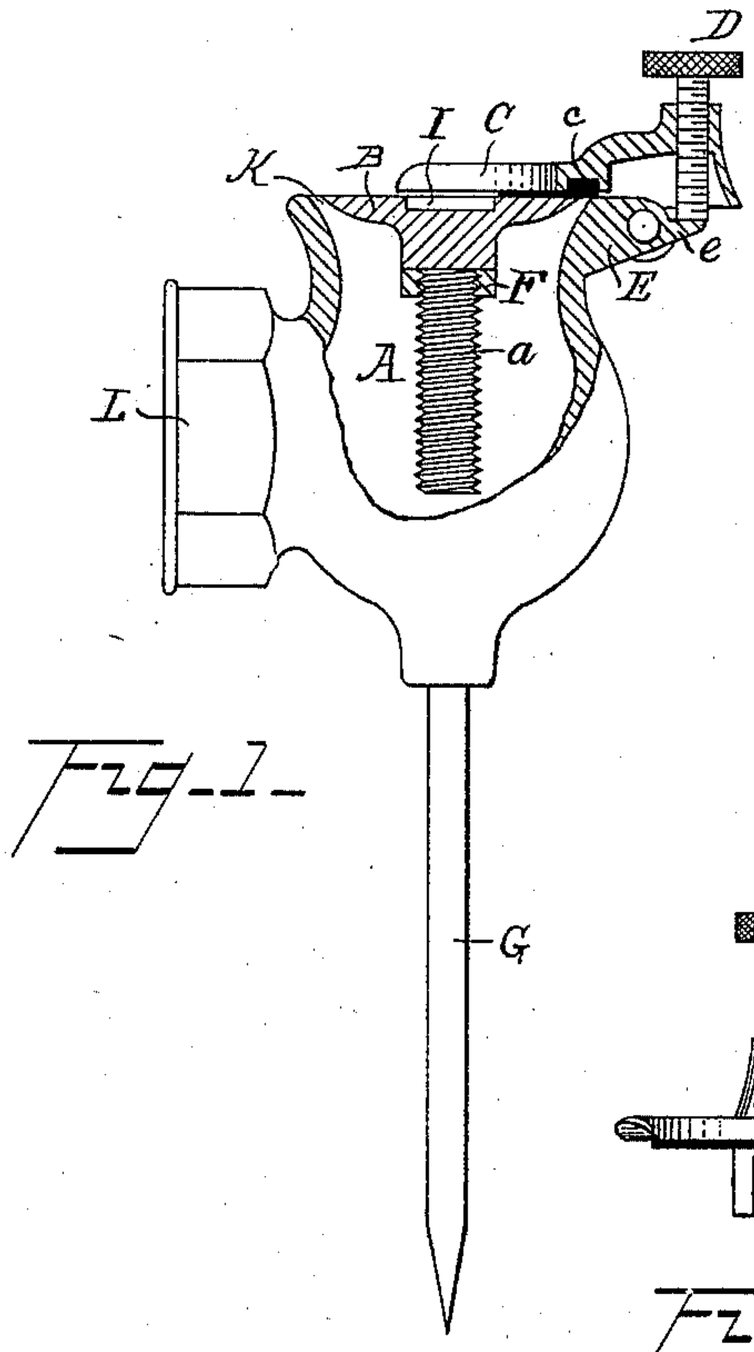

Fig. 1.

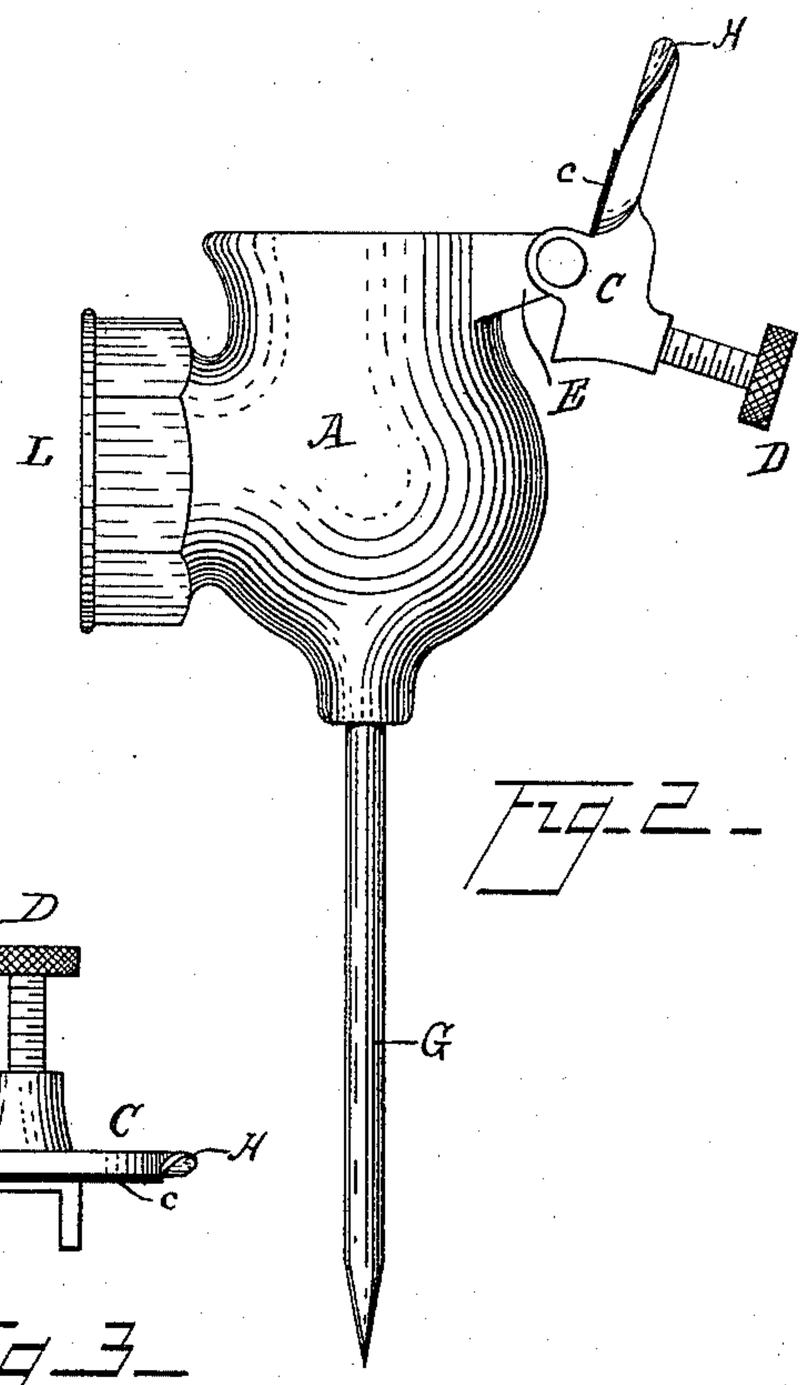

Fig. 2.

Fig. 3.

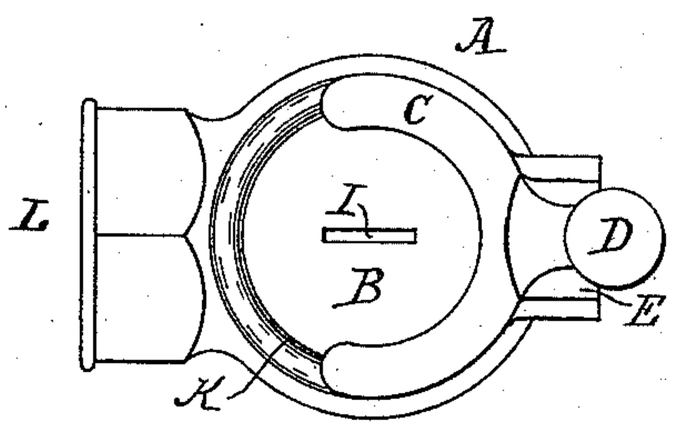

Fig. 4.

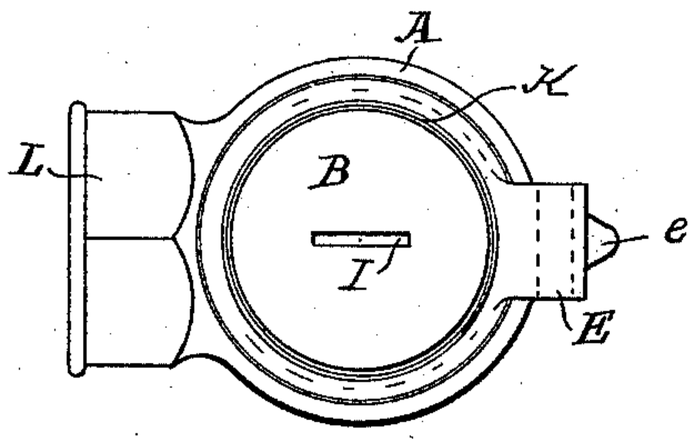

Fig. 5.

Witnesses:
Amy Bloth
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UNITED STATES PATENT OFFICE.

CHARLES ANDERSON, OF DETROIT, MICHIGAN, ASSIGNOR TO THE DETROIT SHEET METAL AND BRASS WORKS, OF SAME PLACE.

LAWN-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 535,655, dated March 12, 1895.

Application filed November 8, 1894. Serial No. 528,220. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ANDERSON, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Lawn-Sprinklers, of which the following is a specification.

My invention consists in an improvement in lawn sprinklers, hereinafter fully described and claimed.

Figure 1 is a side elevation partly in section, of the sprinkler arranged to throw water only in a semi-circle. Fig. 2 is a side elevation of the sprinkler arranged to throw water in a full circle. Fig. 3 is a front view of the valve. Fig. 4 is a top plan view, and Fig. 5 is a top plan view with the valve removed.

A represents a hollow casting forming a water chamber, provided at one side with a hose coupling L, and also provided with a pin G, to be stuck into the ground to hold the sprinkler upright. The upper end of the chamber A has a circular opening, which may be as shown, the full size of the chamber, or less.

B represents a circular deflector, whose diameter is less than that of the opening of the chamber A, and which is provided with a screw *a* tapped through a bridge F in chamber A by which said deflector may be adjusted. I prefer to make the opening of chamber A flare outwardly as shown in Fig. 1, and the under side of the deflector B also flare outwardly as shown in said figure, as this form gives the best results, but this form may be changed without departing from my invention. I also prefer to make a slot I in the upper side of the deflector B, so that said deflector may be turned with a screw driver, but this is not essential, as it may be turned by the fingers. By this arrangement the deflector B may be raised or lowered to leave an annular opening K of adjustable width between it and chamber A. This arrangement also permits ready cleaning of the apparatus if it becomes choked by sediment, as deflector B may be readily screwed up, the sediment removed, and then screw back into place.

When deflector B is in position, and water is admitted under pressure, through hose coupling L, the sprinkler will spray water through a full circle, and the volume of water, and the fineness of the spray, may be adjusted by regulating the width of the annular opening K.

C represents a valve which is pivoted to a bracket E on chamber A, so that when in the position shown in Fig. 1, it will partly close the annular orifice K. The under side of the valve C may be provided with a packing *c*.

To make the device sprinkler a half circle, I so arrange valve C that it closes somewhat less than one half of the orifice K, and extend the ends of said valve as shown at H, in an upward and outward chamfer to direct water which issues from orifice K under the ends of said valve outwardly and also toward the open part of said orifice K. I find that if valve C tightly closes one half of the orifice K the sprinkler will sprinkle less than a semi-circle, and by extending this valve C more or less, the sprinkler may be made to sprinkle any part of a circle desired.

While any suitable arrangement may be used for controlling valve C, a good way is to tap a set screw D through said valve back of the pivot, and carry bracket E back in a lip *e* against which the end of said set screw D may be made to strike, as shown in Fig. 1, to hold valve C firmly to its seat. By turning set screw D up valve C may be swung upward and outward, as shown in Fig. 2, so that water from orifice K will just clear the valve. By this arrangement a lawn sprinkler may be made which has no moving parts to get out of order, and which can be readily adjusted to sprinkle either a full circle, or less than a full circle, and in which the volume of water thrown can be regulated at will.

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

1. In a lawn sprinkler, the combination with a water chamber having an annular orifice, of the pivotal valve C for partly closing said orifice, and the set screw D tapped through the valve back of its pivot and adapted to control the position of said valve, substantially as described.

2. In a lawn sprinkler, the combination with a chamber having an annular orifice, of the pivotal valve C having chamfered ends H,

and a set screw D tapped through the valve and adapted to control its position, substantially as described.

3. In a lawn sprinkler, the combination of the chamber A having a circular opening at its top and provided with a bracket E, the deflector B adjustably supported in said chamber and adapted to form therewith an annular orifice K, the valve C pivoted to the bracket E, and the set screw D adjacent to the valve pivot and adapted to control the position of the valve, substantially as described.

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Witnesses:
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