(No Model.)

J. LAWSON.

LAWN SPRINKLER.

No. 347,359. Patented Aug. 17, 1886.

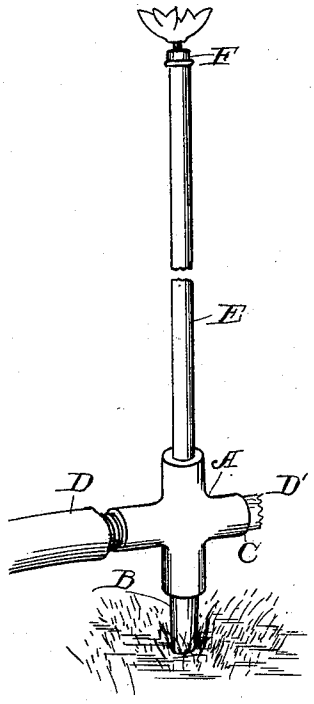

Fig. 1.

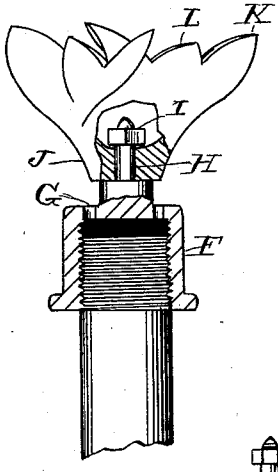

Fig. 2.

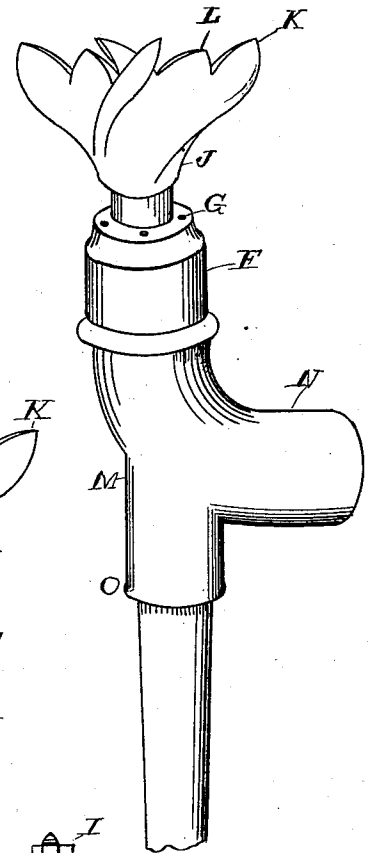

Fig. 4.

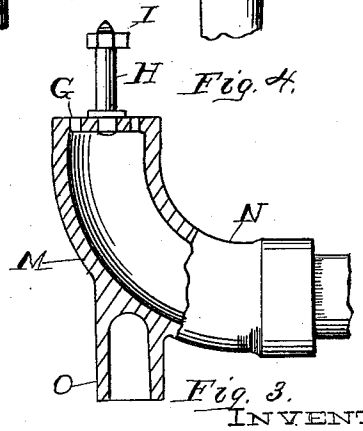

Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES LAWSON, OF DENVER, COLORADO.

LAWN-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 347,359, dated August 17, 1886.

Application filed April 23, 1885. Serial No. 163,204. (No model.)

To all whom it may concern:

Be it known that I, JAMES LAWSON, of Denver, in the county of Arapahoe and State of Colorado, have invented a new and useful Improvement in Lawn-Sprinklers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of my improved sprinkling device with hose-stem attachment; Fig. 2, an enlarged sectional view of the spraying attachment, and Figs. 3 and 4 modified forms of the hose attachment.

The present improvement relates to an improvement in the class of articles known as "lawn-sprinklers" and "spraying devices," in which I provide a cup-shaped device fitted on one end of the metal part attached to a hose, the upper part of the said cup being provided with a series of openings, and centrally having a stem upon which a revolving head is placed, having thereon a series of spiral blades or wings slightly cup-shaped, so that the water in passing through the openings in the head and striking these spiral blades will spray the water, and at the same time cause the said head to revolve, and thus distribute the water evenly, all of which will now be set forth in detail.

In the accompanying drawings, A represents a cross-joint provided at its lower end with a portion, B, sharpened at the end and designed to be pushed into the ground. One of the openings, C, is designed to have a hose-connection, D, therewith leading to any suitable reservoir, the opposite opening to have a short piece, D′ for the foot to press on, and to the upper part is connected therewith a short section of gas-pipe, E. At the upper end of this gas-pipe, which is threaded externally, I provide a cup-shaped part, F, having therein a female screw to correspond with the threaded gas-pipe. The head of this cup is provided with a series of vertical openings, G, therein, preferably near the periphery of the said head. Centrally this head has a vertical stem, H, formed integral therewith, the upper end provided with a nut, I. Upon this stem H, I provide a revolving piece or head, J, secured thereon by means of nut I. The upper peripheral part is flanged outwardly somewhat, terminating in a series of spiral blades, J′, preferably eight in number, each alternate blade, K, somewhat larger than the intermediate blades, L. The base of the larger blade K, commencing at the lower part of the head J, makes a partial convolution about the head J, extending somewhat outwardly at an angle, so that when the water is forced through the openings G it strikes the under surface of the said spiral blades, and being deflected, thus forms a spray, and at the same time the forced water will cause the head to revolve, and thus assist in spraying and distributing the water evenly.

Sometimes I find it convenient to dispense entirely with the cross-shaped pipe-connection, and attach the hose directly to an L-shaped device, with an additional part cast thereon, forming one piece, M, the lower end being horizontally disposed, and a female screw-threaded nut in it to connect directly on the hose, also, a short projecting part, O, in which I put a short piece, intended to push in the ground to hold the whole in an upright position, as shown in the drawings.

In Fig. 4 is shown a modification of Fig. 3, in which the cup F, as shown, is attached to this support of the L-shaped piece.

I am aware that it is not broadly new to apply to the end of a hose used in lawn-sprinkling a rotary spiral sprinkler; but

What I claim is—

In a lawn-sprinkler, a spraying device consisting of the cup-shaped part F, having vertical openings G near the periphery of its head, and a vertical stem, H, in combination with the rotary head J, having external large spiral blades, K, and the smaller blades L, and the nut I, all constructed, substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of April, 1885, in the presence of witnesses.

JAMES LAWSON.

Witnesses:

CHAS. H. OATEY,

SAML. C. COOK.