(No Model.)

R. M. WIDNEY.

LAWN SPRINKLER.

No. 287,984. Patented Nov. 6, 1883.

Fig. 1.

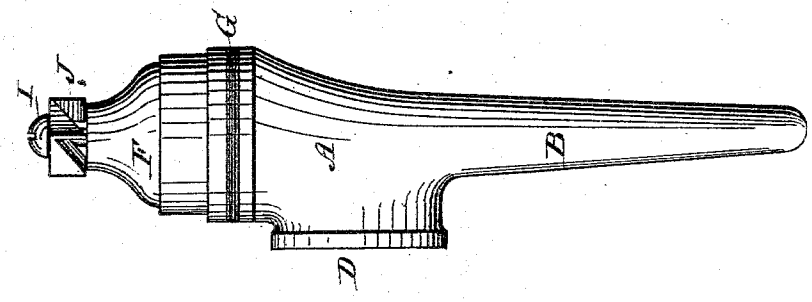


Fig. 2.

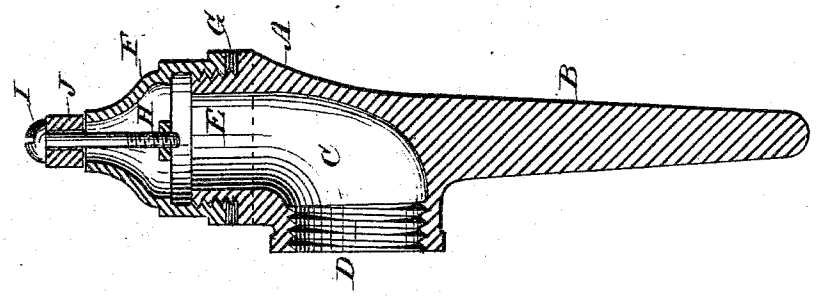
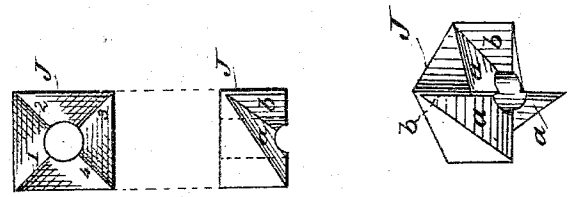


Fig. 3.



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UNITED STATES PATENT OFFICE.

ROBERT M. WIDNEY, OF LOS ANGELES, CALIFORNIA.

LAWN-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 287,984, dated November 6, 1883.

Application filed March 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT MACLAY WIDNEY, a citizen of the United States, residing at Los Angeles, California, have invented new and useful Improvements in Lawn-Sprinklers, of which the following is a specification.

My invention relates to certain new and useful improvements in lawn-sprinklers.

The object of my invention is to so construct the device that the column of water shall be divided horizontally and vertically, to effect a perfect distribution, and at the same time produce a pleasing effect. Another object of my invention is to so construct the parts that the sprinkler can be readily and expeditiously converted into an ordinary nozzle for projecting a spray or a single jet; and with these ends in view my invention consists of the peculiar construction and arrangement of parts hereinafter fully described, and specifically claimed.

In order that those skilled in the art to which my invention appertains may know how to make and use the same, I will proceed to describe its construction and operation, referring by letters to the accompanying drawings, in which—

Figure 1 is a side elevation of a sprinkler embodying my invention; Fig. 2, a central longitudinal section of the same; and Fig. 3 a bottom view and side elevation, on enlarged scale, of the turbine button.

Similar letters denote like parts in the several figures.

A represents the body of the sprinkler, cast in one piece, with its lower portion extended and slightly sharpened, so as to be readily forced into the ground to support the body in an upright position. This extension B is slightly flattened or made elliptical in cross-section, to avoid any rotary movement of the body proper. The upper portion, A, is formed with a water-conduit, C, and is provided with a thread, D, at the side, for connection with an ordinary hose, and at the top with an external thread, E, adapted to receive the cap portion F, the joint being packed by a leather or rubber washer, G. The cap F is tapered toward its top and provided with a single vertical orifice, and is formed with an interior cross bar or bridge, H, adapted to receive the threaded end of a screw, I, which passes through a turbine button, J, and the central vertical orifice in the cap. The turbine button J may be either circular or square in cross-section. I have, however, shown it as being square in the drawings. This button is formed with inclined faces *a b*, converging toward the center, as clearly shown at Figs. 1 and 3, so that said faces will act on the same principle as the buckets of a turbine water-wheel, the intersections of the bevels *a b* forming on the under side of the button sharp edges 1 2 3 4. (See Fig. 3.) The turbine button, as before stated, is held in operative positive position by the screw I, in an obvious manner, and it may of course be held in greater or less frictional contact with the cap F by tightening or loosening the screw I, and in a like manner any wear of said button may be compensated for or taken up. I have shown the button as formed with eight beveled faces; but I do not of course wish to limit myself in this particular, as any desirable number may be formed. From the construction shown and described it will be readily understood that when the column of water is forced through the vertical orifice in the cap-piece F it is divided by the horizontal edges 1 2 3 4 of the button J, and the force of the water is directed against those faces marked *a*, which causes the button to rotate upon its axis with a rapidity in proportion to the force or power of the water, and the column is correspondingly divided and spread toward the various points of the compass. The diameter of the screw I bears such relation to the orifice in the cap F, as seen at Fig. 2, as to form a passage around said screw for the escape of the water.

By simply removing the screw I and button J the device is readily converted into an ordinary nozzle, adapted to throw a single stream.

I am of course aware that a great variety of lawn-sprinklers have been heretofore devised, and do not of course wish to claim, broadly, a device for sprinkling or irrigating surfaces, but

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

1. A lawn-sprinkler composed of a body, A, adapted for connection with an ordinary hose at one side, and provided at its upper end with a screw-cap, F, having a central ori-

fice, cross-bar H, a screw, I, and a revolving button, substantially as described.

2. The cap F, provided with a screw-thread, by which it may be secured to the body or to the coupling of an ordinary hose, and having the cross-bar H, threaded to receive the end of a securing-screw, in combination with the button J, having beveled faces and horizontal edges, as described, and the securing-screw I, as and for the purposes set forth.

3. In a sprinkler, the revolving button J, formed with intersecting oblique and vertical faces *a b* and horizontal edges, substantially as shown, and for the purposes described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ROBERT MACLAY WIDNEY.

Witnesses:
MILTON THOMAS,
GEORGE SINSABAUGH.