C. L. KELSO.

LAWN OR GARDEN SPRINKLER.

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1,235,813. Patented Aug. 7, 1917.

Fig. 1.

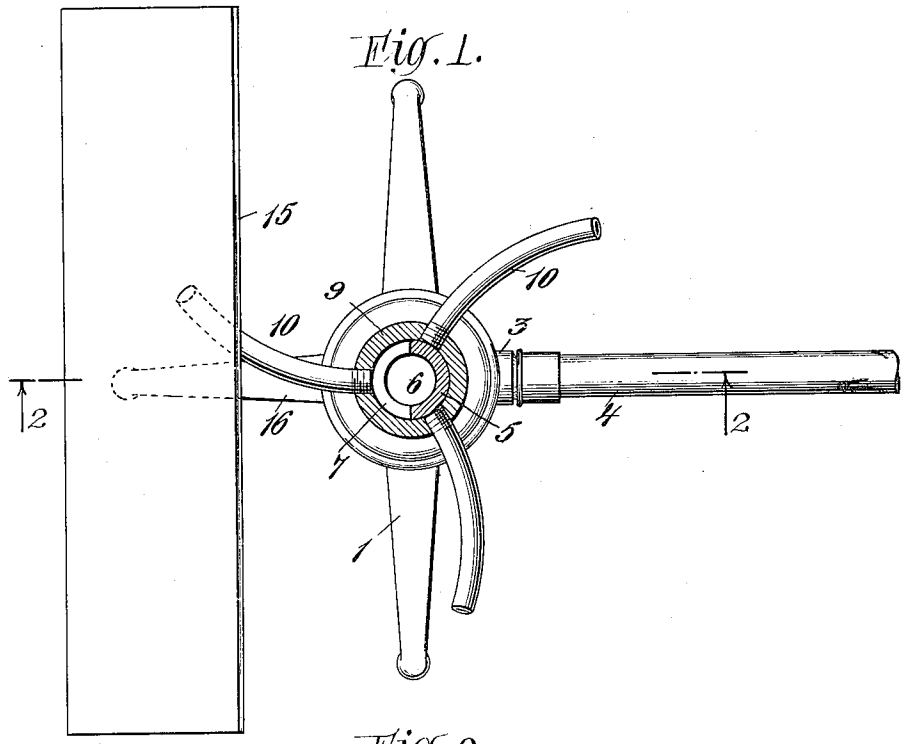


Fig. 2.

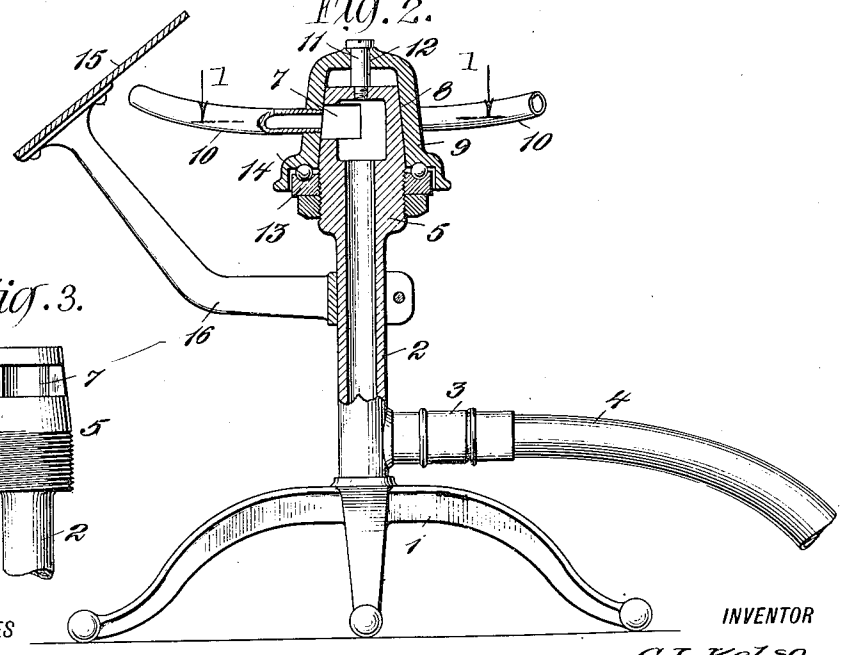


Fig. 3.

WITNESSES

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LAWN OR GARDEN SPRINKLER.

1,235,813. Specification of Letters Patent. Patented Aug. 7, 1917.

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To all whom it may concern:

Be it known that I, CHARLES L. KELSO, a citizen of the United States, and a resident of Cle Elum, in the county of Kittitas and State of Washington, have invented a new and improved Lawn or Garden Sprinkler, of which the following is a full, clear, and exact description.

This invention relates to lawn and garden sprinklers of that type embodying a plurality of rotating nozzles whereby a large area can be sprinkled from a stationary sprinkler.

The invention has for its general objects to improve the construction and operation of devices of this character so as to be reliable and efficient in use, comparatively simple and inexpensive to manufacture, and so designed that areas bordered by straight lines or angles can be effectively sprinkled without waste of water.

A more specific object of the invention is the provision of a sprinkler in which the revolving nozzles are so connected with the stand pipe of the sprinkler that one or more of the nozzles are operative at a time, and consequently a semi-circular area will be sprinkled, thus enabling a person to approach the sprinkler from one side without having to step through mud or wet grass to reach the sprinkler in order to change its position.

Still another object of the invention is the employment of a novel deflecting device whereby the water can be sprinkled on the areas bordered by straight lines or angles.

With such objects in view, and others which will appear as the description proceeds, the invention comprises various novel features of construction and arrangement of parts which will be set forth with particularity in the following description and claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention and wherein similar characters of reference indicate corresponding parts in all the views,

Figure 1 is a plan view with portions in section on the line 1—1, Fig. 2;

Fig. 2 is a partial vertical sectional view on the line 2—2, Fig. 1; and

Fig. 3 is a side view of a pivot head on the upper end of the stand pipe or stem of the sprinkler.

Referring to the drawing, 1 designates a base frame of any suitable construction from which rises a stand pipe or stem 2 having an arm 3 at its bottom to which is coupled an ordinary garden hose 4. The upper end of the stem 2 is formed with a head 5 provided with a chamber 6, and one side of this chamber has a port 7 approximately semi-circular. The head 6 has a frusto-conical bearing surface 8 on which rotates a cap 9 that carries a plurality of nozzles or spraying devices 10. The cap 9 is held in place by a bolt or screw 11 passing downwardly through an aperture 12 in the top of the cap and attaching to the head 5. On the head 5 is screwed a bearing ring 13 between which and the bottom of the cap is interposed a series of anti-friction balls 14 so that the nozzle-carrying cap will freely rotate. The nozzles are curved in such a direction that the reaction effect of the discharging water will cause the nozzles to rotate. As the head has a port only in one side it is obvious that one or more nozzles will be receiving water, and consequently a semi-circular area will be sprinkled. This means that the sprinkler can be approached from one side to change the position of the sprinkler without the feet becoming muddy or wet.

In order to enable areas bordered by straight lines or angles to be sprinkled without waste of water or making paths or walks wet or muddy, a deflector is mounted on the sprinkler so that the jets of water discharged from the nozzles will strike the deflector and be deflected thereby over a restricted area. This deflector is in the form of a flat plate 15 which is mounted on an arm 16 adjustably clamped to the stem 2 of the sprinkler. This arm 16 can be thrown around on the stem to bring the deflector plate in front of the water-discharging nozzles or to the rear of the sprinkler, so that water will not strike on the plate. The plate has its length horizontal, but the plane of the plate is at an angle to the vertical, so that the nozzles which are slightly bent upwardly will discharge against the under side of the inclined plate and be deflected downwardly thereby. If an area bordered by a straight line is to be sprinkled the sprinkler will be so placed that the deflector plate will be parallel with the straight line and in suitable proximity thereto. This

means that the area sprinkled instead of being semi-circular will have a segmental portion cut off.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and method of operation will be readily understood by those skilled in the art to which the invention appertains, and while I have described the principle of operation, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as fall within the scope of the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A sprinkler comprising a stand pipe, a hose connected therewith, a head on the upper end of the stand pipe having a port only at one side, and a plurality of reaction nozzles rotatably mounted on the head and arranged to successively register with the port to receive water therefrom, whereby a non-circular area is sprinkled by the sprinkler.

2. A sprinkler comprising a stand pipe, a hose connected therewith, a head on the upper end of the stand pipe having a port only at one side, and a plurality of reaction nozzles rotatably mounted on the head and arranged to successively register with the port to receive water therefrom, whereby a non-circular area is sprinkled by the sprinkler, in combination with a deflector mounted on the stand pipe and adapted to be disposed at the side of the head having the port, whereby the jets discharged from the nozzles will strike the deflector.

CHARLES L. KELSO.