H. GIBBS.

LAWN SPRINKLER.

APPLICATION FILED JUNE 16, 1914.

1,193,010.

Patented Aug. 1, 1916.

Fig. 1.

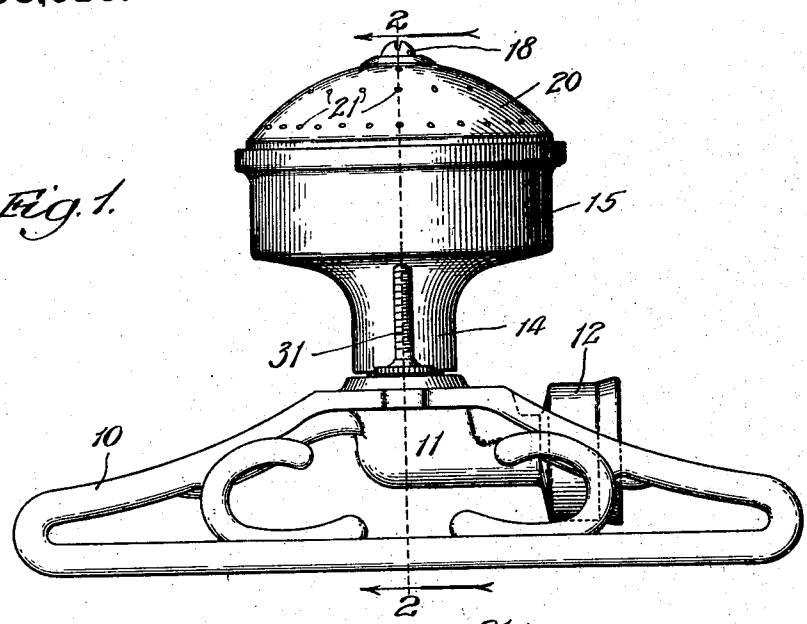


Fig. 2.

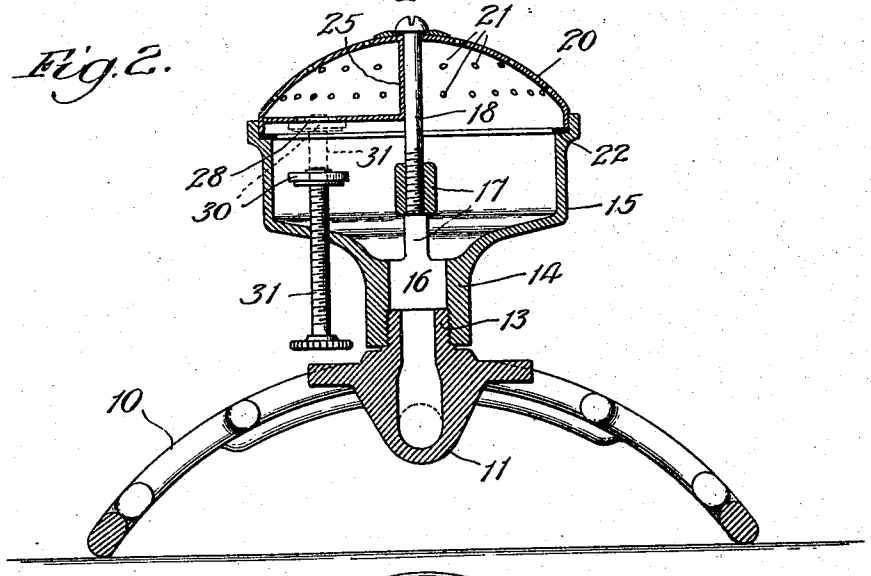
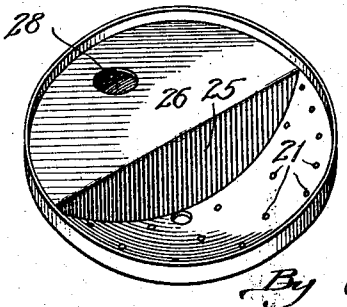


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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LAWN-SPRINKLER.

1,193,010. Specification of Letters Patent. Patented Aug. 1, 1916.

Application filed June 16, 1914. Serial No. 845,341.

To all whom it may concern:

Be it known that I, HENRY GIBBS, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Lawn-Sprinklers, of which I do declare the following to be a full, clear, and exact description.

My present invention has relation to that class of lawn sprinklers designed to throw the water in the form of fine spray or mist over the surface to be sprinkled.

The object of the invention is to provide this type of sprinkler with means whereby the passage of water through a portion of the sprinkler head can be shut off so as to restrict the area sprinkled and thus avoid the wetting of side walks, paths or the like, while at the same time permitting the grass or other vegetation to be sprinkled in close proximity thereto.

The invention consists in the features of novelty illustrated in the accompanying drawing and particularly pointed out in the claims at the end of this specification.

Figure 1 is a view in side elevation of a lawn sprinkler embodying my invention. Fig. 2 is a view in central vertical section on line 2—2 of Fig. 1, parts being shown in elevation. Fig. 3 is an inverted perspective view of the upper portion of the sprinkler head.

In the accompanying drawing, my improved sprinkler head is shown as mounted upon a simple form of cast metal base 10 that is formed with a channel 11, to the interiorly threaded end 12 of which the hose or water supply pipe will be connected. From the top of the base 10 rises a perforated and screw-threaded boss 13 adapted to enter the interiorly threaded neck 14 of the chambered casting 15 that forms the lower member of the sprinkler head. Across and above the opening 16 of the lower member 15 extends a transverse arch or bar 17 that is preferably formed integral with the body of the casting 15, this arch or bar 17 being formed with a threaded hole to receive the lower end of a correspondingly threaded bolt 18, whereby the upper member 20 of the sprinkler head is connected to the lower member 15. The head of the screw-bolt 18 passes through a central hole in the upper member 20, a washer being preferably interposed between the head of the bolt and the upper surface of the member 20.

The upper member 20 of the sprinkler head is preferably formed of sheet metal of convex or hemi-spherical shape and is provided with numerous holes 21 through which the water will pass in the form of fine spray or mist. The flanged lower edge of the member 20 is adapted to rest upon a gasket or washer 22 that sets within the flanged upper portion of the lower member 15 of the sprinkler head.

The upper member 20 of the sprinkler head is divided by a wall or diaphragm 25, from the lower edge of which a supplemental plate 26, preferably formed integral with the diaphragm 25, extends to the flanged lower edge of the upper member 20 of the sprinkler head, the diaphragm 25 and plate 26 thus forming a chamber beneath half of the upper portion of the sprinkler head. In the plate 26 there is formed a port 28 for the passage of water from the chambered lower portion of the sprinkler head and beneath this port is arranged a valve 30. The valve 30 is shown as mounted at the upper end of a screw-threaded valve stem 31 that passes through a threaded hole formed in the lower wall of the lower chamber 15 of the sprinkler head. The outer end of the valve stem 31 is provided with a thumb nut or other convenient means whereby the valve may be manipulated.

From the foregoing description, the operation of my improved sprinkler head will be seen to be as follows: When the valve 30 is away from the port 28 of the plate 26, as shown in Fig. 2 of the drawing, water entering the sprinkler head will pass freely through all the perforations 21 of the upper member of the sprinkler head, as the port 28 allows the water to pass to that part of the upper member of the sprinkler head above the plate 26. When the valve 30 is thus in open position, the sprinkler head will distribute the spray uniformly in all directions. If, now, it is desired to set the sprinkler head adjacent to a sidewalk, a path, or in like situation, the valve 30 will be moved upward by its threaded stem so as to close the port 28 in the plate 26 and when in this closed position the valve will prevent the

passage of water through the perforations 21 above the plate 26. In this way, the spraying of the water upon the sidewalk, path, or the like, will be avoided, while at the same time the grass or other vegetation up to the edge of the sidewalk can be freely sprinkled.

It is obvious that numerous changes in the details of construction above set out may be made without departing from the scope of my invention. I therefore do not wish the invention to be understood as limited to such details of construction.

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

1. A lawn sprinkler comprising a chambered lower member open at its top and an upper separable member having in its upper wall numerous discharge holes and provided with a supplemental chamber extending beneath and communicating with a number of said holes, said supplemental chamber being provided with an admission port for the passage of water to the supplemental chamber, means for connecting said upper member to said lower member, and a valve for closing said admission port of the supplemental chamber, said valve having a stem passing through said lower member.

2. A lawn sprinkler comprising a chambered head formed of a lower member and an upper convex member detachably connected to said lower member, said convex upper member being provided with numerous perforations for the discharge of water over a substantially circular area, a diaphragm extending diametrically across and downward from the inner side of said upper convex member, a plate extending from said diaphragm to the outer portion of said member and forming therewith a supplemental chamber communicating with a plurality of said discharge perforations, said plate being provided with a port communicating with the main chamber of the sprinkler head, a valve within the main chamber of said sprinkler head for opening and closing said port and a screw-threaded stem for said valve passing through a threaded hole provided in said lower member, substantially as described.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."