

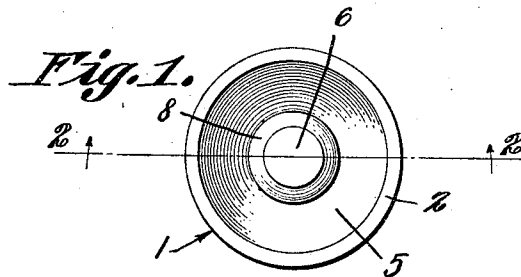
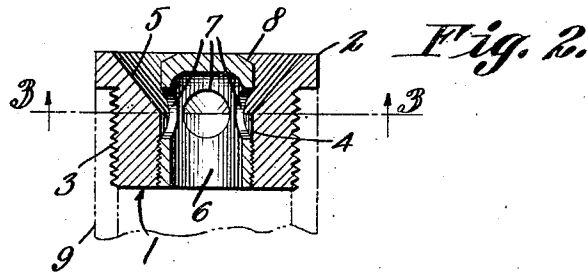
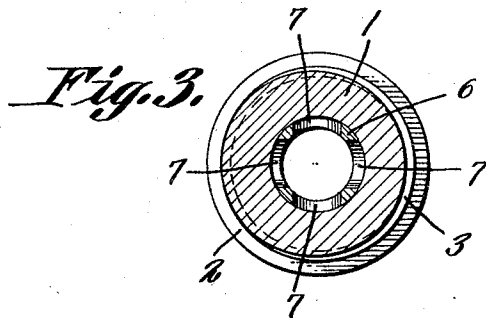
Feb. 12, 1924.

1,483,277

S. BROOME

SPRINKLER HEAD

Filed July 12, 1922



S. Broome,
Inventor.

By *CA Snow & Co.*
Attorneys.

Patented Feb. 12, 1924.

1,483,277

UNITED STATES PATENT OFFICE.

STOCKTON BROOME, OF JACKSONVILLE, FLORIDA.

SPRINKLER HEAD.

Application filed July 12, 1922. Serial No. 574,459.

To all whom it may concern:

Be it known that I, STOCKTON BROOME, a citizen of the United States, residing at Jacksonville, in the county of Duval and State of Florida, have invented a new and useful Sprinkler Head, of which the following is a specification.

This invention relates to a sprinkler head, one of the objects of the invention being to provide a structure of this character which will produce a fine mist adapted to extend over a considerable area so that a nozzle provided with a head of this character will be especially advantageous for sprinkling lawns and for like purposes.

Another object is to provide a sprinkler head which is of simple construction, the parts being easily assembled.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that within the scope of what is claimed, changes in the precise embodiment of the invention shown can be made without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings—

Figure 1 is an end view of the sprinkler head.

Figure 2 is a section on line 2—2, Figure 1.

Figure 3 is a section on line 3—3, Figure 2.

Referring to the figures by characters of reference 1 designates the body of the sprinkler head, the same being formed with an annular flange 2 at one end while the remaining portion of the body is of reduced diameter and exteriorly screw threaded as shown at 3. A central bore 4 is formed within the body 1 and that portion of the bore in the flanged end of the body is flared as indicated at 5.

Firmly seated within the bore 4 is a hollow plug 6 one end of which is closed and flush with the flanged end of the body while the other end is open and preferably flush with the corresponding end of the body. The plug can be held in place by frictional engagement with the body or, if desired, it can be screwed into the body as shown. This plug is provided with spaced circular open-

ings 7 the axes of which are perpendicular to the longitudinal axis of the plug. The openings are so positioned that when the plug is properly seated in the body only one-half of each opening will be exposed within the flared portion 5 of the bore 4. The remaining half of each opening will be closed by the body.

The edge of the closed end of the plug 6 is preferably beveled as shown at 8.

The sprinkler head herein described is designed to be secured in the end of a supply pipe 9 or the like and when a stream is started into the head it will issue in jets through the exposed or uncovered portion of the openings 7. Each jet as it leaves the opening will be semicircular in cross section but will immediately come against the wall of the flared portion 5 and be spread in fan shape by said wall. The spreading jets will intermingle within the flared portion 5 and be broken up thoroughly so that the fluid will be discharged from the head in the form of a fine mist which will cover an extensive area surrounding the head. By beveling the closed end of the plug 6, as shown at 8, a portion of the fluid from each jet is free to rebound inwardly from the flared wall of the bore so as to insure a further breaking up of the fluid beyond the closed end of the plug. The pressure of the issuing jets of fluid back of the spray and the constant formation of an increased amount of spray will result in the propulsion of the spray considerable distances beyond the head. It will be noted of course that the plug 6 can be adjusted in the body 1 because it is screwed thereinto. Consequently the exposed portions of the opening 7 can be semi-circular, or less than or greater than semi-circular. It will be noted, furthermore, that the exposed or closed end portion of the cylindrical plug cooperates with the flared portion 5 of the body to form a substantially V-shaped channel that extends around the plug into which the jets of fluid will be discharged from openings 7.

Importance is attached to the fact that the sprinkler head is formed of but few parts, these being easily assembled. Consequently the cost of producing the sprinkler head is very small and there are no parts to get out of order.

What is claimed is:—

1. A sprinkler head including a body having a bore extending therethrough flared at

one end, a plug seated firmly within the bore and having a closed end inclosed within the flared portion of the bore and surrounded by a substantially V-shaped channel, there
5 being a plurality of radial openings within the plug, each opening being partly closed by the wall of the bore and having its remaining portion opening into the said channel thereby to direct a jet segmental in cross
10 section against the wall of the flared portion of the bore and between said wall and the plug.

2. A sprinkler head including a body having a bore extending therethrough and flared
15 at one end, a plug seated firmly within the bore and having a closed end within the flared portion of the bore, there being a plurality of radial openings within the plug,

each opening being half closed by the wall of the bore and having its remaining half
20 portion opening into the flared portion of the bore thereby to direct a substantially semi-circular jet against the wall of the flared portion of the bore and between said wall and the plug, the closed end of the
25 plug having an angular beveled portion substantially perpendicular to the flared portion of the bore.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature
30 in the presence of two witnesses.

STOCKTON BROOME.

Witnesses:

LEOLA JONES,
G. J. AVENT.