

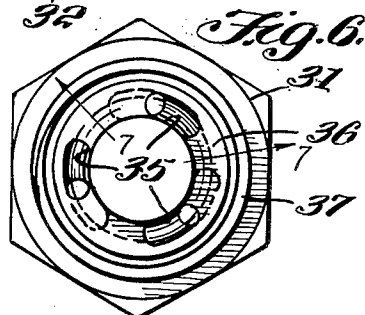
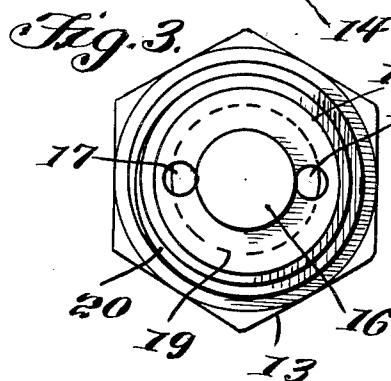
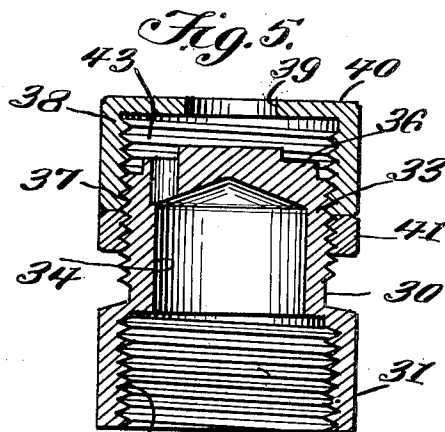
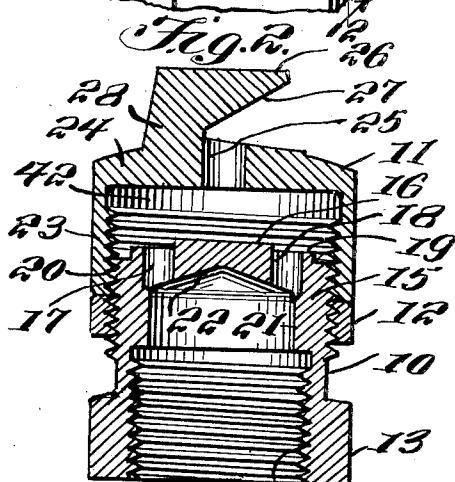
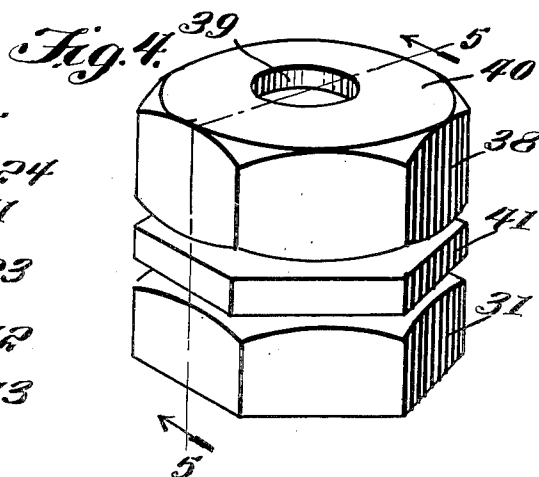
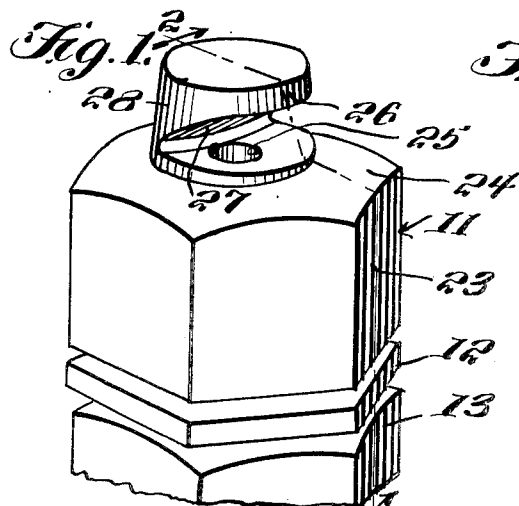
Jan. 27, 1953

C. HERRON

2,626,836

SPRINKLER HEAD

Filed Nov. 16, 1949



INVENTOR.
Charles Herron,

BY *Walter G. Evans & Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE

2,626,836

SPRINKLER HEAD

Charles Herron, Stillwater, Minn., assignor to
Goodrich M. Sullivan, Stillwater, Minn.

Application November 16, 1949, Serial No. 127,546

1 Claim. (Cl. 299—127)

1

This invention relates to sprinkler heads for spray nozzles of the type used on lawn sprinklers and the like, and in particular includes a body having a base threaded to receive a water supply pipe or stand with a closed outer end having spaced openings therethrough and with a baffle cap threaded on the outer end and provided with an outlet or discharge opening offset from the opening in the end of the body and having a semi-circular baffle angularly disposed in relation to the opening.

The purpose of this invention is to provide an improved sprinkler head having a baffle nut adjustably mounted on the outer end and a lock nut for securing the baffle nut in adjusted position.

Various types of sprinkler heads have been provided and openings have been used in various positions in the ends of nozzles but it is difficult to provide adjusting means for regulating the spray without changing the size of the opening and without danger of forming sediment accumulating pockets in the head. With this thought in mind this invention contemplates a sprinkler head having a body with discharge openings in the outer end and with a baffle nut secured in adjusted positions on the body by a lock nut and provided with baffle surfaces positioned in the path of water passing through the head.

The object of this invention is therefore, to provide means for forming the outer end of a sprinkler head whereby the passage of water through the head is obstructed by offset passages and protruding baffles.

Another object of the invention is to provide an improved spray nozzle or sprinkler head that may be threaded on the ends of pipes or sprinkler stands now in use.

A further object of the invention is to provide an improved sprinkler head having a baffle adjustably positioned in relation to the body which is of a simple and economical construction.

With these and other objects and advantages in view the invention embodies a body having an internally threaded base with an externally threaded head with spaced openings extended through the outer end of the head positioned adjacent the side walls thereof, a baffle cap threaded on the head of the body and a lock nut also threaded on the said head.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings wherein

Figure 1 is an elevational view illustrating a semi-circular baffle adjustably mounted on the outer end of the body of a sprinkler head.

2

Figure 2 is a longitudinal section through the sprinkler head and cap taken on line 2—2 of Figure 1.

Figure 3 is a plan view of the body of the sprinkler head shown in Figures 1 and 2 with the baffle cap removed.

Figure 4 is a view similar to that shown in Figure 1 illustrating a modification wherein the baffle cap is replaced by a baffle cap having an opening in the center thereof.

Figure 5 is a vertical longitudinal section through the head shown in Figure 4 being taken on line 5—5 of Figure 4.

Figure 6 is a plan view of the head and body shown in Figures 4 and 5 with the baffle cap removed.

Figure 7 is a detail taken on line 7—7 of Figures 5 and 6 illustrating the sloping openings in the outer end of the body head.

Referring now to the drawings wherein like reference characters denote corresponding parts the improved sprinkler head of this invention includes a body 10, a baffle nut 11, and a lock nut 12.

The body 10 is provided with a hexagonal base 13 having pipe threads 14 on the inner surface for receiving a water supply pipe or tube of a stand and at the upper end of the body is a head 15 having a centrally disposed boss 16 with openings 17 and 18 extended through the outer wall 19 and the outer surface of the head is provided with threads 20. The inner surface of the head 15 is provided with a bore 21 having a conical surface 22 that extends into the bore 16.

The baffle nut 11 is provided with a hexagonal wall 23, internally threaded to receive the threads 20 of the head 15 of the body 10 and the outer end of the nut is closed by a web 24 having a centrally disposed opening 25 therethrough and a semi-circular baffle 26 with a sloping under surface 27 is carried by the web 24 on the outer end of the baffle nut through a base 28. The baffle nut 11 may be turned to adjust the position thereof in relation to the end of the body 10 and when the baffle nut is in the desired position it is secured in this position by lock nut 12, which is also threaded on the threads 20.

In the design shown in Figures 4-7 inclusive the sprinkler head is formed with a body 30 having a hexagonal base 31 with threads 32 on the inner surface and a head 33 on the outer end is provided with a centrally disposed bore 34, and inclined openings 35 are provided in a web 36 forming the outer end of the head 33. The outer surface of the head 33 is provided with threads 37 and a baffle cap 38 with a centrally disposed opening 39 in a web 40 on the outer

3

end is threaded on the threads 37 on the outer surface of the head of the body 30. The position of the baffle cap or nut 38 may be adjusted by turning the nut on the threads 37 and the nut is secured in adjusted position by a lock nut 41.

With the parts arranged as shown in Figures 1 and 2 the water passing through the openings 17 and 18 enters a chamber 42 inside of the baffle nut or cap 11 and from this chamber the water passes through the opening 25, striking the under surface 27 of the semi-circular baffle 26 thereby providing a fan shaped outwardly extended spray. The amount of water sprayed and the size of the spray is controlled by the position of the baffle cap 11 on the head 10 and the baffle cap or nut is adjusted and secured in the adjusted position by the lock nut 12.

In the design shown in Figures 4 and 5 water passing through the sloping openings 35 enters a chamber 43 inside of the baffle cap or nut with a swirling action and the circulating water passing around the inner surface of the cap passes to the opening 39 and is sprayed outwardly. The amount of water and also the size of this spray is adjusted by the position of the cap 38 on the head of the body 30 and this cap is secured in adjusted position by a lock nut 41.

The sprinkler head of either design may be made in different sizes to accommodate different types and sizes and the baffle nut may be secured on the outer end of the head by any suitable means.

It will be understood that other modifications may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

In a sprinkler head, the combination which comprises a cylindrical body having a web extended across the upper end and said web having a cylindrical centrally positioned boss extended from the outer surface, said web also having

4

oppositely positioned openings extended there-through and said openings positioned between the periphery of the boss and the periphery of the body, said body having a hexagonal base and the inner surface of the lower part of the body and the outer surface of the upper part of the body being provided with threads, a nut having a hexagonal body with a cylindrical cavity therein and the inner surface of said body being threaded to receive the threads of the upper part of said cylindrical body, and a nut having a centrally disposed frustro-conical shaped section extended from the outer end and a centrally positioned opening extended through said outer end, said nut being threaded on the upper end of said cylindrical body and said frustro-conical shaped section of the nut having a cavity in one side providing an overhanging outer end thereby forming a spray baffle spaced from the outer end of the nut and positioned to extend over said centrally disposed opening through the nut, and a lock nut threaded on the upper end of the body and positioned to coact with the nut from which the frustro-conical shaped section extends thereby providing means for adjusting the position of the said nut in relation to the end of the cylindrical body.

CHARLES HERRON.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,183,150	Williams	May 16, 1916
1,216,630	Tuthill	Feb. 20, 1917
1,492,990	Kahler	May 6, 1924
1,805,782	Munz	May 19, 1931
1,881,409	Le Moon	Oct. 4, 1932
2,127,883	Norton	Aug. 23, 1938
2,386,918	Timpson	Oct. 16, 1945