Jan. 23, 1962 A. ANDERSON 3,018,057

SPRINKLER HEAD SHIELD

Filed July 28, 1959

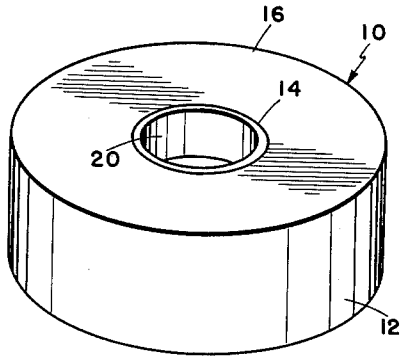


Fig. 1

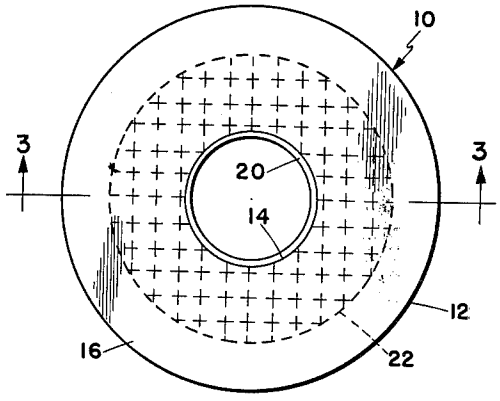


Fig. 2

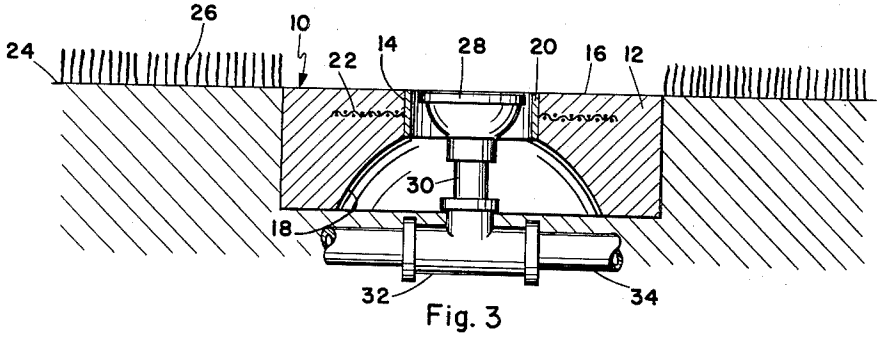


Fig. 3

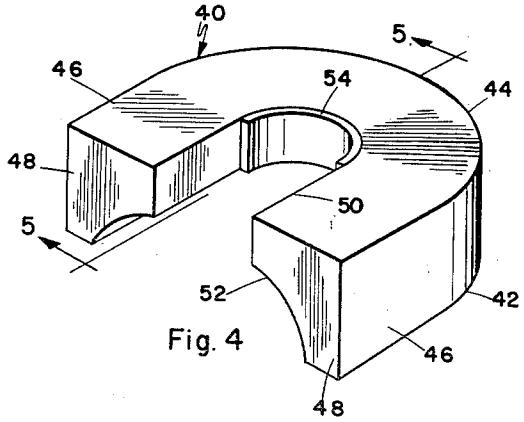


Fig. 4

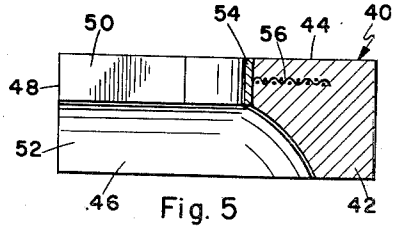


Fig. 5

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SPRINKLER HEAD SHIELD

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The present invention relates generally to lawn sprinkling systems and more particularly to a sprinkler head shield.

The primary object of this invention is to provide a sprinkler head shield which is recessed in the ground to surround and protect a sprinkler head, yet which offers no obstruction to mowers or other implements used in maintenance of the area.

Another object of this invention is to provide a sprinkler head shield which is ideally adapted for the use of a cutting tool having a circular blade of a diameter just slightly greater than the sprinkler head shield to clear away any grass that might tend to overhang the outer edge of the sprinkler head shield.

Another object of this invention is to provide a sprinkler head shield which is easily and economically made from moldable material and is internally reinforced for durability.

A further object of this invention is to provide a sprinkler head shield which can be used with many types of fixed sprinklers or with the pop-up type, the shield having clearance for any associated plumbing adjacent the head.

Finally, it is an object to provide a sprinkler head shield of the aforementioned character which is simple and convenient to install and which will give generally efficient and durable service.

With these and other objects indefinitely in view, this invention consists in the novel construction, combination and arrangement of elements and portions, as will be hereinafter fully described in the specification, particularly pointed out in the claims, and illustrated in the drawing which forms a material part of this disclosure, and in which:

FIGURE 1 is a perspective view of the shield;

FIGURE 2 is a top plan view thereof;

FIGURE 3 is a sectional view taken on the line 3—3 of FIGURE 2, a sprinkler head and a portion of the surrounding earth being indicated to illustrate the use of the shield;

FIGURE 4 is a perspective view of a modified form of the shield for use in proximity to a wall or the like; and

FIGURE 5 is a sectional view taken on the line 5—5 of FIGURE 4.

Similar characters of reference indicate similar or identical elements and portions throughout the specification and throughout the views of the drawing.

The shield 10 comprises a short cylindrical block 12 of molded material such as concrete, lightweight aggregate, plastic, or the like, said block having a central opening 14 extending downwardly from the upper surface 16. The underside of the block 12 has a large concave cavity 18 vertically aligned and communicating with the opening 14 to provide clearance for any plumbing associated with the sprinkler head. The opening 14 is fitted with a tubular metal sleeve 20 and the block 12 has an internal disc shaped reinforcing web 22 of wire mesh, or the like, which can be welded or otherwise attached to said sleeve. The assembly of the sleeve 20 and reinforcing web 22 can easily be placed in the mold or form in which the shield is made, and the material poured around them.

As illustrated in FIGURE 3, the shield 10 is recessed in the ground with the upper surface 16 substantially flush with the ground line 24, so that the grass 26 is completely above the shield. The sprinkler head 28 is supported on a riser 30 extending upwardly from a T-connection 32 in a water conduit 34, the arrangement being typical. The sprinkler head 28 is positioned slightly below the upper surface 16 and is centered in the sleeve 20. If a pop-up type sprinkler is used, the head may extend above the shield 10 when in operation and retract inside when not in use, the cavity 18 providing ample space for the actuating mechanism.

Since the shield is flush with the ground, mowers or other implements can pass directly over the sprinklers without damage to either the sprinkler heads or the implements themselves. In many existing sprinkler systems, the ground surrounding each sprinkler head often subsides slightly due to an excess of moisture, or the sprinkler heads are raised slightly to avoid clogging. In either case, the protruding sprinkler heads can damage the blades of a mower and create an undesirable obstruction. If the sprinkler heads are flush with the ground they are subject to clogging with soil and often become overgrown with grass, which must be trimmed by hand. The shield 10 avoids all these problems yet is small and unobstrusive and, if necessary, can be colored to blend with the surroundings.

It is interesting to note that a further feature of this invention is that a simple tool made from a piece of pipe can be used to cut the circular recess for the shield, so eliminating unnecessary digging or hand work.

For installation in close proximity to a wall or other structure, the modified shield 40 illustrated in FIGURES 4 and 5 may be used. The shield 40 is U-shaped rather than circular and comprises a block 42 having a semicircular portion 44 and two short arms 46 with flat ends 48. Between the arms 46 is a slotted opening 50 and under the block 42 is an enlarged cavity 52 extending outwardly from said slotted opening. The closed end of the slotted opening 50 is fitted with a sleeve portion 54 having a laterally extending reinforcing web 56. The shield 40 is used in the same manner as the shield 10, except that the arms 46 are placed against the wall or other structure, the U-shaped shield being more convenient in such a position than a circular shield.

The operation of this invention will be clearly comprehended from a consideration of the foregoing description of the mechanical details thereof, taken in connection with the drawing and the above recited objects. It will be obvious that all said objects are amply achieved by this invention.

It is understood that minor variation from the form of the invention disclosed herein may be made without departure from the spirit and scope of the invention, and that the specification and drawings are to be considered as merely illustrative rather than limiting.

I claim:

1. A sprinkler head shield, comprising:

a unitary block of molded material having a flat upper surface positioned flush with the ground level;

said block having a substantially central opening extending downwardly from said upper surface to receive a sprinkler head therein;

said opening having a unitary sleeve fixed therein, the sides of said sleeve being parallel to the axis of said opening;

a reinforcing web attached to and extending radially outwardly from said sleeve into said block;

said block having a reduced vertical thickness dimension at said central opening and said sleeve having a thickness dimension equal to said reduced dimension; and

an enlarged cavity in the underside of said block, vertically aligned and communicating with said opening, the uppermost portion of said sprinkler being

normally positioned below said flat upper surface of said block.

2. A sprinkler head shield, comprising:

a unitary, shallow, generally cylindrical block of molded material having a flat upper surface positioned flush with the ground level;

said block having a substantially central inverted funnel-shaped opening extending downwardly from said upper surface;

a unitary cylindrical sleeve fixed in the narrow portion of said funnel-shaped opening;

a reinforcing web attached to and extending radially outwardly from said sleeve into said block; and

a sprinkler head positioned in said sleeve with its uppermost surface normally below the flat upper surface of said block.

3. A sprinkler head shield, comprising:

a unitary, shallow, generally U-shaped block of molded material having a flat upper surface positioned flush with the ground level;

said block having a substantially central slotted opening extending downwardly from said upper surface;

said slotted opening having a unitary semi-cylindrical sleeve portion fixed therein, the sides of said sleeve being parallel to the axis of said opening;

a reinforcing web attached to and extending outwardly from said sleeve portion within said block;

said block having a reduced vertical thickness dimension at said slotted opening and said sleeve portion having a vertical dimension equal to said reduced dimension; and

an enlarged cavity on the underside of said block, vertically aligned and communicating with said slotted opening, the uppermost portion of said sprinkler being normally positioned below said flat upper surface of said block.

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