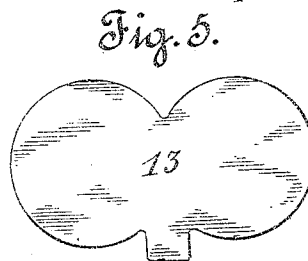
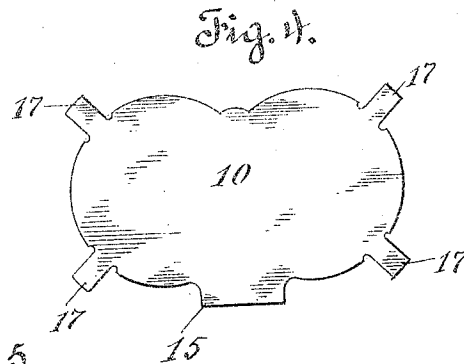
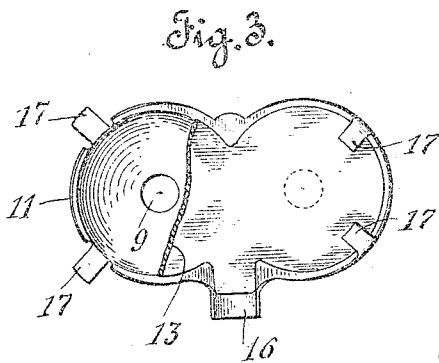
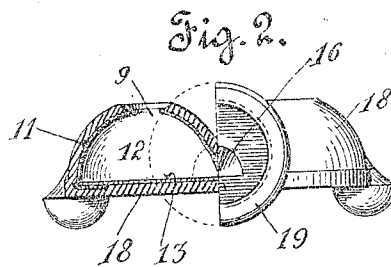
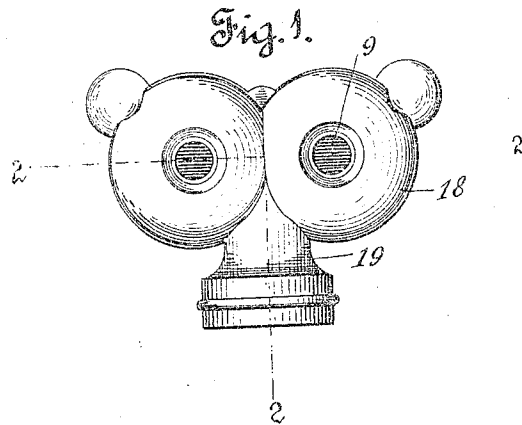


W. VAN E. THOMPSON.
LAWN SPRINKLER.
APPLICATION FILED DEC. 28, 1910.

Patented Dec. 3, 1912.

1,046,348.



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UNITED STATES PATENT OFFICE.

WALTER VAN E. THOMPSON, OF LOS ANGELES, CALIFORNIA.

LAWN-SPRINKLER.

1,046,348.

Specification of Letters Patent.

Patented Dec. 3, 1912.

Application filed December 28, 1910. Serial No. 599,709.

To all whom it may concern:

Be it known that I, WALTER VAN E. THOMPSON, a citizen of the United States, residing in the city of Los Angeles, county of Los Angeles, State of California, have invented new and useful Improvements in Lawn-Sprinklers and in the Process of Manufacturing the Same, of which the following is a specification.

Heretofore in the manufacture of that class of lawn sprinklers, in which the water is admitted into a chamber tangentially and escapes therefrom through an orifice central to the chamber, it has been the custom to cast the sprinklers out of metal and to finish the central outlet orifice by cutting the metal to a fine edge around the orifice. In the casting such sprinklers a sand core is used, and it is very difficult, if not impossible, to get these cores always of the same size, thereby producing in the sprinklers an unevenness of chamber area and therefore an unevenness as to capacity in different sprinklers. Waste in the manufacture of such sprinklers occurs owing to the fact that there is more or less moisture in the sand cores which sometimes results in a blow hole, which extends entirely through the body of the sprinkler rendering it useless. In other cases the blow hole extends so near through the body, that when the sprinkler is put into use the pressure of the water blows out the hole and renders the sprinkler useless. This is particularly noticeable in that class of sprinklers called twin sprinklers where two chambers lie side by side and are supplied with water from a common inlet which opens into both chambers. In these sprinklers, the chambers are nearly the segment of a hollow globe.

It is the object of my invention to do away with the use of the sand core in the casting of such sprinklers and to use in lieu thereof a metallic hollow core, which forms the lining of the chamber in the completed sprinkler, said core having a central outlet for each chamber and a common inlet for the two chambers. I accomplish this object by the sprinkler described herein and illustrated in the accompanying drawings, showing a "twin sprinkler", in which—

Figure 1 is a top plan view of my improved sprinkler. Fig. 2 is a rear end elevation partly in section, being cut on the

line 2—2 of Fig. 1. Fig. 3 is a bottom plan view of the metallic core with a part of the bottom plate broken away for clearness of illustration and with a portion of the upper part in the position it is in before the bottom is secured to the top. Fig. 4 is a plan of the blank sheet of metal for the formation of the top portion of the core. Fig. 5 is a view of the sheet of metal which forms the bottom of the core.

I cut blank 10 from thin sheet metal of such nature that it can be drawn and of the shape shown in Fig. 4. I prepare dies not shown, which will press the blank into shape to form the top of the core or the lining of the upper portion of chamber 12 in a completed sprinkler, and afterward I punch a central aperture 9 for each chamber. I cut another blank 13 as shown in Fig. 5, which forms a closure for the bottom of the core and bottom of completed lining. As shown in Fig. 4, the blank for the top portion has a large projection 15, which is formed into an arch by the dies and forms the top 16 of the inlet to and between the inlet sides of the chambers. The blank 10 also has smaller projections 17, which when the bottom plate is positioned for use as shown in Fig. 3, are folded over upon the bottom plate as shown at the right in Fig. 3, thereby completing the core. This core is positioned in suitable dies for casting the outside shell 18 around the same. The outer shell has a neck 19, the outer part of which is enlarged and internally threaded for the reception of the threaded end of the coupler in the end of the hose, not shown.

By the use of the metal core formed in the manner before described, a perfect lining is provided for the sprinkler and uniform chamber capacity is provided for every sprinkler, so that there is no unevenness of capacity between the sprinklers. As there is no moisture in the core, there are no blow holes extending partly or entirely through the body, and consequently no defective sprinklers, thus saving the waste heretofore occasioned by blow holes in casting such sprinklers. As the mold is so constructed that the cast metal is kept a short distance away from the central aperture in the top of the core, the central orifice requires no finishing and the sprinkler as soon as it is cast and the shank threaded is ready for use.

In the drawings I have shown a twin sprinkler, but a sprinkler with a single chamber can be constructed in like manner.

Having described my invention, what I claim is:—

As a new article of manufacture a lawn sprinkler having a chamber provided with a sheet metal lining, said lining having an orifice in the top and a tangential inlet in the side, and an integral continuous cast

body around said lining except at the top orifice and side inlet, said body having hose attaching means at the inlet.

In witness that I claim the foregoing I have hereunto subscribed my name this 15 22nd day of December, 1910.

WALTER VAN E. THOMPSON.

Witnesses:

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