

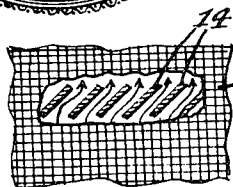
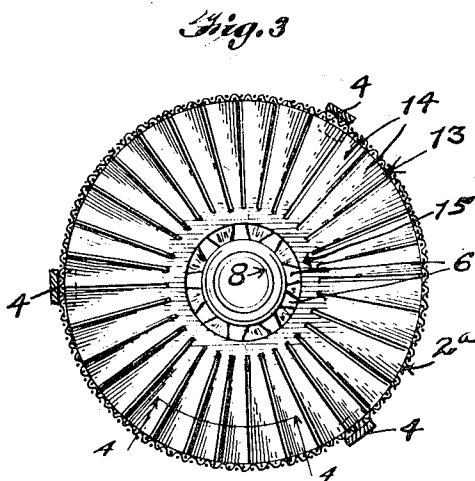
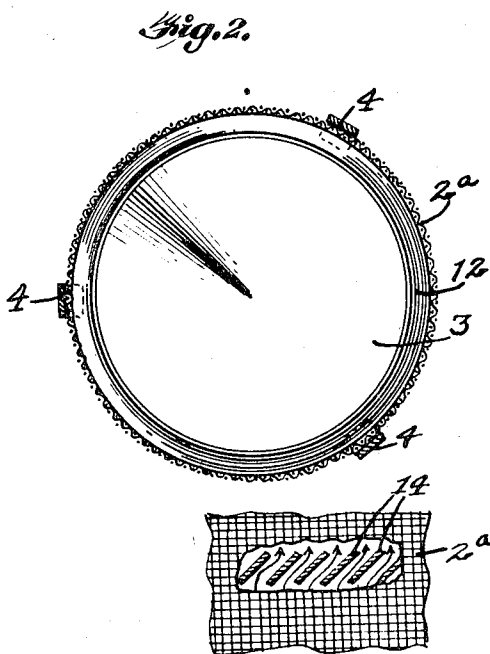
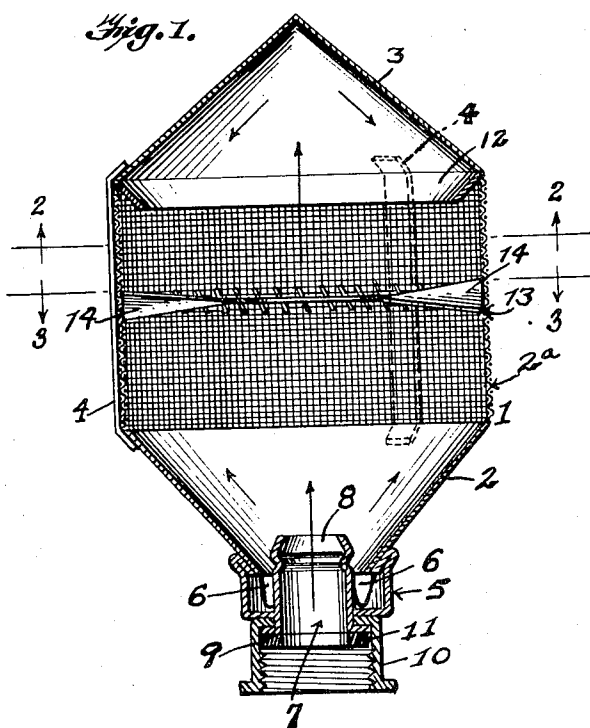
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2,420,958

IRRIGATOR

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UNITED STATES PATENT OFFICE

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IRRIGATOR

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5 Claims. (Cl. 299-107)

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This invention relates to an irrigator.

An object of this invention is to avoid soil erosion during the process of irrigation. For instance, if a hose is placed in a newly prepared flower or vegetable bed, it washes the dirt from a foot to one and one-half feet ahead, and leaves an indentation from two to three inches deep. Even if the soil is not newly prepared, the hose always leaves its mark. Therefore, the purpose of the irrigator herein described is to prevent the above specified faults.

It is to be understood that in a semi-arid district where daily flooding is imperative, my device is extremely useful. However, in all parts of the United States, my device can be used to great advantage. Newly planted seeds and plants require immediate irrigation for the best results.

Another object of the invention is the construction of an irrigator which is simple and efficient in operation, because the turbulence inside the device avoids all possibilities of destruction from water pressure. With my device, it cannot be detected from which point the irrigation is applied in newly prepared soil.

With the foregoing and other objects in view, my invention comprises certain novel constructions, combinations and arrangements of parts as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a vertical central sectional view of an irrigator, constructed in accordance with the present invention.

Figure 2 is a horizontal sectional view, taken on lines 2-2, Fig. 1, and looking in the direction of the arrows.

Figure 3 is a horizontal sectional view, taken on lines 3-3, Fig. 1, and looking in the direction of the arrows.

Figure 4 is a vertical sectional view, taken on lines 4-4, Fig. 3, and looking in the direction of the arrows.

Referring to the drawings, in which I have shown the preferred embodiment of my invention, 1 designates a casing that comprises an inverted conical bottom 2, and 2^a is the cylindrical wire mesh side, while 3 is the conical top, all being fixedly secured together in any suitable manner. On the outside of the casing are a plurality of vertical bracing strips 4. Each strip 4 is fixedly secured at its lower end to the bottom 2, while its upper end is fixedly secured to the top 3.

A slotted collar 5 is fixedly secured to the lower end of the conical bottom 2. This collar 5 is pro-

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vided with side slots 6. Within the collar 5 is fixedly secured a nozzle sleeve 7. This sleeve 7 is provided with a reduced upper or inner end 8 for efficiently discharging the water into casing 1. On the lower end of the nozzle sleeve 7 is a horizontal annular flange 9, between which and the collar 5 is secured the inner end of the hose coupling 10. A suitable rubber washer 11 is placed in the hose coupling 10. It is to be noted that the nozzle sleeve 7 is considerably smaller than the lower end of the conical bottom 2, so that some water can pass down and out through slot 6.

Secured in the conical top 3 is an inverted conical-like baffle 12, for the purpose hereinafter described. A fan-like baffle 13 is secured to the middle of the wire mesh cylindrical side 2^a. This baffle 13 comprises blades 14, radiating from a ring-like hub 15, Fig. 3. The blades 14 are spaced apart, as clearly seen in Figure 4, to allow free passage of the water. The outer ends of the blades 14 are preferably soldered to the wire mesh side.

In operation, after the water stream passes through the nozzle sleeve 7, bottom 2, cylindrical side 2^a, and conical top 3, and returns to baffle 12, it is deflected to baffle 13, and then to conical bottom 2, then to screen side 2^a and out beyond casing 1. Under seventy pounds' water pressure (or what is available), the water will leave this device without the slightest sign of soil erosion in newly prepared soil. The device may be made of plastic or metal, as the operator desires.

While I have described the preferred embodiment of my invention and illustrated the same in the accompanying drawings, certain minor changes or alterations may appear to one skilled in the art to which this invention relates during the extensive manufacture of the same, and I, therefore, reserve the right to make such changes or alterations as shall fairly fall within the scope of the appended claims.

What I claim is:

1. In an irrigating device, the combination of a casing, a slotted collar on the outside of said casing and surrounding its lower end, a nozzle sleeve fixedly secured to said slotted collar and extending into said casing above said slotted collar, and a hose coupler on said nozzle sleeve.
2. In an irrigating device, the combination of a casing, a slotted collar on the outside of said casing and surrounding its lower end, a nozzle sleeve fixedly secured to said slotted collar, said nozzle sleeve provided with a reduced end above said slotted collar, said nozzle sleeve provided with

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its outer end with a horizontal flange, and a hose coupling having a portion positioned between said horizontal flange and said slotted collar.

3. In an irrigating device, the combination of a casing provided with a top and having an open mesh side, an inverted conical baffle within the top of said casing and extending downwardly within said mesh side, a second baffle provided with a solid ring hub and with radiating spaced blades secured to said mesh side, and water supplying means formed on the lower end of said casing.

4. In an irrigating device, the combination of a casing comprising a cone bottom and a cone top with a cylindrical mesh side positioned between and secured to said top and bottom, a plurality of bracing strips outside of said mesh side and fixedly secured at their ends to said top and bottom, an inverted conical baffle fixedly secured to said top and extending downwardly within said mesh side, a second fan baffle secured within said mesh side, said fan baffle including a ring hub with radiating spaced blades, the outer ends of said blades against said mesh side, a slotted collar fixedly secured to the outside of said bottom and depending below the bottom, a nozzle sleeve fixedly mounted on said slotted collar and having a reduced end extending into said bottom, and a hose coupling mounted between a portion of said nozzle sleeve and said slotted collar.

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5. In an irrigating device, the combination of a casing, a slotted collar surrounding the inner end of said casing with the slots of said collar opening upon the outer atmosphere, a nozzle sleeve extending into said casing beyond the inner end of said slotted collar, and a hose coupling on said nozzle sleeve and against the outer end of said slotted collar.

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