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L. L. BARR

2,481,279

CHEMICAL SPRAYING DEVICE

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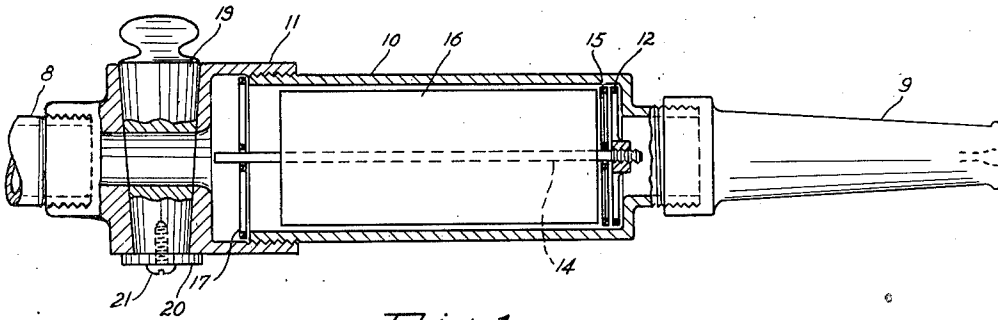


Fig. 1

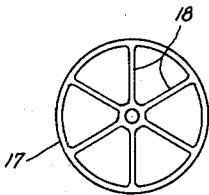


Fig. 2

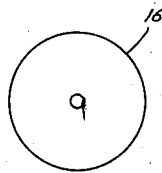


Fig. 3

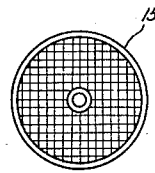


Fig. 4

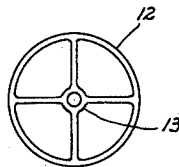


Fig. 5

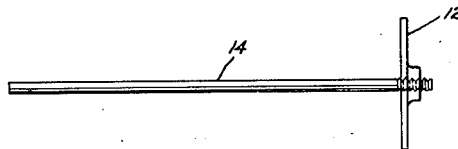


Fig. 6

INVENTOR.
LOUIS L. BARR

BY *Archibald Martin*
ATTORNEY

UNITED STATES PATENT OFFICE

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CHEMICAL SPRAYING DEVICE

Louis L. Barr, Pittsburgh, Pa.

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1 Claim. (Cl. 299—83)

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My invention relates to a spray device suitable for spraying a dissolved chemical or fertilizer along with or as part of a water spray, from an ordinary water hose.

One object of my invention is to provide means for supporting a soluble chemical or fertilizing material in block form in such manner that the flow of water to the discharge nozzle of a hose will move along the exposed surface of the block, at all sides thereof and gradually dissolve the same.

Another object of my invention is to provide, in a device of the character referred to in the preceding paragraph, means for preventing lumps of the soluble material from being carried into the hose nozzle.

In the accompanying drawing, Figure 1 is a longitudinal sectional view through my device, showing the interior construction thereof and the manner in which the device is connected to a garden hose and its nozzle; Fig. 2 is a face view of the spider in the rear portion of the chemical-containing chamber; Fig. 3 is an end view of the block of chemical material or fertilizer in the chamber; Fig. 4 is a face view of the screening device mounted at the forward end of the block; Fig. 5 is a view showing the spider for holding the rod that supports the chemical block in centralized position in the chamber, at the front end thereof, and Fig. 6 shows the rod that extends through the chemical block for supporting the same.

An ordinary garden hose is indicated at 8 and has the usual nozzle 9. In the present case however, my chemical-containing device is interposed between the hose and the nozzle. This device comprises a tubular chamber 10 having threaded connection with a valve block 11. These members 10 and 11 respectively have screw-threaded connection with the nozzle and the hose. A spider 12 fits loosely within the chamber 10 and has a threaded hub 13, to receive the threaded end of a rod 14, to thereby support the rod centrally of the chamber 10. A screen plate 15 has a central hole through which the rod extends and serves to prevent loosened lumps of the soluble block 16 from being carried past the spider and into the nozzle.

The block material may be of an insecticidal nature or in the form of a fertilizer chemical and has a central hole through which the rod 14 ex-

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tends and whereby the block is held in spaced relation to the side walls of the chamber 10, so that water can readily flow along the sides of the block and through the screen 15 to a nozzle 9.

The rear end of the rod extends loosely through a spider 17 which abuts the rear end of the chamber and whose primary purpose is to support the rear end of the rod 14. However, spokes 18 in the spider help to give a churning effect to the stream of water, so that there is turbulence around the periphery of the block 16, which assists in dissolving the block.

The member 11 contains a tapered bore for a valve or stop cock 19 that is releasably held in place by a washer 20 and a screw 21. When the valve 19 is turned to open position as shown in Fig. 1, there will be flow of water through the ports in the member 11 and the valve. This valve serves as a convenient means for shutting off water flow when the chamber 10 is to be disconnected for the insertion of a chemical block 16.

I claim as my invention:

A chemical spray device comprising a chamber of tubular form open at its ends, means for connecting the rear end of the chamber to a water hose, means for connecting the forward end of the chamber to a discharge nozzle, a radially disposed seating surface in the forward end of the chamber, a spider having seating engagement with said surface, a rod arranged to extend centrally through a block of soluble material in the chamber and having its forward end in threaded engagement with the said spider, and a spider at the rear end of the chamber and having a central opening for loosely receiving the rod, the connection between the rear end of the chamber and a hose comprising a valve block with which the chamber has screw-threaded engagement at its rear end.

LOUIS L. BARR.

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