June 26, 1956 L. C. MORROW 2,751,931

FOOTWEAR DISINFECTOR

Filed Oct. 5, 1953

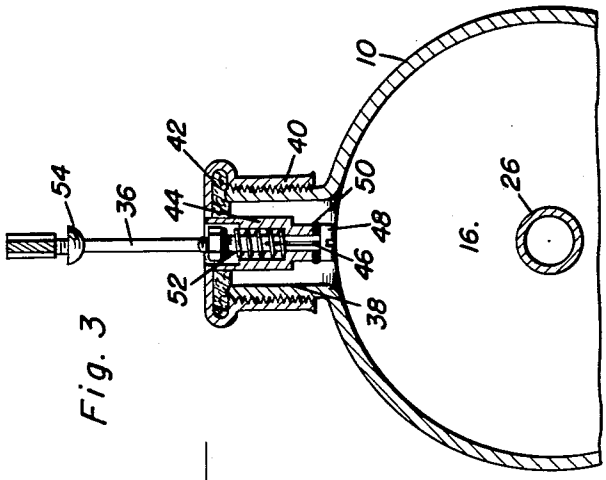


Fig. 3

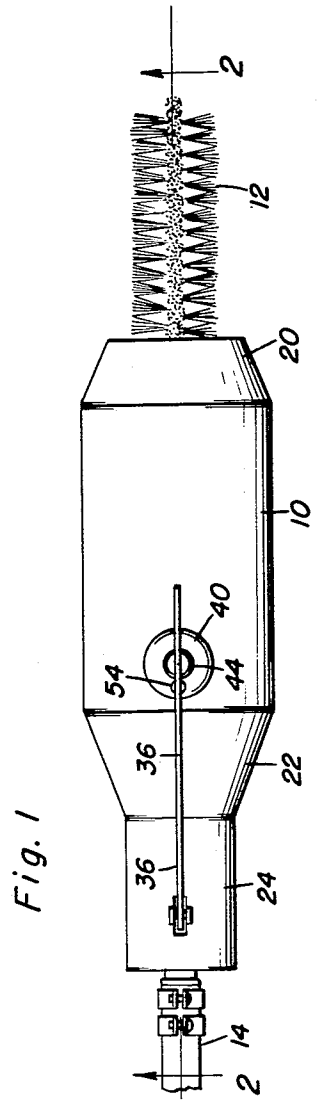


Fig. 1

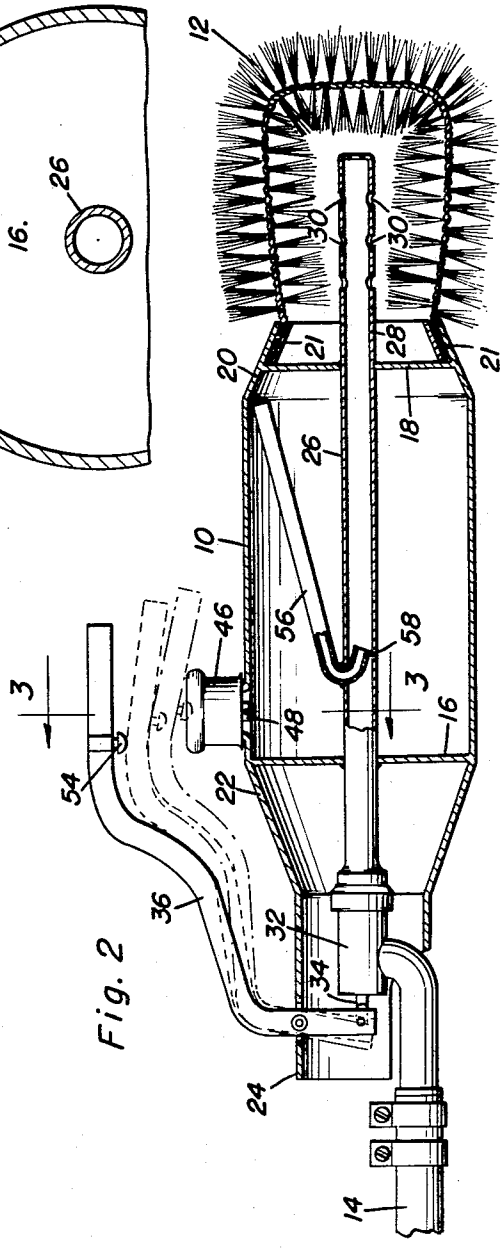


Fig. 2

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United States Patent Office 2,751,931 Patented June 26, 1956

2,751,931

FOOTWEAR DISINFECTOR

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Application October 5, 1953, Serial No. 384,138
1 Claim. (Cl. 137—587)

This invention relates to a footwear disinfector and more particularly to a device for washing and disinfecting the outside surface of footwear.

When dairymen, cattle buyers, veterinarians, etc., visit dairy barns, it is possible for them to spread disease by carrying germs on their footwear from one farm to another.

An object of this invention is to provide a footwear disinfector for conveniently supplying disinfectant for cleaning and disinfecting footwear.

Another object of this invention is to provide a footwear disinfector which can be used to clean mud, or the like, from the outer surface of footwear.

A further object of this invention is to provide a footwear disinfector carrying a supply of disinfectant material which can be connected to a conventional water supply in order to clean footwear.

Another object of this invention is to provide a footwear disinfector which is simple and efficient in construction and durable and lasting in use.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is an elevational view of the footwear disinfector forming the subject of this invention;

Figure 2 is a sectional view taken substantially along the section line 2—2 of Figure 1; and

Figure 3 is a sectional view taken substantially along the section line 3—3 of Figure 2.

Referring now more specifically to the accompanying drawings, it will be seen that the improved footwear disinfector forming the subject of this invention includes, as shown in Figure 1, a main body 10, having a brush 12 secured to one end thereof and a water supply 14 secured to the other end thereof.

The body 10 is tubular in shape and has the ends thereof closed as at 16 and 18. The end of the body 10 tapers inwardly as at 20 adjacent the closed end 18. The brush 12 is formed of bristles secured between twisted wires and bent into a substantially U-shaped configuration. The ends of the wires bend outwardly so as to engage the tapered portion 20 and fit into pieces of tubing 21 attached to the inner side of portion 20 to retain the brush in position on the body 10. The other end of the body 10 tapers inwardly as at 22. An extension 24 is secured to the end of the tapered section 22 away from the body 10.

A tubular conduit 26 extends through the walls 16 and 18. An extension 28 is provided on the end of conduit 26 and is disposed within the brush 12. The extension 28 is provided with a plurality of apertures 30 for dispensing liquid to the brush 12. A control valve comprising a housing 32 is secured to the end of the conduit 26 outwardly of the wall 16. The inlet 14 is connected to the valve housing 32. A conventional plunger-type valve is disposed within the housing 32 and has a rod 34 extending outside the housing 32. A lever arm 36

is pivotally mounted on the extension 24 and is secured at one end to the rod 34. The lever 36 is bent so as to extend substantially parallel to the body 10.

A filler hole 38 is provided on the body 10 and underlies the lever 36. The filler 38 extends away from the body 10. The outer surface of the filler 38 is threaded and receives thereon an internally threaded cap 40. The inside of the cap 40 is provided with a suitable gasket 42.

The center of the cap 40 is provided with an aperture which receives therein an air vent valve comprising a tubular member 44. Disposed within the bore of the member 44 is a pin 46 having an enlarged head 48 bearing against the inner end of the member 44. A gasket 50 is mounted on the pin 46 adjacent the head 48 and engages the end of the member 44 for sealing the same. A spring 52 is disposed on the pin 46 and engages an abutment on the end of the pin 46 opposite the headed end 48. The spring 52 also engages a portion of the member 44 for urging the head portion 48 into closed position. The member 36 is provided with a projection 54 adjacent the end thereof which engages the end of the pin 46 for moving the pin inwardly into the casing 10 to allow air to pass through the member 44.

A tubular conduit 56 is disposed within the body 10 and intersects the conduit 26. The conduit 56 has a portion 58 disposed within the conduit 26 and extending in the direction toward the brush 12. The conduit 56 is open at both ends to allow material within the casing 10 to pass into the conduit 26.

In practical use, the body 10 is filled with a disinfectant and the water supply 14 is connected to the valve housing 32. When it is desired to use the device, the lever 36 is first depressed part way allowing water to flow through the conduit 26 and the perforations 30 to the brush 12. When it is desired to mix disinfectant with the water, the lever 36 is depressed further, pushing down on the pin 46 allowing air to pass into the body 10 and thereby allowing the disinfectant to pass through the conduit 56 into the conduit 26. To stop the flow of disinfectant, the lever 36 is released part way and to stop the flow of water, the lever 36 is completely released.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

A footwear disinfector comprising: a casing for the reception of a disinfectant, an air vent valve on said casing, a fluid conduit passing through the casing and communicating therewith for receiving disinfectant therefrom, a control valve on said conduit, and a hand lever pivotally mounted at an intermediate point on the casing and having one end portion operatively connected to the control valve, the other end portion of the lever extending in spaced, opposed relation to the vent valve and engageable therewith for opening same after the control valve has been opened by the initial movement of said lever.

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