Oct. 24, 1939.

H. C. BAUMGARDNER

2,177,032

SPRAYING DEVICE

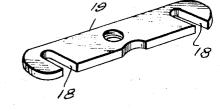
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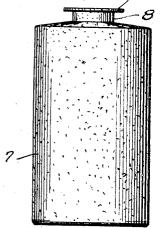
Filed June 14, 1938

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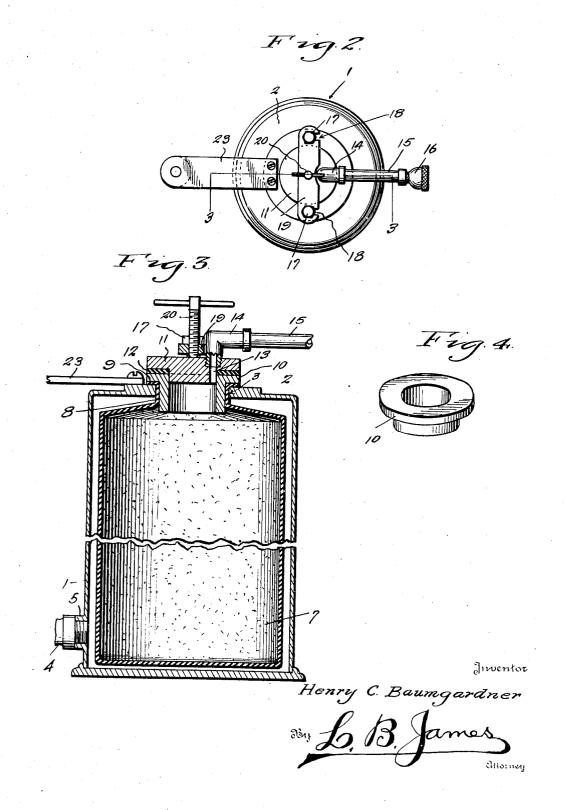
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,177.032

SPRAYING DEVICE

Henry Charles Baumgardner, Ann Arbor, Mich.

Application June 14, 1938, Serial No. 213,703

2 Claims. (Cl. 299-92)

This invention relates to a spraying device of the type having an inner container of resilient material, placed in an outer container, so that when fluid is forced into the outer container, the inner container will be compressed and thus the fluid therein will be forced out of the inner container.

The general object of the invention is to provide simple and inexpensive means for connecting

10 the two containers together in a fluid tight manner and to permit the inner container to be easily and quickly refilled.

The invention also consists in certain other features of construction, combination and ar-

- 15 rangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.
 - Fig. 1 is an elevation of the improved device.
 - Fig. 2 is a top plan view thereof.
 - Fig. 3 is a section on line 3-3 of Fig. 2.
 - Fig. 4 is a view of the filler plug.

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- Fig. 5 is a view of the notched bar.
- Fig. 6 is an elevation of the resilient container. In these drawings, the numeral I indicates the outer container which has a top part 2 formed with an opening 3. A valve 4 has a part threaded in a nipple 5 at the lower part of the container and a hose 6, or the like, is connected to the valve 80
- and is adapted to be connected to a source of fluid supply, such as a faucet of a water supply system. The resilient container is shown at 7,
- and is formed of rubber or the like and when this container 7 is placed in the outer container, a space is left between the two for receiving the
- fluid entering the outer container. The inner container 7 is formed with a neck 8 at its upper end, having a flange 9 at its top. The neck extends through the opening 3 in the outer con-
- 40 tainer with the flange resting on the upper face of the part 2, around the opening, said top part being preferably thickened at its center, as shown. After the inner container is put in place, a filler plug 10 is put in place. This plug is
- 45 formed with a tubular reduced part for fitting in the neck 8 and with a flange for resting on the flange 9 of the neck. The plug is adapted to be closed by a filler cap 11 which has a reduced under part for fitting in the upper end of the plug
- 50 and with a flange part for resting on a gasket 12 which is seated on the flange of the plug. A hole 13 passes through the cap and the upper end of the hole is enlarged and threaded to receive an end of an elbow 14, the other end of which has 55 attached thereto the tube 15 which carries the

spray head 16. Bolts 17 extend upwardly from the top 2 of the outer container, and these bolts are arranged at opposite points with respect to the plug. They are adapted to fit in the notches 18 of a bar 19 for holding the bar in position extending across the cap II and the center of the bar has a threaded hole therein for receiving the turn screw 20. Thus by putting the bar in place and then turning the screw 20, the cap 11 will be pressed against the gasket 12 and the flange of 10 the plug 10 forced against the flange 9 of the neck of the rubber container, and thus a fluid tight joint will be formed between the parts.

A handle 21 for the device, depends from the outer end of a bar 23 which has its other end 15 connected to a part of the top 2 of the outer container.

Thus it will be seen that by introducing fluid under pressure into the outer container, this fluid will compress the inner container and thus 20 force the contents of the inner container through the hole 13, elbow 14 and tube 15 and through the spray head 16.

When the inner container is to be refilled, it is simply necessary to loosen the screw 20 and 25 remove the bar 19 and then the cap 11 can be removed to permit fluid to be poured into the inner container through the plug. Then the parts are replaced and the device will be ready for use again.

If desired, a drain can be provided for the outer container and the action can be reversed by placing fluid in the outer container and then forcing fluid into the inner container to expand the same and thus cause the fluid to leave the outer con- 35 tainer.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be 40 made in the construction, combination and arrangement of the several parts, provided such changes fall within the scope of the appended claims.

What I claim and desire to protect by Letters 45 Patent is:

1. In a device including an outer container and an inner container of resilient material, a neck on the inner container having a flange, said neck passing through a hole in the outer con- 50 tainer with the flange resting on a part of the top of the outer container, a tubular flanged plug fitting in the neck and having its flange resting on the flange of the neck, a cap having a reduced part fitting in the plug and a flange, a gasket 55

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between the flange of the cap and the flange of the plug, studs connected with the top of the outer container, a cross bar extending across the cap and having notches therein engaging the stud, said bar having a threaded hole therein and a screw passing through the hole and engaging the cap.

2. A spray device of the class described, comprising an outer container having an opening in

10 its top, an inner container of resilient material having a flanged neck passing through the opening with the flange resting on the top, a filler plug having a part extending into the neck and a flange resting on the flange of the neck, studs carried by the top, a cap having a part fitting in the plug and a flange, a gasket between the flange of the cap and the flange of the plug, a cross bar extending across the cap and having notches 5 therein receiving the studs, a screw passing through the bar and engaging the cap, a nozzle carrying tube carried by the cap and in communication with the plug, and means for forcing fluid into the outer container to compress the 10 inner container.

HENRY CHARLES BAUMGARDNER.