

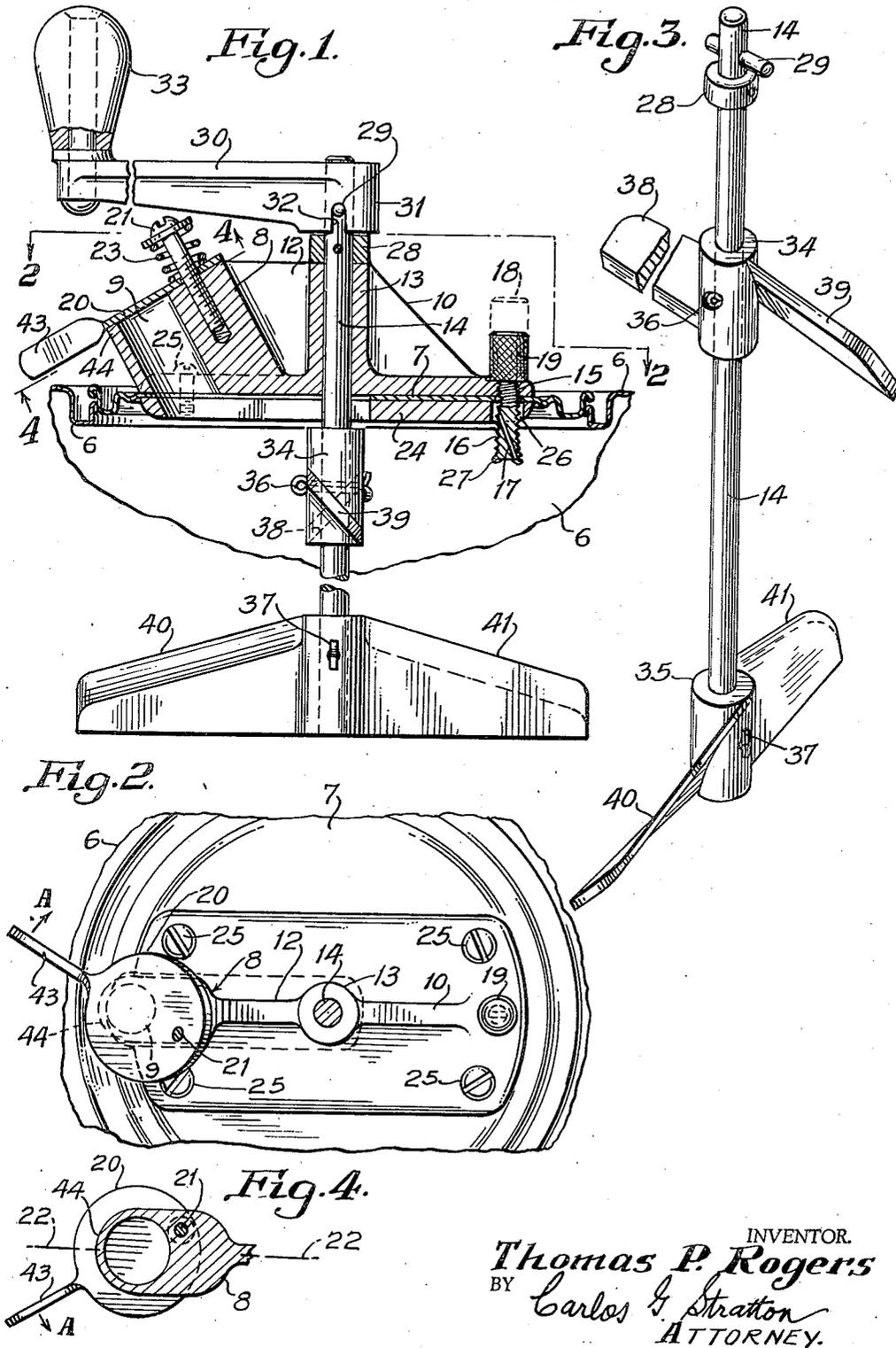
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DISPENSING DEVICE

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DISPENSING DEVICE

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1 Claim. (Cl. 221—23)

My invention relates to a dispensing device and more particularly to a device for dispensing liquids from a container, such as paints and the like.

An object of the invention is to provide simple, effective pouring means by which liquid is poured from the container.

Another object is to provide means for closing the pouring means and for progressively opening same from the lower portion of the pouring means, considering the pouring means in its normal pouring position.

Still another object is to provide means for clamping the present device upon the lid of an ordinary paint can, by merely cutting a few openings in the top of the can.

Further objects are to provide effective stirring means by which the liquid in the container may be effectively stirred and the ingredients therein mixed together, and to provide adjustable vent means for introducing air into the container.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawing merely shows and the following description merely describes one embodiment of the present invention, which is given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

Figure 1 is a broken, sectional elevation of an embodiment of my invention.

Figure 2 is a broken, plan view taken on the line 2—2 of Figure 1.

Figure 3 is a perspective view of a shaft and stirring means comprised in the invention.

Figure 4 is a section taken on the line 4—4 of Figure 1.

Referring more in detail to the drawing, the reference numeral 6 generally designates a paint can or other container having a conventional lid 7. My dispensing device has a head 8 that is bored at 9 to provide a pouring passage connecting with the interior of the can.

Strengthening ribs 10 and 12 support a bearing 13 for a shaft 14.

The head 8 also has a threaded opening 15 at its rear end, in which opening is screwed an air vent screw device 16 having an air passage 17 drilled to open into the interior of the container and to open exteriorly of the container when the device 16 is screwed to the dotted line position 18. A knurled head 19 is arranged exteriorly for manipulation of the vent means.

A gate 20 is pivoted to close the passage 9 upon a pivot bolt 21. The bolt 21 is at a side of the longitudinal axis of the head 8. The longitudinal axis is indicated by the broken line 22 in Figure 4.

A spring 23 on the pivot bolt 21 urges the gate against the outer face of the head 8 and insures the firm cutting off of the pouring stream through the passage 9.

An underplate 24, on the underside of the lid 7 clamps the lid between the head 8 and the underplate 24 by means of suitable bolts 25. It is believed clear without further illustration that a suitable gasket may also be clamped between the head and the underplate, to insure a close fit with the lid.

The underplate has an opening 26 that is larger than the threaded opening 15 in the head, with which it is alined. The bottom end 27 of the vent device 16 is slightly upset, in order to prevent the vent device being unscrewed through the head 8. However, the slightly enlarged opening 26 is large enough to permit the upset end 27 to pass through the opening 26, to facilitate assembly.

The shaft 14 has a collar 28 pinned thereto adjacent a transverse pin 29 at the upper end of the shaft. In normal use the collar 28 rests upon the bearing 13 and provides a rotary support for the shaft 14. A crank 30 is provided at the upper end of the shaft 14. The crank 30 has a sleeve 31 that may be slid down over the upper end of the shaft 14 until sockets 32 in the sleeve 31 engage the pin 29. A handle 33 is arranged on the crank 30.

Below the underplate 24, the shaft 14 carries spaced sleeves 34 and 35. Cotter pins 36 and 37 respectively hold the sleeves 34 and 35 in spaced positions on the shaft 14. The sleeve 34 has oppositely extending blades 38 and 39 which are arranged at different angles to the longitudinal axis of the sleeve 34. Blades 40 and 41 on the sleeve 34 are similarly disposed at different angles.

The blades 40 and 41 are arranged to be rotated substantially at the bottom of the can 6, while the blades 38 and 39 rotate near the top thereof.

In practice, the said blades stir the contents of the can and effect thorough mixing of the different ingredients therein at different levels in the can.

Also in practice, by reason of the laterally arranged pivot 21, the gate 20, by means of its handle 43, may be swung, in the direction of the arrows A, whereby the lower portion of the pour-

ing lip 44, as it is shown in Figure 1, is first opened by the gate, and as the gate is successively swung to a more open position it progressively opens the passage 9 in horizontal planes. This avoids opening the passage 9 at a side thereof.

It is believed clear from the foregoing description that air is admitted to the container, to permit regular flowing of the liquid therefrom, through the vent passage 16, by unscrewing the vent device 16 to its position 18. Moreover, the present device may be easily and quickly removed from any lid and placed on another lid that has suitable openings.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications which may fall within the scope of the appended claim.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

In combination with the closure top of a friction top can, means providing for pouring through said top while in closed position on a can, comprising members above and below the top and spaced inwardly from the peripheral edge of the top, means clamping said members and the can top in connection with one another, the members having apertures in communicating line with each other through an opening of the can top and the aperture of the upper member being inclined upwardly and outwardly to thus form an inclined pouring spout, and a swinging gate normally covering the upper outer end of said inclined pouring aperture, the said gate consisting of a disc having a pivot positioned inwardly beyond the mouth of the inclined pouring aperture and substantially at one side of a line diametrically of said aperture and radially of the can top.

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