

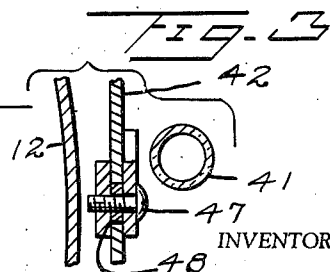
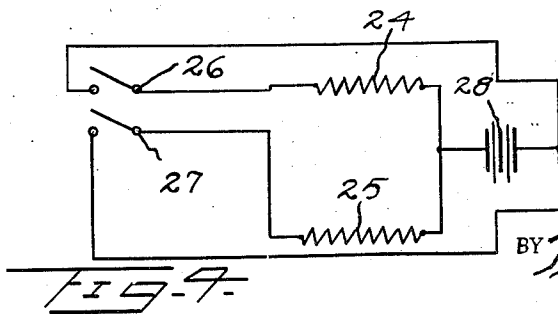
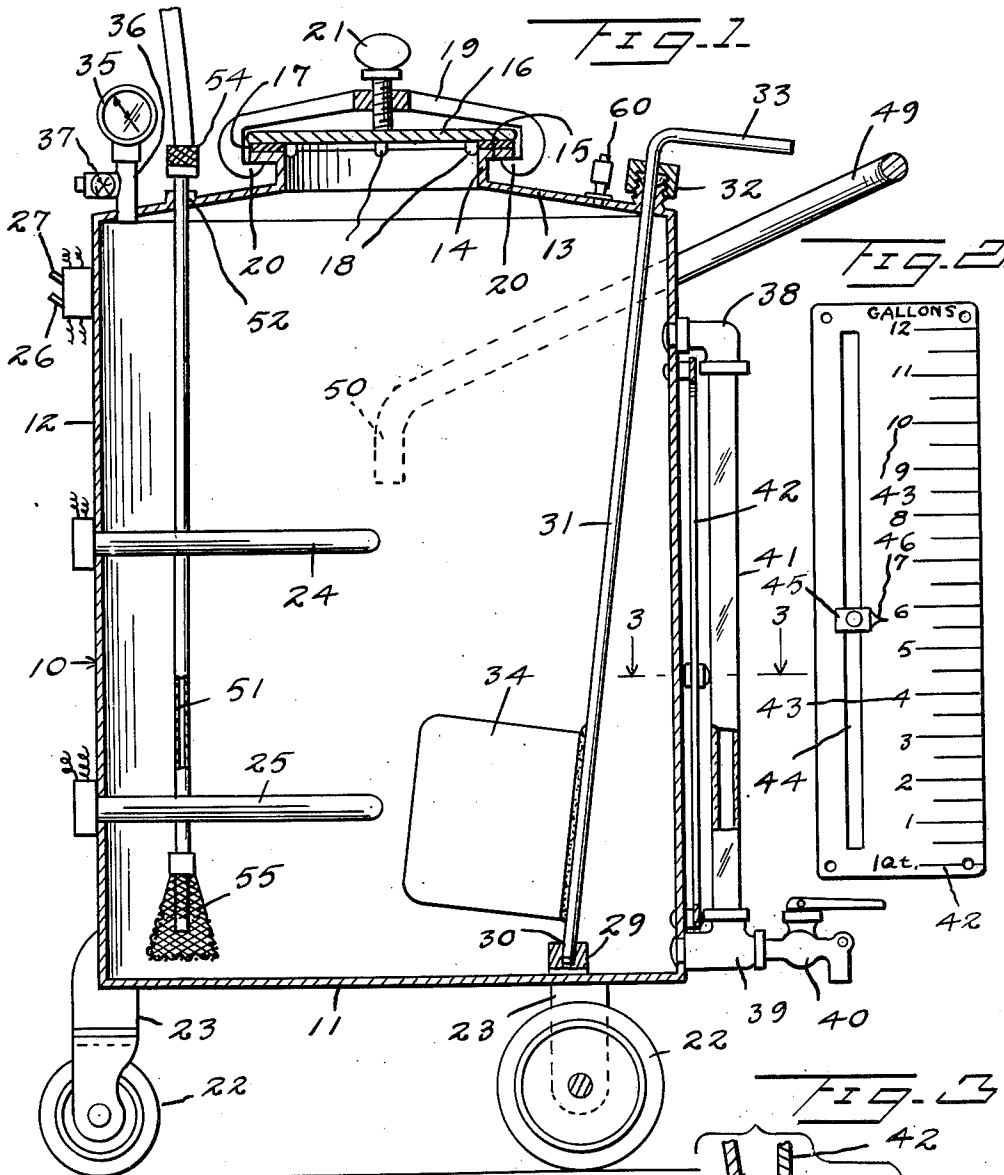
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DISPENSER

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DISPENSER

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1 Claim. (Cl. 222-226)

The present invention relates to dispensers for liquid materials of the type having a tendency to solidify upon cooling.

The primary object of the invention is to provide a dispenser for liquids in which means are provided for heating and agitating the liquids.

Another object of the invention is to provide a dispenser of the class described, having means to eject the dispensed material under pressure so that it can be sprayed from a spray gun.

A further object of the invention is to provide a dispenser of the character described which includes a sight level gauge for determining the quantity of material dispensed.

A still further object of the invention is to provide a structure of the class described which will be inexpensive to manufacture, relatively easy to maintain, and non-complex in operation.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a vertical cross section of the invention;

Figure 2 is a front elevation of the sight gauge;

Figure 3 is an enlarged fragmentary transverse cross section taken along the line 3-3 of Figure 1, looking in the direction of the arrows, and

Figure 4 is a circuit diagram of the electrical circuits involved in the invention.

Referring now to the drawings in detail wherein like reference numerals indicate like parts throughout the several figures, the reference numeral 10 indicates generally a cylindrical container in the bottom wall 11, side wall 12, and upwardly diverging top wall 13, and a neck 14 extending from the upwardly divergent top wall 13. The neck 14 is provided with a circumferential flange 15 extending outwardly from the neck 14. A cover 16 is positioned over the flange 15 with a gasket 17 interposed therebetween. Guides 18 are provided on the cover 16 to engage within the neck 14 to align the cover 16 therewith. A clamp 19 is engaged over the cover 16 and is provided with hooks 20 which are positioned under the flange 15 to secure the cover 16 thereto. A binding screw 21 is threaded through the clamp 19 and is adapted to engage against the top of the cover 16 to maintain the cover 16 in pressure sealing relation to the neck 14.

The container 10 is carried by wheels 22 mounted on forks 23 to permit the container 10 to be moved alongside of the job to be done. A pair of electric heating elements 24 and 25 are extended through the side wall 12 of the tank 10 and electrically connected through switches 26 and 27 to a source of electricity 28. As can be seen from the circuit diagram in Figure 4, either heating element or both can be energized as desired. A boss 29 extends upwardly from the bottom wall 11 of the tank 10 and has a bore 30 extending through the top face thereof. A rod 31 is seated in the bore 30 at the lower end thereof and passes through the top wall 13, which

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is sealed by a stuffing box 32. A handle 33 is formed on the outer end of the rod 31 and a paddle 34 is welded or otherwise secured to the rod 31 so that the contents of the tank 10 may be stirred or agitated by oscillation of the handle 33 on the rod 31. A pressure gauge 35 is mounted through fitting 36 in communication with the interior of the tank 10 and carries a nipple 37 for attachment of an air hose thereto so that air pressure may be exerted against the contents of the tank 10. A fitting 38 extends through the side wall 12, while a second fitting 39 extends through the side wall 12 at a point spaced below the fitting 38. A drain cock 40 is connected to the fitting 39 for draining of the tank 10. A sight glass 41 is connected to the fittings 38 and 39 in a manner to permit the contents of the tank 10 to attain the same relative height in the glass 41 as is maintained in tank 10.

A gauge 42 is positioned behind the sight glass 41 so that the indicia 43 may be viewed simultaneously with the top level of the liquid in the sight glass 41. The sight glass 41 is provided with a vertical slot 44 which supports an indicator 45, which carries a point 46 for indicating the starting gallonage before dispensing begins. The indicator 45 can be clamped to the gauge 42 by means of a bolt 47 and a nut portion 48. It should be understood, of course, that the sight glass 41 is formed transparent so that the liquid level of the material contained therein may be readily read.

The cylindrical container 10 is provided with a handle 49 which is welded or secured as at 50 to the opposite side of the container 10 to permit the container 10 to be moved adjacent an object to be coated. An exit pipe 51 passes through the top wall 13 of the tank 10 at 52 and carries an air hose fitting 54 on the upper end thereof. A strainer 55 is provided at the lower end of the pipe 51 for straining the contents of the tank 10 before dispensing by any suitable means such as a spray gun (not shown).

In the use and operation of the invention, materials such as dissolved waxes and tallows, such as that disclosed in my copending application, are placed in the container 10 where they are maintained in liquid condition by the electric heaters 24 and 25 and are maintained homogeneously by the agitator 34. Air pressure is exerted on the tank 10 through the air hose nipple 37 in sufficient pounds of pressure to dispense with the liquid contained in the tank 10 through the strainer 55 and dispensing pipe 51. Contents of the fluid in the tank 10 is determined before dispensing by a reading through the sight glass, comparing the level of the liquid with the gauge printed on the gauge 42. This point is read and recorded by moving the indicator 45 in line with the level. The material from the tank is then dispensed and the new level is read on the gauge 42. The difference between the position of the indicator 45 and the new level indicates the quantity of material dispensed for which the purchaser may be charged.

The drain cock 40 may be used to drain the tank 10 completely when it is desired to clean the tank or store it for any length of time. The safety blow-off valve 60 is conventional.

Having thus described the preferred embodiment of the invention, it should be understood that numerous modifications may be resorted to without departing from the scope of the appended claim.

What is claimed is:

A dispenser comprising a cylindrical tank, means in said tank extending through the top of said tank for dispensing liquid from said tank, a boss secured to the wall of said tank, and agitator rod positioned for oscillation in said boss at one end thereof and having the other end thereof extending through the top wall of said tank with said rod having its axis upwardly diverging from the axis

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of said tank, means for sealing said rod to said top, a handle formed on the outer end of said rod for oscillation thereof, and a blade welded to the lower end of said rod and extending outwardly therefrom and movable therewith whereby the contents of said tank may be agitated upon oscillation of said rod. 5

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