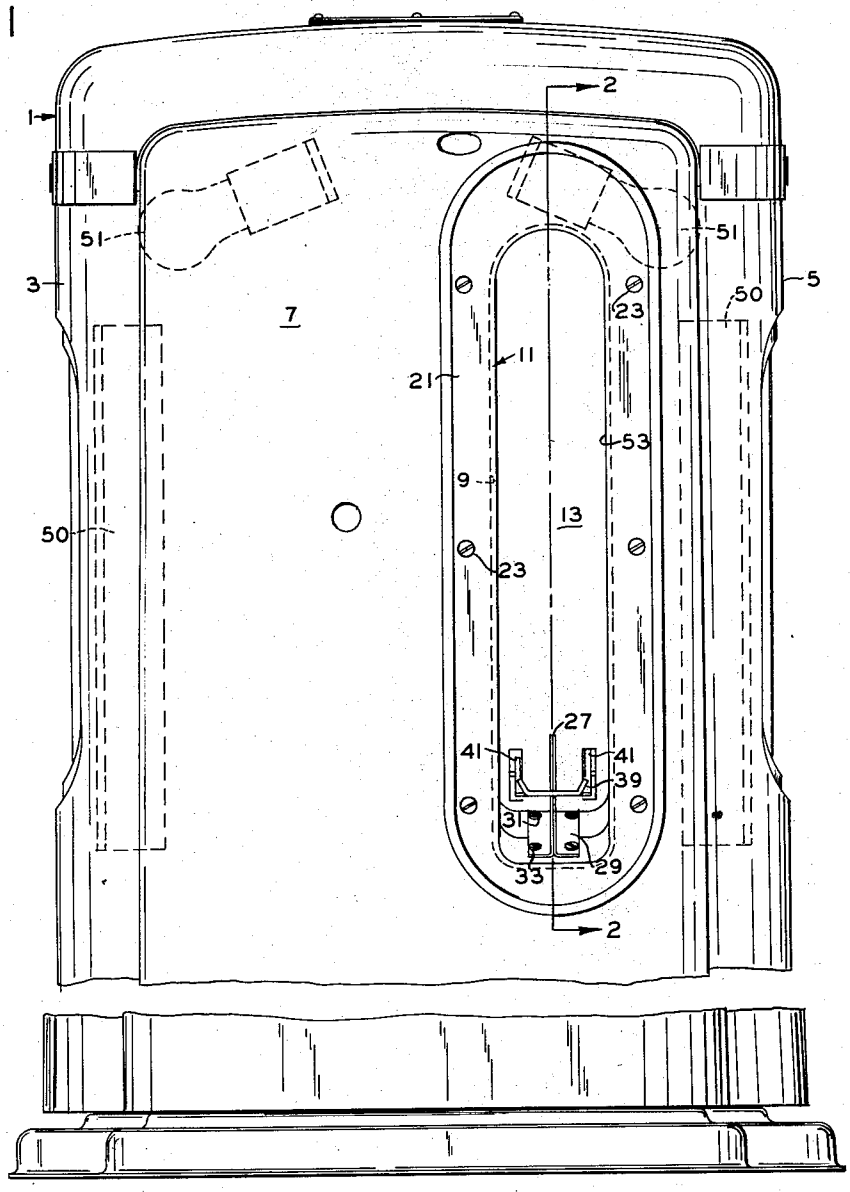
Aug. 18, 1959 O. R. SCHEURER 2,900,111

DISPENSER NOZZLE RECEPTACLE

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FIG. 1



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DISPENSER NOZZLE RECEPTACLE

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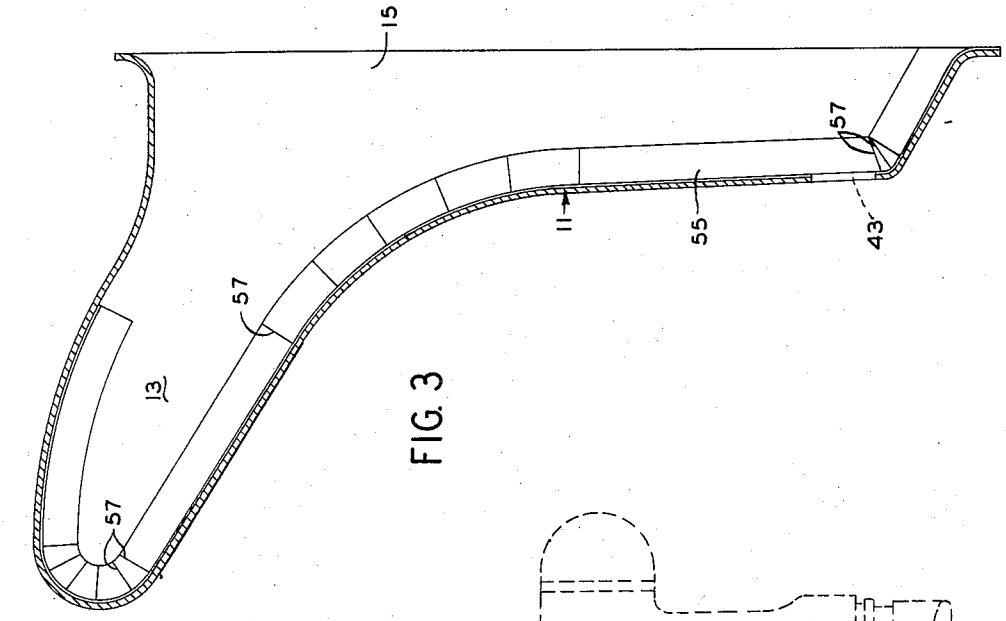


FIG. 3

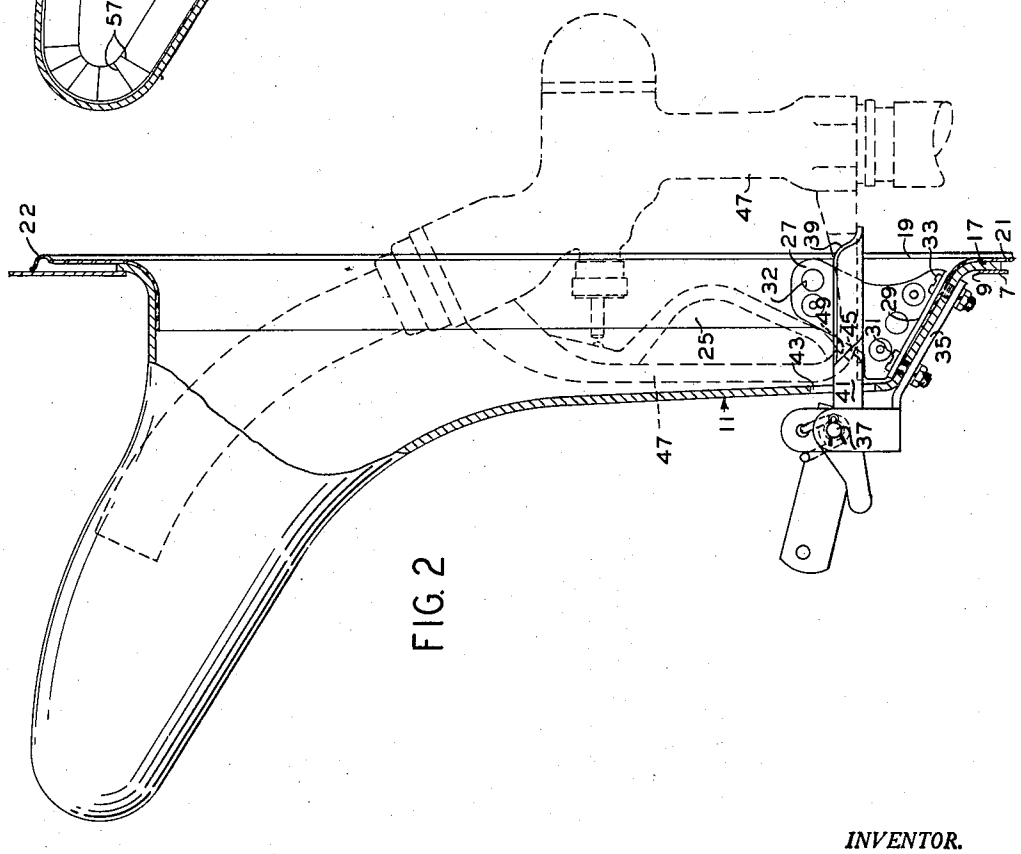


FIG. 2

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DISPENSER NOZZLE RECEPTACLE

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Application January 18, 1956, Serial No. 559,926

7 Claims. (Cl. 222—74)

This invention relates to a dispenser nozzle receptacle. More specifically it relates to a receptacle which is made of a translucent, reinforced plastic material instead of metal as is the accepted practice.

It is an object of the invention to provide a nozzle receptacle which is strong, tough and abrasion resistant so as to withstand the severe service imposed by thousands of nozzle insertions and withdrawals.

Another object of the invention is to provide a nozzle receptacle which is relatively inexpensive and easy to manufacture.

A further object is to provide a nozzle receptacle which is of translucent material which is lighted by the lamps usually provided in a dispenser, to aid the operator in removing and, more especially, in reinserting the nozzle in the receptacle.

Still another object of the invention is to provide a receptacle made of fireproof material.

Yet another object of the invention is to provide a receptacle which is non-sparking when struck by metal.

A further object of the invention is to provide a receptacle which will conduct liquid to the exterior of the dispenser.

Another object of the invention is to provide a nozzle receptacle which is recessed in the side panel of the dispenser to minimize the degree to which the nozzle and hose stand out from the dispenser.

These and other objects will become apparent from a study of this specification and the drawings which are attached hereto, made a part hereof and in which:

Figure 1 is a side elevation of a dispenser showing the nozzle receptacle in front elevation and its relation with the lamps.

Figure 2 is a sectional view taken substantially on the line 2—2 of Figure 1 showing the receptacle, nozzle support and switch mechanism.

Figure 3 is a sectional view of the receptacle per se, showing the distribution of the reinforcing material.

Receptacle, nozzle support and control device

Referring first to Figure 1, the numeral 1 indicates generally the dispenser which has front and rear panels 3, 5 and a side panel 7 which is provided with a vertical, elongated opening 9 (as shown in dashed lines) near its upper right corner.

A receptacle 11 has a spout receiving portion or cavity 13 which extends upwardly and away from main or nozzle receiving portion or cavity 15 and which conforms generally with the opening 9 in panel 7. A flange 17 surrounds the portion or cavity 15 and lies against the face of the panel 7 as shown in Figure 2.

A nozzle guide cover or receptacle shield 19 has a flange 21 which is disposed parallel to the flange 17 and panel 7, and in overlying relation with respect to flange 17. Bolts 23 are passed through flanges 17, 21 and the panel 7 and are drawn tight to hold the parts firmly together.

The guide cover flange 21 is usually plated and preferably extends slightly beyond the flange 17 in all directions. It may also be bent toward the panel around the edge of flange 17 so as to fully enclose it, if desired, as shown at 22.

It will be noted from Figure 2 that the guide cover is also provided with a flange 25 which enters the portion 15 of the receptacle and conforms with and lies closely adjacent the surface thereof.

As shown in Figures 2 and 3, a nozzle hook 27 has a base plate 29 which is held in place on the inside of the receptacle by bolts 31, 33, the latter passing through both the flange 25 and the receptacle while the former does not pass through the flange 25. The hook is provided with a hole 32 adapted to receive the bolt of a padlock.

A control lever bracket 35 is also mounted by means of the bolts 31, 33 on the outside of said receptacle 11 and supports a shaft 37. A switch control lever 39 has a trough-shaped end disposed in the receptacle, and arms 41 extend from each side of said trough portion, backwardly through slots 43 formed in the receptacle, to the shaft 37 on which the arms are pivotally mounted.

The trough portion of the lever is provided with a slot 45 through which the nozzle hook extends.

As shown in dashed lines in Figure 2, the nozzle guard 47 is slotted at 49 to receive the hook 27 while the guard rests in the trough portion of the control lever so as to rotate the latter to its farthest, clockwise position. When the nozzle is removed from the hook, the control lever may be rotated in a counter-clockwise direction to operate associated means and start dispensing.

It is not believed necessary to describe in detail the means for starting and stopping delivery or any of the other usual functions of a dispenser since they are generally old and well known.

Illumination

As shown in dashed lines in Figure 1, the dispenser is provided with electric lamps 51 which are used to illuminate the dials 50 of the registers and the interior of the dispenser. Since the receptacle is of translucent material, it will be lighted from both sides by the lamps 51 so that the opening 53 in the guide cover 19 will be readily visible to the operator who will therefore have no difficulty in finding and grasping the proper portion of the nozzle when the dispenser to be operated is installed in a dark or dimly lighted location. The proper replacing of the nozzle tip in the receptacle and replacing of the nozzle on the hook as well as the operation of the control lever is likewise facilitated by the lighting effected through the walls of the receptacle.

Nozzle receptacle

Referring particularly to Figure 3, the receptacle 11 is preferably made of a polyester resin bearing the commercial name of "Heatron No. 92." The receptacle is made by preforming a mat of glass fibers on a suitably shaped form, impregnating the fibers with the resin, positioning a reinforcing strip of square woven glass fiber cloth 55 about three inches wide along the lower and rear inside surfaces of the portion or cavity 15 and along the lower rear and about half of the top inside surfaces of the spout receiving portion 13. The cloth may be suitably notched as indicated at 57 so that it will conform smoothly to the contour of the receptacle. The cloth is also impregnated with resin and the mat with the cloth in place is cured by heat and under pressure in a suitable mold.

The required holes and slots for the bolts 23, 31 and 33 as well as the slots 43 are punched or otherwise formed after the receptacle has been cured.

While the receptacle is preferably formed in the natural color of the material, which is an "off white," pigment

may be added to give it any desired color if this is required.

About five percent by weight of antimony trioxide or equivalent is added to the resin prior to impregnation to render the receptacle fireproof since it is used in connection with an apparatus which handles a hazardous liquid such as gasoline or fuel oil.

The receptacle is tough, strong and abrasion resistant and will withstand the impact of the tip, guard and other portions of the nozzle which is inevitable in the process of removing the nozzle from or replacing it on the hook which is usually performed in a very forceful manner.

Further, the material of the receptacle is non-sparking so that impact of any part of the nozzle on the receptacle will not create a spark which could ignite liquid fuel or vapors which might be in the vicinity of the point of impact.

It will be readily apparent form Figure 3 that any fuel leaking from the nozzle into the receptacle will drain downwardly to the exterior of the dispenser since the bottom walls of both portions **13** and **15** are inclined downwardly and outwardly.

It is obvious that various changes may be made in the form, structure and arrangement of parts of the specific embodiments of the invention disclosed herein for purposes of illustration, without departing from the spirit of the invention. Accordingly, applicant does not desire to be limited to such specific embodiments but desires protection falling fairly within the scope of the appended claims.

I claim:

1. In a liquid dispensing apparatus having a housing including a panel, means defining a vertically elongated opening in said panel, a reinforced plastic receptacle, shaped to receive the guard and tip of a dispensing nozzle, adapted to enter said housing through said open, said receptacle having an outwardly directed peripheral flange adapted to overlie said panel, a nozzle guide cover having a central opening and including an outwardly directed peripheral flange adapted to overlie the flange of said receptacle, said cover including a second flange disposed to extend into said receptacle a limited distance, said second flange conforming closely with the interior shape of the contiguous portion of said receptacle and defining said central opening and means for fastening the outwardly directed peripheral flanges together and to said panel.

2. In a liquid dispensing apparatus having a housing including a panel, means defining a vertically elongated opening in said panel, a reinforced plastic receptacle, shaped to receive the guard and tip of a dispensing nozzle, adapted to enter said housing through said opening, said receptacle having an outwardly directed peripheral flange adapted to overlie said panel, a nozzle guide cover having a central opening and including an outwardly directed peripheral flange adapted to overlie the flange of said receptacle, the flange of the cover extending beyond the flange of the receptacle in all directions and means for fastening the outwardly directed peripheral flanges together and to said panel.

3. In a liquid dispensing apparatus having a housing including a panel, means defining a vertically elongated opening in said panel, a plastic receptacle having a first cavity of sufficient depth to receive the major portion of a nozzle guard and a second cavity, of greater depth than the first, to receive the spout of a nozzle, said second cavity communicating with said first cavity, said cavities having outwardly and downwardly sloping bottom walls, an outwardly directed peripheral flange surrounding said first cavity and adapted to overlie the panel, means for attaching the flange to the panel, a nozzle hook having an upwardly extending projection adapted to enter an opening in the guard of a nozzle and having a base disposed transversely of said hook, said base having a large bottom area, said base being adapted to rest with substantially all of said bottom area on the bottom wall of the first cavity and means for fastening the base to said receptacle.

4. In a liquid dispensing apparatus having a housing including a panel, means defining a vertically elongated opening in said panel, a plastic receptacle having a first cavity of sufficient depth to receive the major portion of a nozzle guard and a second cavity, of greater depth than the first, to receive the spout of a nozzle, said second cavity communicating with said first cavity, said cavities having outwardly and downwardly sloping bottom walls, an outwardly directed peripheral flange surrounding said first cavity and adapted to overlie the panel, means for attaching the flange to the panel, a nozzle hook having an upwardly extending projection adapted to enter an opening in a guard of a nozzle and having a base disposed transversely of said hook, said base being adapted to rest on the bottom wall of said first cavity, a control lever bracket having a member adapted to contact the bottom wall of said first cavity on the side opposite to said base and common means for fastening said member and base together, with said receptacle bottom wall therebetween.

5. The structure defined by claim 4 including a control lever having one end formed as a trough for the reception of a portion of the nozzle guard, said trough end defining an opening adapted to receive the nozzle hook projection, an arm attached to said trough end and extending through an opening defined by receptacle, a shaft supported by said control lever bracket, said arm being mounted on said shaft, said shaft, bracket and arm being constructed and arranged to permit rotation of said lever about the axis of said shaft.

6. In a liquid dispensing apparatus having housing means including a panel and at least one electric lamp mounted within said housing, said panel defining an opening, the improvement which comprises a nozzle receptacle of translucent material mounted so as to extend through said opening into said housing in a position to be illuminated by said lamp, a nozzle support, means mounting said support within said receptacle for illumination by said lamp through said receptacle.

7. In a liquid dispensing apparatus having housing means including a panel and at least one electric lamp mounted within said housing, said panel defining an opening, the improvement which comprises a nozzle receptacle of translucent material mounted so as to extend through said opening into said housing in a position to be illuminated by said lamp, a control lever, means mounting said control lever in a position in said receptacle to be illuminated by said lamp through said receptacle.

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