Nov. 13, 1956 L. B. BARANOWSKI 2,770,711

DISPENSER DIAL AND SIGN ILLUMINATOR

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Fig. 1

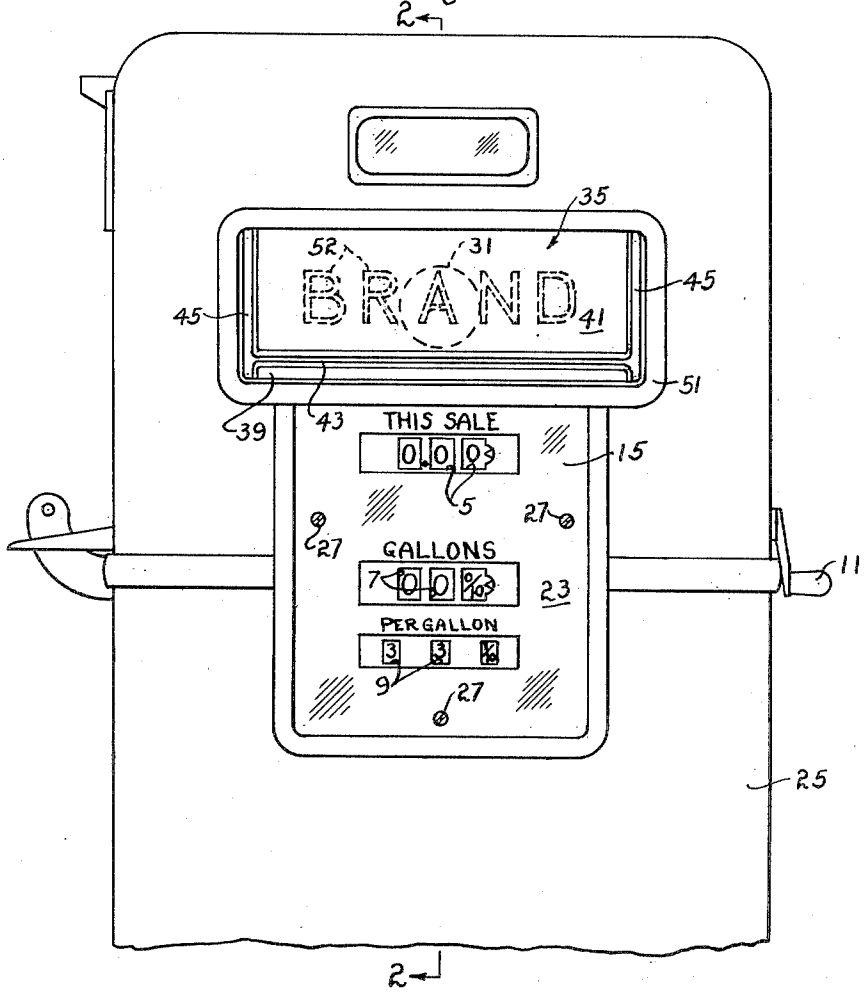


Fig. 4

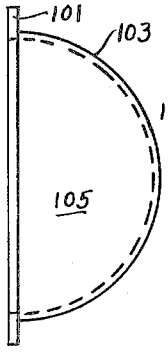
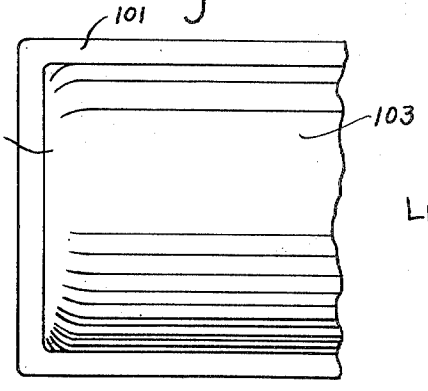


Fig. 5



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Fig. 2

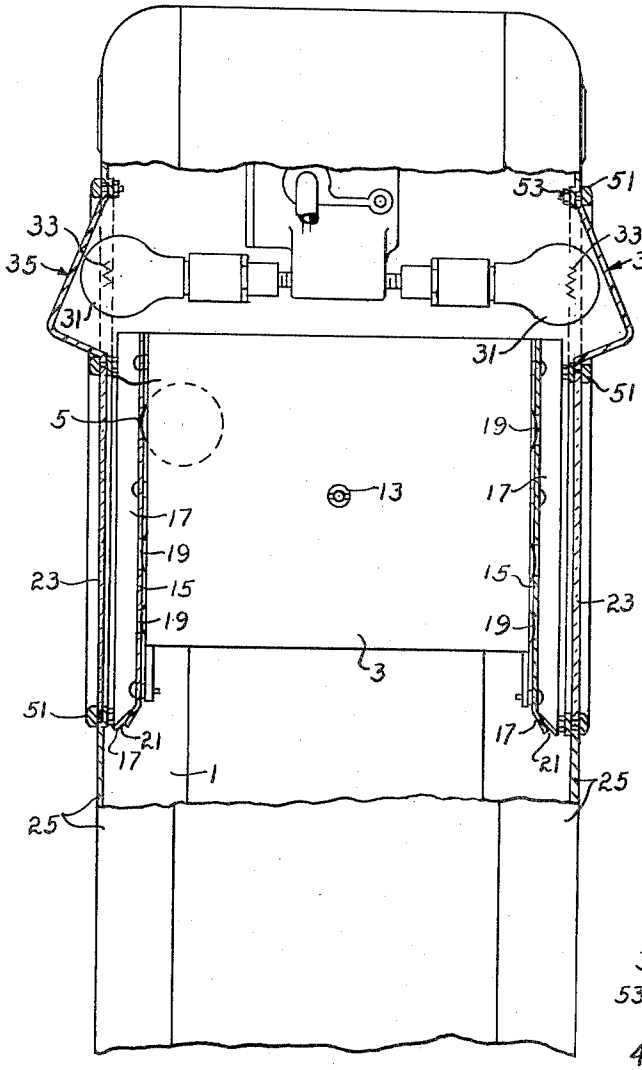
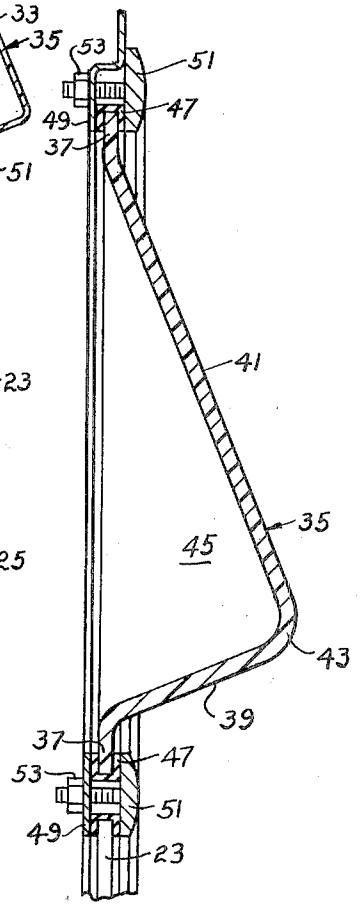


Fig. 3



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DISPENSER DIAL AND SIGN ILLUMINATOR

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Application March 16, 1953, Serial No. 342,642

2 Claims. (Cl. 240—2.1)

This invention relates to a lighting structure for a liquid dispensing pump. More specifically, it relates to a brand panel which is so formed as to permit a rearrangement of the dial illuminating lamp relative to the associated dial and indicators so that the latter are better lighted.

In most modern filling station gasoline dispensers, the lighting of the register indicators and dials is usually quite poor because the dial is rather long and is arranged vertically, parallel to the housing and because the space between the dial and housing and that between the lamp and the housing are too small to permit the direct light from the filament of the lamp to fall on the dial and indicators.

Various attempts have been made to improve lighting by supplying special bulbs such as the "Lumaline" or "Showcase" types, but this solution is not acceptable because the lamps are not readily available and are expensive.

Other efforts have been made along the lines of tilting or bending the dials, but these have not been too successful to date because the registers to which the dials are fastened are standardized and the amount of tilting or bending which can be done is severely limited by the register structure.

In order to solve the problem, applicant has provided a specially formed brand panel which permits the adjustment of the lamp to position the filament at the most advantageous point for illumination of the dial and indicators.

A further and unexpected advantage gained by this structure is that considerable lighting of the ground around the dispenser and of the dispenser housing itself is attained.

Still another unexpected advantage is obtained in that the projecting brand panels provide attractively and brilliantly lighted areas when the dispenser is viewed edgewise as in Figure 2 or from a slight angle.

A further object of the invention is to provide a brand panel which can be readily manufactured in various colors and of various materials.

Yet another object of the invention is to provide a panel which can be made of plastic materials.

Another object of the invention is to provide a brand panel which is convex and extends outwardly 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 vertical, front elevation of the dispenser showing the dial, indicators and brand panel.

Figure 2 is a vertical sectional view taken substantially on the line 2—2 of Figure 1 showing the lamps positioned with respect to the dials, indicators, brand panels, etc.

Figure 3 is an enlarged view of the brand panel and its mounting structure.

Figure 4 is an end elevation of a modified form of panel.

Figure 5 is a front elevation of the panel of Figure 4.

Referring to the drawings, the numeral 1 represents, generally, the frame of the dispenser, 3 the register which has the indicator wheels 5, 7 and 9 which are used to display the dollar value of the sale, the gallons dispensed and the price per gallon. A reset crank 11 actuates a reset shaft 13 to reset the indicators to zero prior to another dispensing operation.

Fastened to the registering mechanism, on each side, are dials 15. Each dial has a rim 17 at the side and bottom edges. Suitable openings 19 are formed in the dials through which the indicators project and are visible. A ventilating opening 21 is formed in the lower rim to permit circulation of air between the dial and the door glass 23 which is suitably mounted in each of the doors 25 of the housing.

The dials are held in proper position on the register by screws 27.

It should be noted that the distance between the surface of the dial and the inner surface of the adjacent door glass is relatively small, being approximately 1⅛" in the actual structure. Since the filament 33 of the lamp 31 is disposed about ⅞" from the tip of the globe which encases it and since some clearance must be allowed between the globe and the brand panel, it is obvious that the filament is actually disposed behind the plane of the dial in the prior art dispensers so that no direct illumination could reach the face of the dial and so that the only light reaching the dial was that which was reflected from the door glass and other parts of the unit.

It was impractical to either increase the distance between the door glasses or to decrease the distance between dials because of the great number of parts which would have to be altered to say nothing of the tools and dies for such parts.

In order to overcome this difficulty, a concavo-convex brand or sign panel 35 is provided. The panel may take any one of a number of shapes. The preferred form utilizes a rectangular flange 37 which runs all around the panel. From the bottom and top portions of the flange, the planar walls 39 and 41 extend substantially at right angles toward each other until they merge in a radius 43. From each end flange a wall 45 extends outwardly and is joined with the walls 39 and 41 by a suitable radius. The walls 45 converge slightly outwardly. Wall 39 is preferably shorter than wall 41 (Figure 3) so that the lettering of the brand name may be as large as possible.

The flange 37 is fitted with a U-shaped gasket 47 and is held in place on an offset flange 49 of the door by a trim or molding strip 51 which is bolted to the door by suitable bolts 53.

It will be seen that the brand name or other message or lettering 52 can be incorporated in the wall 41 by any of the usual methods such as by painting, raised letters, inlay, decal or any other suitable method.

As will be seen from Figure 2, the convex brand panel makes it possible to move the lamps 31 away from each other to the extent that the filaments 33 are disposed in front of the dials 15. Thus, the dial and the indicators are subjected directly to the light from the associated filament.

It is further to be noted that the filaments are disposed relative to the walls 39 so that light will pass downwardly therethrough to the ground surrounding the dispenser and that light will be reflected from the upper wall 41 down the door of the dispenser.

The panel 35 is well lighted so that the brand name is well displayed and the end walls 45 are similarly well

lighted so that the dispenser is quite attractive when approached from the side or at an angle.

By using plastic materials, for example, acrylic resin such as "Plexiglas" or "Lucite" which have good diffusive properties, it is possible to use more intense lamps without creating an unpleasant or uncomfortable bright spot on the brand panel. This also increases the amount of light which is shed on the dial, on the ground around the dispenser and on the dispenser housing.

The lamp usually used is a standard 60 watt lamp. Use of a 100 watt lamp in the prior art structure, usually produces little more lighting on the dial and produces a blinding bright spot on the glass brand panel. In the instant device, a 100 watt lamp can be used to great advantage, especially in stations where there is little auxiliary lighting.

As shown in Figure 2, the lamp sockets are adjustably mounted upon screwed nipples which are mounted in the junction box so that the sockets may be positioned, by rotation thereof, to dispose the filament of the associated lamp at the most effective position. The lamp must, of course, be out of contact with the brand panel when the door **25** is closed and should be separated therefrom by an air space so that the plastic material will not be damaged by the heat from the lamp.

It will thus be seen that, by provision of the brand panel, not only is the brand name made more prominent because of the reduction of a glaring bright spot, but the dial and indicators are furnished with light of much greater intensity and which is much more evenly distributed over them.

Further, the dispenser is lighted to increase its visibility by reason of the light reflected on the housing, on the ground adjacent the housing and that which radiates out of the side walls of the brand panel. The dispenser is thus rendered more attractive and useful by the novel construction and arrangement of the parts as disclosed herein.

Another form which the brand panel may take is shown in Figures 4 and 5. In this case the retaining flange **101** is the same size and shape as flange **37** but the body **103** is rounded instead of planar and the end walls **105** converge outwardly to a slight degree.

It should be noted that the brand panels are interchangeable with each other and with the usual glass panel.

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

What I claim to be new and desire to protect by Letters Patent of the United States is:

1. In a liquid dispenser, a planar dial, a door, a door glass therein disposed in parallel, closely spaced relation to the dial, means for supporting a lamp above the dial and glass with its longitudinal axis substantially normal to the plane of the dial, a translucent sign panel mounted in the door above said glass, said panel having upper and lower planar walls disposed substantially at right angles to each other, said upper wall being longer than said lower wall, said walls intersecting to form a concave-convex wall disposed at the level of the lamp and with its convexity extending away from the lamp, said lamp being disposed to extend into the concavity of the panel to position the filament of the lamp directly above the space between the dial and door glass, said panel convexity projecting from said dispenser whereby the outside surfaces of the dispenser and the ground around the dispenser will be illuminated when said lamp is energized.

2. A sign panel formed substantially from translucent material for use with a light carried therebehind comprising coplanar top, bottom and end flanges, a concavo-convex wall convex forwardly extending between said top and bottom flanges and substantially planar end walls connecting said end flanges and the ends of said concavo-convex wall, said concavo-convex wall comprising a first planar display wall extending downwardly and outwardly from said top flange and a second planar light emitting wall extending outwardly and upwardly from said bottom flange and merging with said first wall substantially normal thereto, said first wall being greater in length than said second wall to present simultaneously a large forwardly visible illuminable sign area and separate downwardly and sidewardly directed outside illuminating means.

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