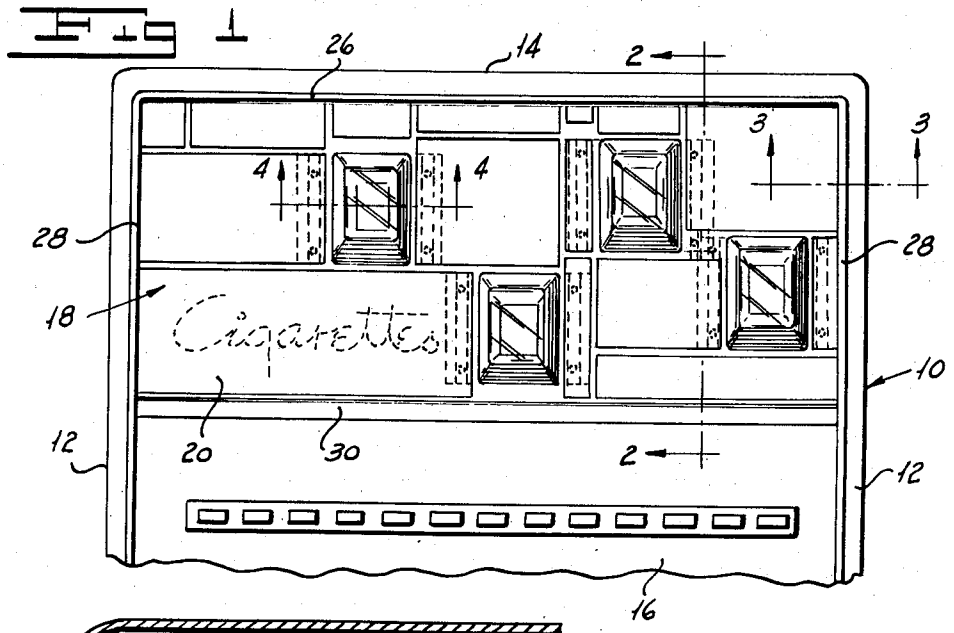
Jan. 27, 1959 R. Z. GREENE ET AL 2,871,081

DISPLAY PANEL

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Fig 1



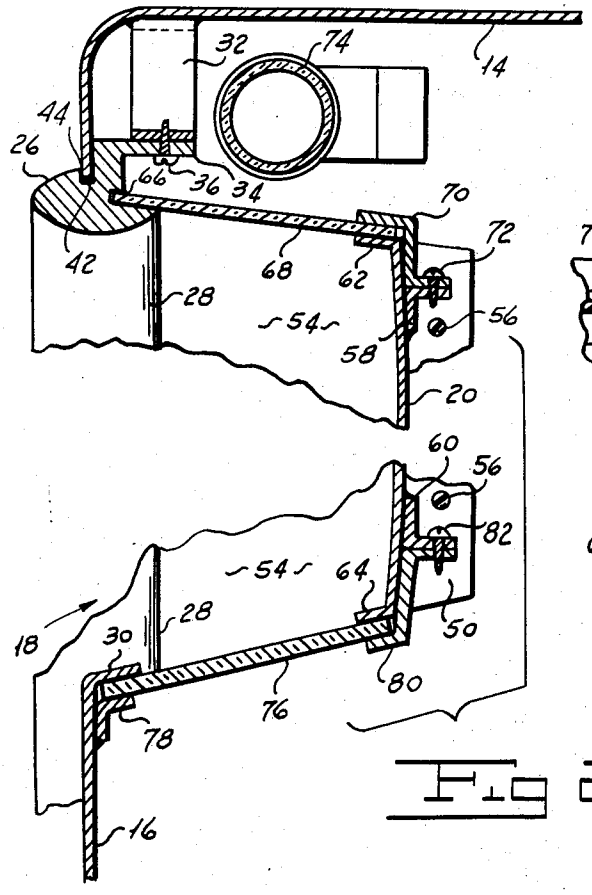
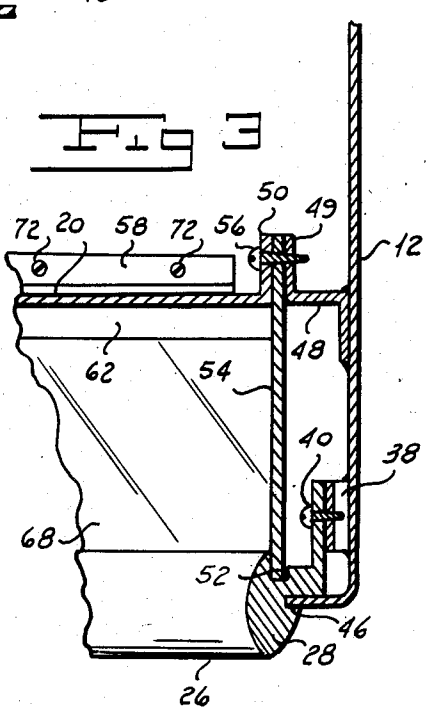


Fig 2

Fig 3



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DISPLAY PANEL

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Fig 4

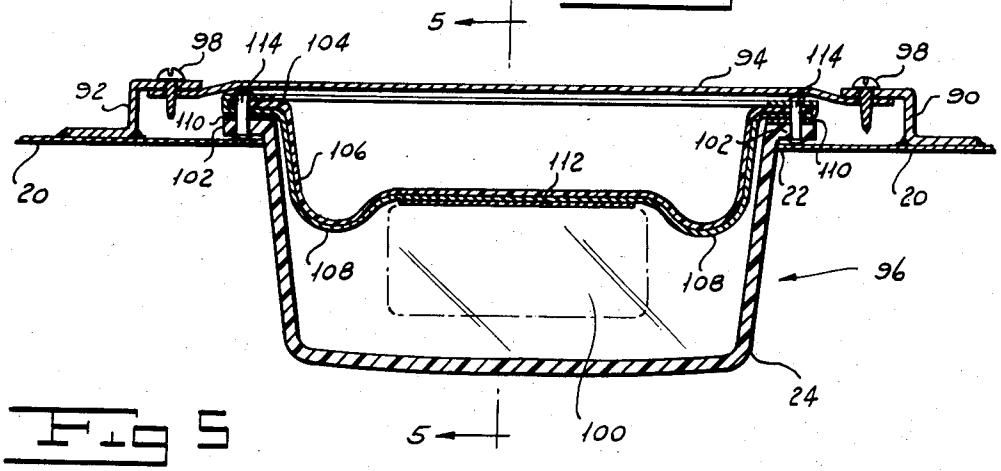
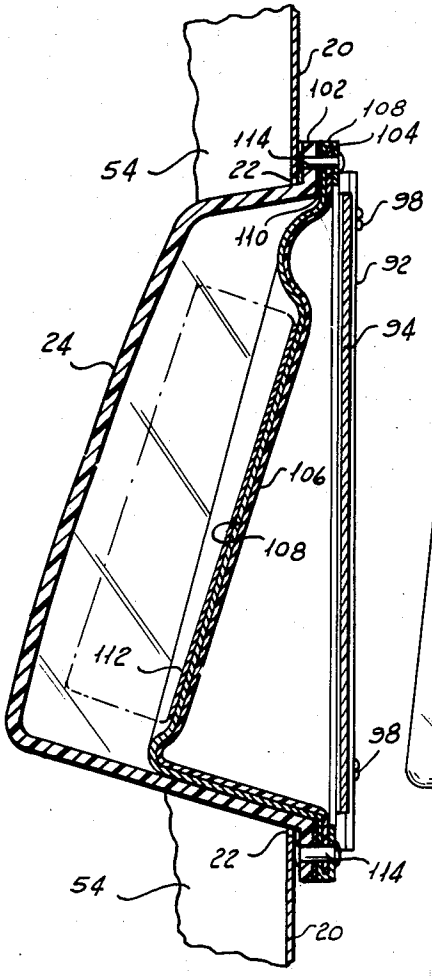


Fig 5



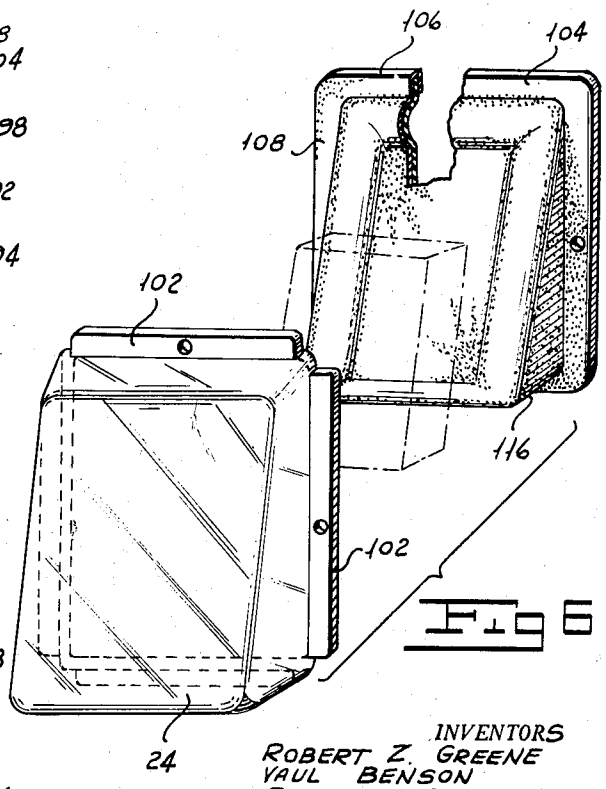


Fig 6

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United States Patent Office 2,871,081 Patented Jan. 27, 1959

2,871,081

DISPLAY PANEL

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Application November 16, 1945, Serial No. 469,162

4 Claims. (Cl. 312—114)

Our invention relates to display panels and more particularly to display panels for merchandising machines and the like in which actual products housed in merchandising machines may be attractively displayed to prospective customers.

In the merchandising machines of the prior art, it has been the practice to provide windows through which the merchandise can be seen in stacked condition. Ordinarily only the end or one boundary surface of the package of merchandise can be seen. In some types of merchandising machines a row or series of pockets have been provided in which candy or the like is inserted. At best, the merchandise can be imperfectly seen and is generally unattractively displayed.

Merchandising machines are silent salesmen. They cannot answer questions for a prospective purchaser of the merchandise they vend and must rely chiefly on the memory or appetite of a purchaser.

One object of our invention is to provide a display panel for automatic merchandising machines in which the merchandise to be sold is attractively exhibited.

Another object of our invention is to provide a display device for automatic merchandising machines in which a prospective purchaser may obtain a comprehensive view of the merchandise for sale in the machine.

A further object of our invention is to provide an attractive display for merchandise to be sold in merchandising machines which will protect the merchandise from theft, from attack by pests or vermin, and which will maintain the merchandise in eye-appealing condition.

In general, our invention contemplates the provision of transparent housings for individual packages of merchandise and the mounting of these housings on a panel in such a manner that three dimensions of the merchandise may be readily viewed by a prospective purchaser. The plurality of transparent housings thus mounted are illuminated so that the merchandise may be readily seen. Provision is made for "breathing" of the air within the housing in response to changes in temperature, humidity and barometric pressure of the circumambient atmosphere in order to prevent the condensation of moisture and the deposit of dew from interfering with the transparency of the housing or affecting the appearance of the merchandise adversely. The housings may be made of any transparent material, as, for example, glass, acrylic resins, polystyrene resins, cellulose acetate resins, or other transparent synthetic resins.

In the accompanying drawings which form part of the instant specification and which are to be read in conjunction therewith and in which like reference numerals are used to indicate like parts in the various views:

Figure 1 is a fragmentary view of a merchandising machine showing a display panel containing one embodiment of our invention.

Figure 2 is a fragmentary sectional view, with parts omitted, drawn on an enlarged scale and viewed along the line 2—2 of Figure 1.

Figure 3 is a fragmentary sectional view, drawn on an enlarged scale, viewed along the line 3—3 of Figure 1.

Figure 4 is a sectional view, drawn on an enlarged scale, viewed along the line 4—4 of Figure 1.

Figure 5 is a sectional view taken along the line 5—5 of Figure 4.

Figure 6 is an exploded perspective view of the transparent housing and its base.

For purposes of convenience, we will describe our invention with respect to a panel for a cigarette merchandising machine. It is to be understood, of course, that any other appropriate merchandise, or facsimiles or representations of merchandise, may be displayed in our display panel.

More particularly referring now to the drawings, the merchandising machine cabinet, indicated generally by the reference numeral **10**, may be formed of sheet metal or the like and may take any appropriate form. As shown, the cabinet is provided with side walls **12**, a top **14** and a front panel **16**. A portion of the front panel **16** is removed to form a window, indicated generally by the reference numeral **18**. Our display panel **20** is mounted at the rear of the window **18** and is set back from the plane of the front panel **16**. The display panel **20** is formed with a plurality of apertures **22** through which transparent members **24** of the merchandise housings are adapted to project, as will be pointed out more fully hereinafter. The upper edge of the window **18** is bounded by a horizontally extending molding **26**. The sides of the window **18** are bounded by vertically extending molding **28**. The bottom of the window **18** is bounded by a flange **30** which may be formed by bending the edge of the panel **16** backwardly, as can readily be seen by reference to Figure 2. A bracket **32** is welded to the inside of the top member **14** of the cabinet. The molding **26** is provided with a member **34** through which the molding may be secured to the bracket **32** by means of fastening screws **36**, as can readily be seen by reference to Figure 2. The molding **26** may be made of brass, aluminum or any other appropriate material. The cabinet generally may be made of sheet steel. In a similar manner, the sides **12** of the cabinet are provided with brackets **38** to which the vertically extending molding **28** is secured by means of fastening screws **40**, as can readily be seen by reference to Figure 3. The molding **26** is formed with a rabbet **42** into which the edge **44** of the upper portion of the front of the cabinet extends. This upper portion may be formed by bending the top of the cabinet **14** downwardly. Similarly, the vertically extending molding **28** is formed with a rabbet **46** into which the edge of the metal of the cabinet sides **12** extends, as can readily be seen by reference to Figure **3**. Z-brackets **48** are welded to the sides **12** of the cabinet. The panel **20** is formed with vertically extending side flanges **50**. The vertically extending molding **28** is formed with a groove **52**. Side plates **54** extend parallel to the cabinet sides **12**. The inner edge of the side plate **54** is sandwiched between the flange **50** of the panel **20** and the flange **49** of the Z-bracket **48**. The parts are held in assembled position by means of fastening screws **56**, as can readily be seen by reference to Figure 3. The forward edge of each side plate **54** is seated in the vertically extending groove **52** formed in the molding **28**. A horizontally extending angle bracket **58** is welded to the panel member **20** adjacent its upper portion, as can readily be seen by reference to Figure 2. A second angle bracket **60** is welded horizontally across the lower portion of the panel **20**. The upper edge of the panel

20 is formed with a substantially horizontally extending flange 62. The lower edge of the panel 20 is formed with a horizontally extending flange 64. The horizontally extending molding 26 is formed with a groove 66. A transparent plate 68, formed of glass or transparent plastic, extends across the top of the assembly, as can be seen by reference to Figure 2. The forward edge of the transparent plate 68 is lodged in the groove 66. The rear edge of the plate 68 rests upon the flange 62. Appropriate clamps 70 secure the transparent plate 68 in position. The clamps are fastened to the angle bracket 58 by means of screws 72. A fluorescent light 74 extends across the cabinet above the transparent plate 68 and is adapted to illuminate the display housings mounted in the apertures of panel 20. The bottom of the re-entrant housing which has been described is formed with a plate 76. This plate may be transparent, if desired, so that the merchandise in the merchandising machine can be seen through it. The forward edge of the bottom plate 76 is supported by a bracket 78 which is secured to the front 16 of the cabinet by welding. The rear edge of the bottom plate 76 is secured to the angle bracket 60 by means of clamping members 80 through fastening screws 82. The clamping members 80 position the rear edge of the bottom member 76 against the bottom flange 64 of the panel 20.

Thus far we have described the formation of a window in a merchandising machine cabinet and the provision of a re-entrant casing in conjunction with this window. The sides of the casing 54 extend generally vertically and are formed of sheet metal. The top and bottom of the re-entrant casing may be formed of transparent material, such as glass, or sheets of acrylic resin, polystyrene resin or cellulose acetate resin. The transparent roof of the re-entrant casing is adapted to pass light from any appropriate lighting means, such as a fluorescent light bulb 74, positioned thereabove. The floor of the re-entrant casing may be formed with a transparent sheet to enable merchandise being dispensed within the merchandising machine to be readily viewed. The rear of the re-entrant casing is formed with a panel provided with apertures.

Reference is now had to Figures 4, 5 and 6. A pair of vertically extending Z-bars 90 and 92 are welded or otherwise secured on each side of each aperture 22, as can readily be seen by reference to Figure 4. A strap or plate 94 is positioned to extend across the aperture between Z-bars 90. The strap 94 holds the display housing assembly, indicated generally by the reference numeral 96, in position in the aperture 22. The strap 94 is secured to the Z-bars 90 and 92 by means of screws 98, or in any other appropriate manner. The housing assembly 96 comprises a transparent member 24 formed of glass, cellusose acetate resin, polystyrene resin, acrylic resin or any other appropriate transparent material. It is molded in the form of a dome, bubble, or in any other appropriate form, so that it may enclose merchandise, indicated by the dotted outline 100 in Figure 4, for view from a plurality of directions. The transparent member 24 is formed with a peripheral flange 102 adapted to coact with the peripheral flange 104 of backing member 106. The backing member 106 may be made of metal, such as pressed steel, aluminum, brass or the like. The backing member is covered with a fabric layer 108 which may be made of velvet or any other appropriate material. The fabric layer 108 is secured to the backing member or base 106 by means of an adhesive or the like. It will be observed that the fabric layer 108 is sandwiched between the flange 102 of the transparent member 24 and the flange 104 of the base 106. The layer of fabric thus sandwiched between the flanges permits the migration of air from inside of the housing through the fabric itself and permits the interior of the housing to "breathe." The peripheral edge of the fabric 108 is glued to the flange 102 by an appropriate layer of adhesive 110. The merchandise, which is a package of cigarettes in the case of a cigarette merchandising machine, is secured to the fabric 108 within the housing by a layer of adhesive 112, as can readily be seen by reference to Figure 4. The package of cigarettes may be attractively displayed. It may be open, if desired, with one or two cigarettes protruding therefrom in an inviting manner. The use of an actual package of the merchandise presented to three-dimensional view and illuminated is an excellent way to display the merchandise. This avoids the necessity of using facsimiles of labels or dummy packages which have an artificial appearance. The housing, which comprises the transparent cover 24 and the base 106, is maintained in assembled position by means of a plurality of rivets 114. It will be readily understood that the housing may be of any appropriate shape or size. In the case of cigarettes, some housings may be designed to accommodate standard-size cigarettes and other housings may be made for king-size cigarettes. The base 106, it will be seen, is provided with a pedestal portion 116 which extends at an angle to the flange 104. The transparent cover 24 has a configuration agreeable to the shape of the pedestal 116. The angular disposition of the surface of the cover 24 with respect to the panel 20 reduces reflections. The reflected light will pass upwardly and eliminate the glare which might obscure a clear view of the merchandise within the housing. The layer of fabric against which the merchandise is displayed presents an attractive appearance. That portion of the fabric which is sandwiched between the flanges of the base and the cover not only permits breathing, as pointed out above, but insures that dust and dirt will be filtered from the air entering the housing during the process of breathing. If, for example, during a warm day the air expands, the increased volume will be accommodated by some of the expanded air passing out of the housing through the fabric layer sandwiched between the flange of the base and the flange of the housing. During the night when the temperature drops and the pressure is reduced within the housing owing to a contraction of the volume of the air, the pressure is equalized by permitting atmospheric air to migrate through the sandwiched fabric layer. Dust or dirt contained in this air will be filtered by the fabric layer and thus maintain the merchandise in the housing clean and presentable for long periods of time. In the case of merchandise of an edible nature, such as candy bars and the like, the sealed housing precludes the entrance of vermin, insects or the like.

It will be seen that we have accomplished the objects of our invention. We have provided a display panel for attractively displaying merchandise which it is to be dispensed in a merchandising machine in a simple, convenient and expeditious manner. A prospective purchaser is permitted to obtain a comprehensive view of the actual merchandise being dispensed by means of a sample thereof. The exhibited merchandise cannot be pilfered and is protected from vermin and pests. The housings associated with our display panel are adapted to protect the merchandise over long periods of time and may be readily and conveniently exchanged to exhibit merchandise of different kinds.

It will be understood that certain features and subcombinations are of utility and may be employed without reference to other features and subcombinations. This is contemplated by and is within the scope of our claims. It is further obvious that various changes may be made in details within the scope of our claims without departing from the spirit of our invention. It is therefore to be understood that our invention is not to be limited to the specific details shown and described.

Having thus described our invention, what we claim is:

1. In a merchandising machine adapted to dispense articles of merchandise, a merchandise machine cabinet for

housing a supply of articles of merchandise to be dispensed, a panel formed with an aperture, means mounting said panel on said cabinet, a transparent housing member extending through said aperture, a housing base member, means for securing said base member to said transparent member to form a housing assembly, means for positioning a sample article of said merchandise to be exhibited within the housing assembly upon the base member, and means for fastening said housing assembly to said panel.

2. A machine as in claim 1 in which said base is formed with a flange and said transparent member is formed with a flange and a layer of porous material positioned between said flanges to permit the migration of air into and out of said housing.

3. In a merchandising machine adapted to dispense articles of merchandise, a merchandise machine cabinet for housing a supply of articles of merchandise to be dispensed, a panel formed with a plurality of apertures, means mounting said panel on said cabinet, a plurality of transparent housing members respectively extending through said apertures, a plurality of housing base members, means for securing the respective base members to said transparent members to form a plurality of housing assemblies, means for positioning respective sample articles of said merchandise to be exhibited within the housing assemblies upon said base members and means for fastening said housing assemblies to said panel.

4. In a merchandising machine adapted to dispense articles of merchandise, a merchandise machine cabinet for housing a supply of articles of merchandise to be

dispensed, a panel formed with a plurality of apertures, means mounting said panel on said cabinet, a plurality of transparent housing members respectively extending through said apertures, a plurality of housing base members, means for securing the respective base members to said transparent members to form a plurality of housing assemblies, means for positioning respective sample articles of said merchandise to be exhibited within the housing assemblies upon said base members, means for fastening said housing assemblies to said panel, said means for mounting said panel comprising a re-entrant portion formed in said merchandising machine cabinet, said re-entrant portion having a transparent wall and a lamp positioned within the merchandising machine adjacent the transparent wall whereby to illuminate said sample articles of merchandise being exhibited in said housing assemblies.

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