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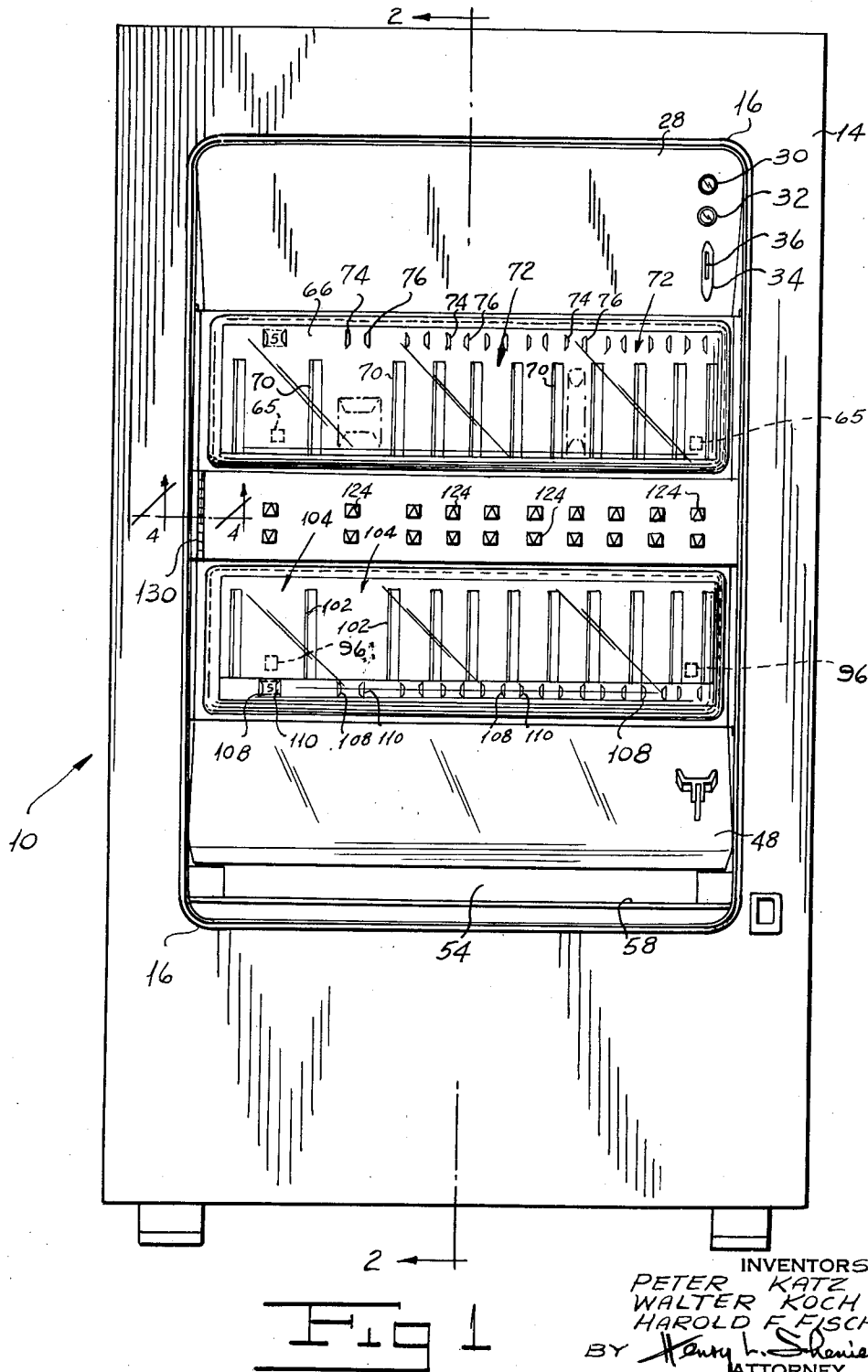
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DISPLAY ASSEMBLY FOR MERCHANDISING MACHINE

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3 Sheets-Sheet 1



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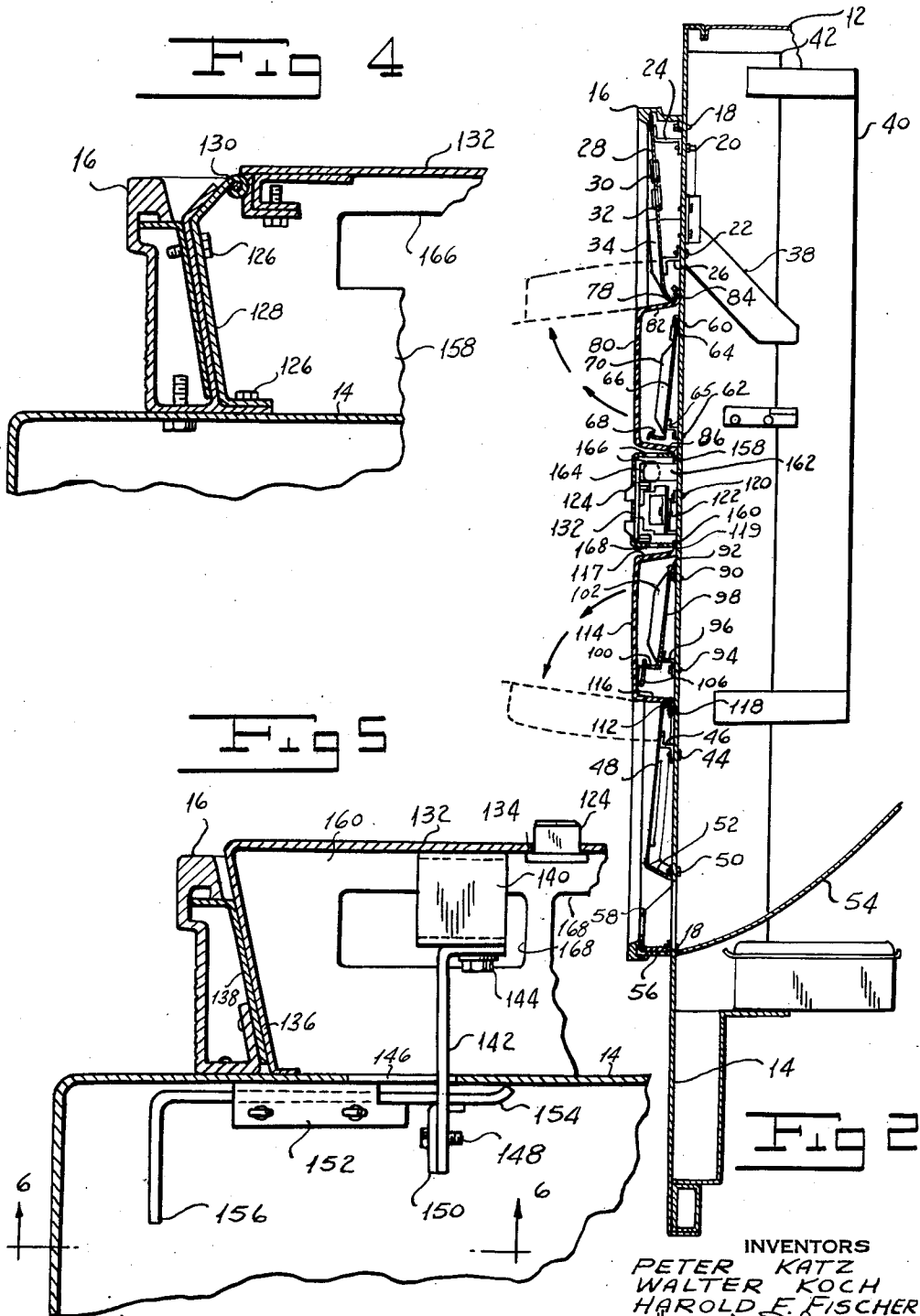
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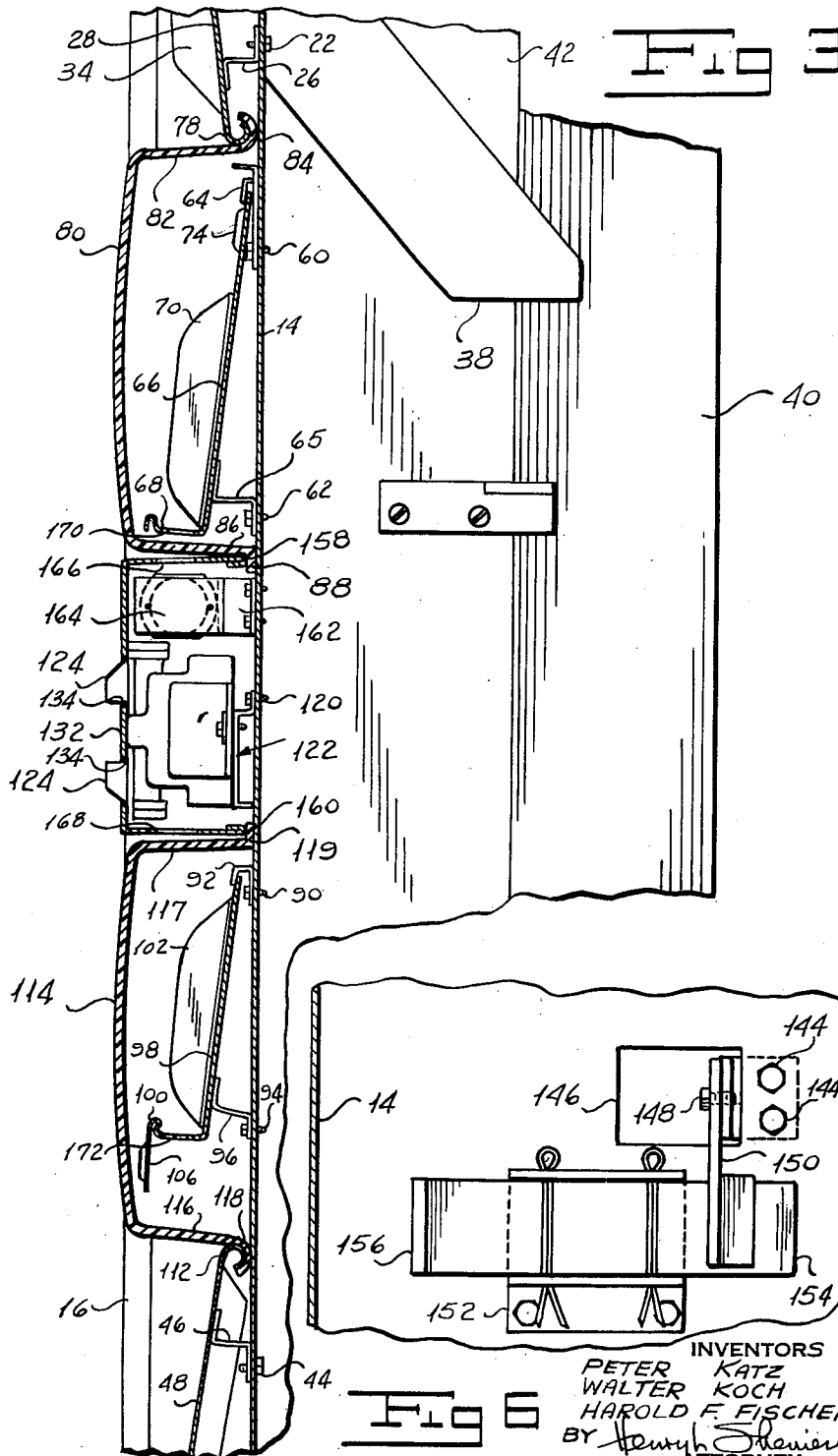
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DISPLAY ASSEMBLY FOR MERCHANDISING MACHINE

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DISPLAY ASSEMBLY FOR MERCHANDISING MACHINE

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Our invention relates to a display assembly for a merchandising machine and more particularly to an improved display assembly for merchandising machines which displays sample articles of a large number of kinds of merchandise dispensed by a merchandising machine.

For effective automatic merchandising of goods, it is desirable that the merchandise dispensed by the machine be displayed in view of prospective customers. In machines of the prior art the cabinet door may be provided with a transparent panel through which the supplies of merchandise may be seen. This display has not proved satisfactory, since the article supply containers of the machines do not support the articles in positions in which they may clearly be viewed by prospective customers.

It has been suggested that the cabinet door be provided with a display panel having recessed housings in which sample articles of merchandise may be positioned in view of customers. While such an arrangement satisfactorily displays the merchandise, it embodies a number of defects. In order that the sample article be replaced, as is required after a period of time or when the kinds of articles of merchandise being sold are changed, the display housings must be disassembled to permit new articles to be placed therein. That is, the displayed sample articles are not readily accessible. The disassembly operation required in these machines of the prior art generally is accomplished through the back of the cabinet door with the result that a large number of openings must be provided in the cabinet door. This construction is especially undesirable in a refrigerated machine requiring a well-insulated door. The arrangement of display panels of the prior art is such that a large number of individual bulbs are required to illuminate the sample articles being displayed.

We have invented a display assembly for a merchandising machine in which the sample articles being displayed are readily accessible without disassembly of parts to permit their replacement. Our assembly prominently displays a large number of sample articles in view of prospective customers without requiring openings in the machine cabinet door. Owing to the arrangement of parts in our assembly, a single lamp illuminates all of the displayed sample articles.

One object of our invention is to provide a display assembly for a merchandising machine which prominently displays a large number of sample articles of merchandise without requiring openings or recesses in the machine cabinet door.

Another object of our invention is to provide a display assembly for merchandising machines in which the displayed sample articles are readily accessible to permit their replacement without disassembly of parts.

A further object of our invention is to provide a display assembly for a merchandising machine in which a single lamp illuminates all the displayed articles.

Other and further objects of our invention will appear from the following description.

In general our invention contemplates the provision of a display assembly for a merchandising machine having a cabinet door on which we superimpose a plurality of supports for displaying sample articles. We swingably mount transparent covers on the door for closing over

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the supports to house the displayed articles. A selecting button assembly cover, pivotally mounted on the door, is arranged to be locked in a closed position over the machine selecting button assemblies carried by the door. We provide the button assembly cover and the article covers with interengageable portions which lock the article covers in position over the article supports when the button cover is locked in its closed position. We so arrange the parts of our assembly that a single lamp, housed by the button assembly cover, illuminates all the displayed articles.

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 characters indicate like parts in the various views:

FIGURE 1 is a front elevation of a merchandising machine provided with our display assembly.

FIGURE 2 is a sectional view of our display assembly for a merchandising machine taken along the line 2—2 of FIGURE 1.

FIGURE 3 is a fragmentary sectional view of our display assembly for a merchandising machine showing a portion of the assembly in detail.

FIGURE 4 is a fragmentary sectional view of our display assembly or a merchandising machine taken along the line 4—4 of FIGURE 1 and drawn on an enlarged scale.

FIGURE 5 is a fragmentary sectional view of our display assembly for a merchandising machine showing the details of the means for locking the assembly.

FIGURE 6 is a fragmentary sectional view of our display assembly for a merchandising machine taken along the line 6—6 of FIGURE 5.

Referring now more particularly to the drawings, the merchandising machine indicated generally by the reference character 10, with which our display assembly is used, includes a cabinet 12 having a door 14 secured to the cabinet 12 by any convenient means such as a hinge (not shown) in a manner known to the art to permit the door to be opened and closed. We mount a generally rectangular frame 16 on the outside of door 12 by any suitable means, such as screws 18 or the like. Respective sets of screws 20 and 22 secure pairs of upper panel mounting brackets 24 and 26 to the door 14. We secure an upper panel 28 to the brackets 24 and 26 by any suitable means, such as welding or the like. The lengths of brackets 24 and 26 are such that while the upper end of panel 28, as viewed in FIGURE 2, is spaced away from the door 14, the lower end of the panel is relatively close to the surface of door 14. Panel 28 carries a pair of signal lenses 30 and 32 which may be selectively illuminated in a manner known to the art to display such legends as "Empty, Try Another" and "Exact Amount Only." This panel also carries a member 34 provided with a coin slot 36 through which coins may pass into a coin tube 38 leading to the coin register 40 supported in any convenient manner on a mounting panel 42 supported by the door.

A set of screws 44 secures a pair of lower panel mounting brackets 46 to door 14. We secure a lower panel 48 to the bracket 46 by any suitable means, such as welding or the like. Another set of screws 50 secure an offset portion 52 of panel 48 to the door 14. As can be seen by reference to FIGURE 2, the upper end of panel 48, as viewed in the figure, is relatively close to the surface of door 14, while the portion 52 spaces the lower end of the panel away from the surface of door 14.

The frame 16 also supports a delivery chute 54 along which articles pass to a tray 56 carried by the frame from which the articles dispensed may be removed by the customer through an opening 58 formed by the lower end of panel 48 and by the tray 56.

Respective sets of screws 60 and 62 secure pairs of brackets 64 and 65 to the door 14 below the upper panel 28. We mount an article support member 66 on the bracket 62 by any convenient means, such as welding or the like. Bracket 64 engages the upper end of the article support 66 to retain it in a position closely adjacent to the surface of door 14. The support 66 is formed with a base 68 for supporting articles and carries a number of partitions 70, which divide the support into a number of sections indicated generally by the reference character 72, each of which supports one article. We form the upper portion of the support 66 over each section 72 with a pair of tabs 74 and 76 for receiving cards or the like indicating the price at which an article displayed in the corresponding section is sold.

We curl the lower edge of the upper panel 28 inwardly to form a bearing portion 78 spaced a short distance from the surface of the cover 12. We provide the support 66 with an elongated cover 80 formed of any suitable transparent material, such as clear plastic or the like. The top 82 of the cover 80 has a curved flange 84 along its edge. We insert this flange between the bearing portion 78 of the panel 28 and the door 14 to cause the flange and the bearing portion to co-operate to form a hinge for supporting the cover 80 for movement from a position over the support 66, as is shown in full lines in FIGURE 2, to a position at which the support is exposed, as is indicated in broken lines in FIGURE 2. We form the bottom 86 of the cover 80 with a flange 88 adapted to rest against the door 14 when the cover 80 is closed over the support 66.

A set of screws 90 secure retaining brackets 92 to the door 14 over the panel 48. A set of screws 94 secure brackets 96 to the door 14 above the panel 48 at a distance below the brackets 92. We secure a second article support 98 to the brackets 96 by any convenient means, such as welding. Brackets 92 engage the upper edge of the support 98 to retain the edge in a position closely adjacent to the door 14. We form the support 98 with a base 100, which carries the displayed articles. We provide the support 98 with a plurality of partitions 102 which divide the support into a number of sections indicated generally by the respective reference characters 104. The base 100 carries a depending portion 106 provided with a plurality of pairs of tabs 108 and 110, each pair of which is adapted to support a card or the like indicating the price of the article carried by the section 104 immediately above the pair of tabs.

We curl the upper edge of panel 48 to form a bearing portion 112 spaced a short distance from the door 14. An elongated cover 114, formed of a suitable transparent material such as clear plastic, has a bottom 116 formed with a curved flange 118 disposed in the space between the surface of door 14 and the portion 112. This flange 118 co-operates with the bearing portion 112 to support cover 114 for movement between a closed position over the support 98, as is indicated in full lines in FIGURE 2 and a position at which the support is exposed, as is indicated in broken lines in FIGURE 2. We form the top 117 of the cover 114 with a flange 119 adapted to rest against the door 14 when the cover 114 is closed.

Any suitable means, such as screws 120 or the like, secure the machine selector button assembly indicated generally by the reference character 122 to the door 14. The assembly 122 includes a plurality of respective selecting buttons, each of which is associated with a unit of the machine adapted to dispense a particular article. Preferably we form these buttons from translucent plastic. As can be seen by reference to FIGURE 1, two rows of buttons 124 are provided in the embodiment shown. The respective buttons of the upper row are associated with units adapted to dispense respective articles corresponding to those displayed in the sections 72 immediately over the buttons of the top row. Similarly, the buttons of the lower row are adapted to vend respective articles

corresponding to the articles displayed in the sections 104 immediately below the buttons of the lower row.

Referring now to FIGURES 4 to 6, screws, or the like, 126 secure a bracket 128 to the side of frame 16 at a location between the respective supports 66 and 98. A hinge 130 pivotally connects an elongated button assembly cover 132 to the bracket 128 for movement to a position at which the cover houses the button assembly. In this position of the cover, the buttons 124 extend through openings 134 provided in the cover 132. As the cover closes, its end 136, remote from the bracket 128, is guided into position by a guide 138 carried by the frame 16.

A bracket 140 secured to the cover 132 by any suitable means, such as welding, carries an arm 142 secured to the bracket by any suitable means, such as a screw 144. As the cover 132 is closed, arm 142 passes through an opening 146 in the cover. A screw 148 secures a depending lug 150 to the end of arm 142 remote from screw 144. A guide 152 mounted on the inner surface of the door 14 slideably supports a locking bar 154 having a handle 156. After cover 132 is closed, handle 156 is actuated to cause the bar 154 to engage lug 150 to lock the cover in place.

It is to be noted that with both the article covers 80 and 114 in their closed or full line positions as the cover 132 closes the edges of its top 158 and of its bottom 160 engage the flanges 88 and 119 to hold covers 80 and 114 in the closed position. Thus when bar 154 locks the button cover, the article covers also are locked.

Any suitable means, such as a pair of brackets 162, support a fluorescent lamp 164 on the door 14 within the cover 132. This lamp is adapted to illuminate all the articles displayed by the respective supports 66 and 98. We provide the top 158 with a plurality of openings 166 through which light may pass to illuminate the articles supported on the base 68. The bottom 160 has similar openings 168 through which light passes to illuminate the articles carried by support 98. We provide the bases 68 and 100 of supports 66 and 98 with openings 170 and 172 to permit light to pass from lamp 164 to panels 28 and 48. It will be appreciated that the light may pass through both housings 80 and 114 to illuminate the panels 28 and 48.

In use of our display assembly for a merchandising machine, when sample articles are to be placed on the supports 66 and 98, bar 154 is moved to the left, as viewed in FIGURE 5, to release the button assembly cover. The button assembly cover is then moved away from the door 14 on its hinge 130 to release the article support covers 80 and 114. Cover 80 is raised and respective articles corresponding to articles dispensed by various sections of the machine are placed on the support. Cover 114 is moved away from its support and the lower support is loaded in a manner similar to that described in connection with the upper support. When the loading operation is complete, both article covers are moved to their closed positions and the selector button assembly cover is closed and locked by bar 154 to lock all the covers in their closed positions. Whenever it is desired to replace the sample articles being displayed, this may readily be done without disassembling any of the parts of the display assembly. The lamp 166, when lit, illuminates all the articles in the manner described.

It will be seen that we have accomplished the objects of our invention. We have provided a display assembly for a merchandising machine which prominently displays a large number of sample articles in view of prospective customers. Our assembly permits the sample articles to be replaced in a rapid and expeditious manner without the necessity of disassembling any machine parts. The construction of our display assembly is such that no openings are required in the machine door which would interfere with adequate refrigeration of the machine cabinet. A single lamp illuminates all the display sample articles in our assembly.

It will be understood that certain features and subcom-

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binations 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. A display assembly for a merchandising machine having a cabinet including in combination an article display support carried by said cabinet, a transparent cover for said support, means mounting said cover on said cabinet for movement between an open position at which said support is accessible and a closed position, a button assembly carried by said cabinet, a button assembly cover, means mounting said button assembly cover on said cabinet for movement between an open position at which said button assembly is accessible and a closed position over said button assembly, means for locking said button assembly cover in its closed position and interengageable means on said transparent cover and on said button assembly cover for locking said transparent cover in its closed position when said button assembly cover is locked closed.

2. A display assembly for a merchandising machine having a cabinet including in combination an upper article display support carried by said cabinet, a transparent cover for said support, means mounting said cover on said cabinet for movement between an open position at which said support is accessible and a closed position, a lower article display support carried by said cabinet at a location below said upper article support, a second transparent cover, means mounting said second cover on said cabinet for movement between an open position at which said lower support is accessible and a closed position, a locking member having a free end and a locking end, means mounting said locking end on said cabinet for pivotal movement, means for securing the free end of said locking member to said cabinet and interengageable means on said transparent covers and on said button assembly covers for locking said transparent covers in their closed positions when said button assembly cover is locked closed.

3. A display assembly for a merchandising machine having a cabinet including in combination an upper article support carried by said cabinet, a transparent cover for said support, means mounting said cover on said cabinet for movement between an open position at which said support is accessible and a closed position, a lower article display support carried by said cabinet at a location below the said upper article support, a second transparent cover, means mounting said second cover on said cabinet for movement between an open position at which said lower support is accessible and a closed position, a button assembly carried by said cabinet, a button assembly cover, means mounting said button assembly cover on said cabinet for movement between an open position at which said button assembly is accessible and a closed position, means for locking said button assembly cover in its closed position, interengageable means on said transparent covers and on said button assembly cover for locking said transparent covers in their closed positions when said button assembly cover is locked closed, illuminating means and means mounting said illuminating means on said cabinet in a position at which it is adapted to be enclosed by said button assembly cover, said button assembly cover being provided with means for permitting passage of illumination from said illuminating means to said transparent covers to illuminate said supports.

4. A display assembly for a merchandising machine having a cabinet including in combination an upper article display support carried by said cabinet, a transparent cover for said support, means mounting said cover on said cabinet for movement between an open position at which said support is accessible and a closed position, a lower article display support carried by said cabinet at a

location below said upper article support, a second transparent cover, means mounting said second cover on said cabinet for movement between an open position at which said lower support is accessible and a closed position, a locking member having a free end and a locking end, means mounting said locking end on said cabinet for pivotal movement, means for securing the free end of said locking member to said cabinet and interengageable means on said transparent covers and on said locking member for locking said transparent covers in their closed positions when said locking member is locked closed, said cabinet including a door, said supports and said transparent covers and said locking member being mounted on said door.

5. A display assembly for a merchandising machine having a cabinet including in combination respective upper and lower panels, means mounting said panels on said cabinet, respective upper and lower article supports, means mounting said supports on said cabinet adjacent said upper and lower panels, respective transparent covers for said supports, means mounting said transparent covers on said cabinet for movement toward said panels to open positions at which said supports are exposed and to closed positions over said supports, a locking member disposed between said supports, means mounting said locking member on said cabinet and interengageable means carried by said locking member and by said transparent covers for holding said transparent covers in closed positions and means for securing locking member in locking position.

6. A display assembly for a merchandising machine having a cabinet including in combination respective upper and lower panels, means mounting said panels on said cabinet, respective upper and lower article supports, means mounting said supports on said cabinet adjacent said upper and lower panels, respective transparent covers for said supports, means mounting said transparent covers on said cabinet for movement toward said panels to open positions at which said supports are exposed and to closed positions over said supports, illuminating means, means mounting said illuminating means on said cabinet between said supports, a third cover, means mounting said third cover on said cabinet for movement between an open position and a closed position over said illuminating means and interengageable means carried by said third cover and by said transparent covers for holding said transparent covers in closed positions and means for securing said third cover in its closed position, said third cover being provided with means for permitting the passage of illumination from said illuminating means through said transparent covers to said panels.

7. A display assembly for a merchandising machine having a cabinet including in combination an article display support carried by said cabinet in a position to display an article carried by said support, an elongated transparent cover for said support, means mounting said cover on said cabinet for pivotal movement about a horizontal axis from a normally closed position to an open position at which said support is accessible, a button assembly carried by said cabinet, an elongated cover for said button assembly, means mounting said button assembly cover on said cabinet for pivotal movement around a vertical axis from a normally closed position to an open position and interengageable means carried by said button assembly cover and by said transparent cover for holding said transparent cover closed when said button assembly cover is closed.

8. A display assembly for a merchandising machine having a cabinet including in combination an article display support carried by said cabinet in a position to display an article carried by said support, an elongated transparent cover for said support, means mounting said cover on said cabinet for pivotal movement about a horizontal axis from a normally closed position to an open position at which said support is accessible, a button assembly carried by said cabinet, an elongated cover for said button

assembly, means mounting said button assembly cover on said cabinet for pivotal movement around a vertical axis from a normally closed position to an open position and interengageable means carried by said button assembly cover and by said transparent cover for holding said transparent cover closed when said button assembly cover is closed, said interengageable means comprising a flange formed along a longitudinal edge of said transparent cover and a longitudinal edge of said button assembly cover.

9. A display assembly for a merchandising machine having a cabinet including in combination an upper article display support carried by said cabinet in a position to display articles of merchandise carried thereby, an elongated transparent cover having upper and lower longitudinal edges for said upper article support, means mounting said upper cover for pivotal movement around its upper edge from a normally closed position to an open position at which the upper support is exposed, a lower article support carried by said cabinet in a position to display an article of merchandise carried thereby, an elongated transparent lower article support cover having upper and lower longitudinal edges, means mounting said lower support cover on said cabinet for pivotal movement about its lower edge from a normally closed position to an open position at which said lower support is exposed, a button assembly carried by said cabinet between said upper and lower supports, an elongated button assembly cover having a vertical edge, means mounting said button assembly cover on said cabinet for pivotal movement about its vertical edge from a normally closed position over the button assembly to an open position at which the button assembly is exposed and interengageable means on said button assembly cover and on said transparent covers for holding said transparent covers closed when said button assembly cover is closed.

10. A display assembly for a merchandising machine having a cabinet including in combination an upper article display support carried by said cabinet in a position to display articles of merchandise carried thereby, an elongated transparent cover having upper and lower longitudinal edges for said upper article support, means mounting said upper cover for pivotal movement around its upper edge from a normally closed position to an open position at which the upper support is exposed, a lower article support carried by said cabinet in a position to display an article of merchandise carried thereby, an elongated transparent lower article support cover having upper and lower longitudinal edges, means mounting said lower support cover on said cabinet for pivotal movement about its lower edge from a normally closed position to an open position at which said lower support is exposed, a button assembly carried by said cabinet between said upper and lower supports, an elongated button assembly cover having a vertical edge, means mounting said button assembly cover on said cabinet for pivotal movement about its vertical edge from a normally closed position over the button assembly to an open position at which the button assembly is exposed and interengageable means on said button assembly cover and on said transparent covers for holding said transparent covers closed when said button assembly cover is closed, said interengageable means comprising flanges formed respectively on the lower edge of the upper transparent cover and on the upper edge of the lower transparent cover and the respective longitudinal edges of said button assembly cover.

11. A display assembly for a merchandising machine having a cabinet including in combination an upper article display support carried by said cabinet in a position to display articles of merchandise carried thereby, an elongated transparent cover having upper and lower longitudinal edges for said upper article support, means mounting said upper cover for pivotal movement around its upper edge from a normally closed position to an open position at which the upper support is exposed, a

lower article support carried by said cabinet in a position to display an article of merchandise carried thereby, an elongated transparent lower article support cover having upper and lower longitudinal edges, means mounting said lower support cover on said cabinet for pivotal movement about its lower edge from a normally closed position to an open position at which said lower support is exposed, a button assembly carried by said cabinet between said upper and lower supports, an elongated button assembly cover having a vertical edge, means mounting said button assembly cover on said cabinet for pivotal movement about its vertical edge from a normally closed position over the button assembly to an open position at which the button assembly is exposed, interengageable means on said button assembly cover and on said transparent covers for holding said transparent covers closed when said button assembly cover is closed, and means for locking said button assembly cover in its closed position.

12. A display assembly for a merchandising machine having a cabinet including in combination an upper article display support carried by said cabinet in a position to display articles of merchandise carried thereby, an elongated transparent cover having upper and lower longitudinal edges for said upper article support, means mounting said upper cover for pivotal movement around its upper edge from a normally closed position to an open position at which the upper support is exposed, a lower article support carried by said cabinet in a position to display an article of merchandise carried thereby, an elongated transparent lower article support cover having upper and lower longitudinal edges, means mounting said lower support cover on said cabinet for pivotal movement about its lower edge from a normally closed position to an open position at which said lower support is exposed, a button assembly carried by said cabinet between said upper and lower supports, an elongated button assembly cover having a vertical edge, means mounting said button assembly cover on said cabinet for pivotal movement about its vertical edge from a normally closed position over the button assembly to an open position at which the button assembly is exposed, a manually operated latch and bolt assembly for locking said button assembly cover in its closed position and means mounting the bolt of said assembly on the inside of said cabinet.

13. A display assembly for a merchandising machine having a cabinet including in combination an upper article display support carried by said cabinet, a transparent cover for said support, means mounting said cover on said cabinet for movement about a horizontal axis between an open position to which said support is accessible and a closed position, a lower article display support carried by said cabinet at a location below said upper article display support, a second transparent cover, means mounting said second cover for movement about a horizontal axis between an open position to which said lower support is accessible and a closed position, a locking member having a free end and a mounting end, means mounting said locking member at its mounting end on said cabinet for pivotal movement around a vertical axis, means for securing the free end to said cabinet and interengageable means comprising flanges along the longitudinal edges of said transparent covers and the longitudinal edges of said locking member for holding said transparent covers closed.

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