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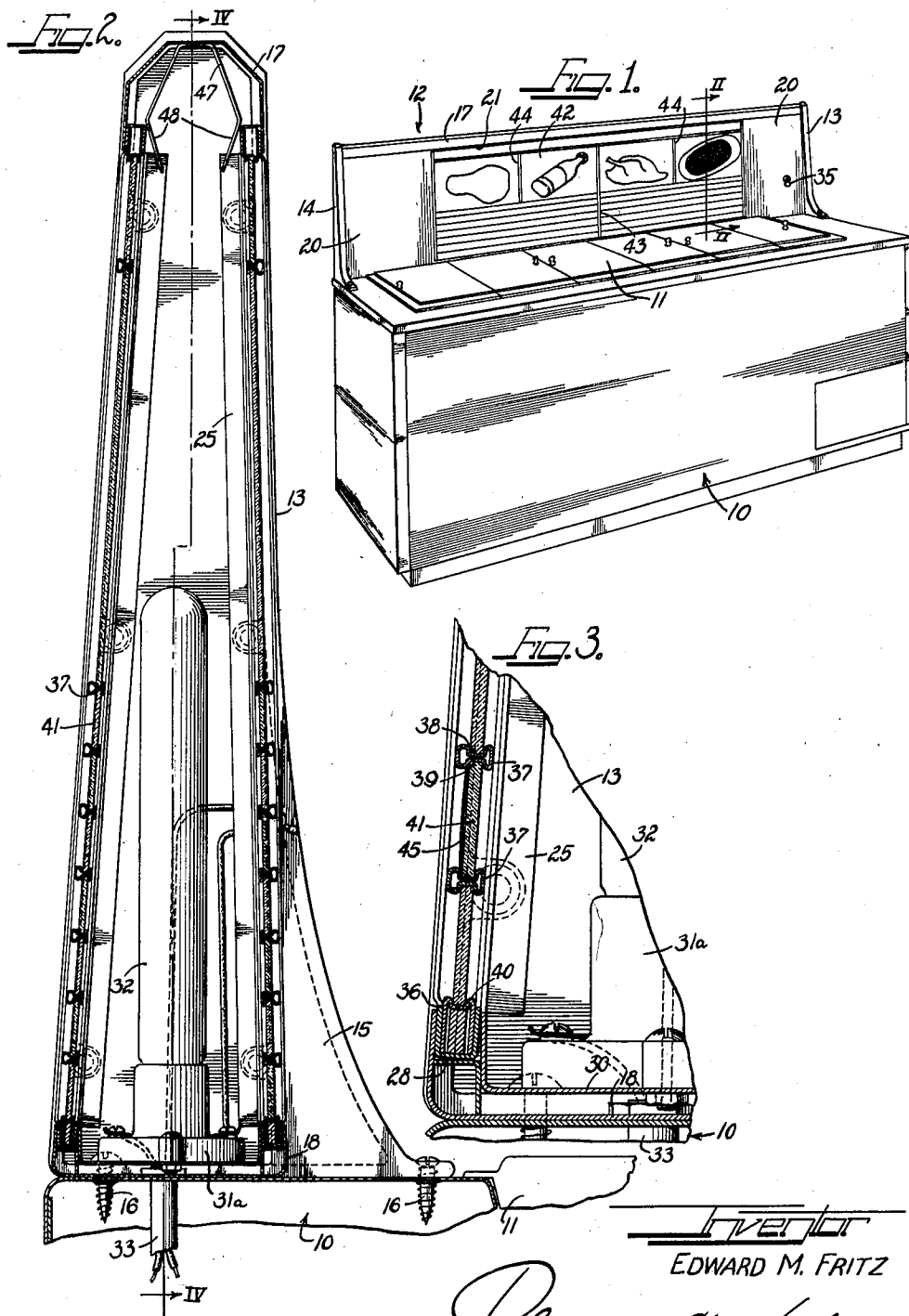
E. M. FRITZ

2,271,689

ILLUMINATED DISPLAY SIGN

Filed Aug. 30, 1939

2 Sheets-Sheet 1



EDWARD M. FRITZ

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by Charles M. Fritz *Attys*

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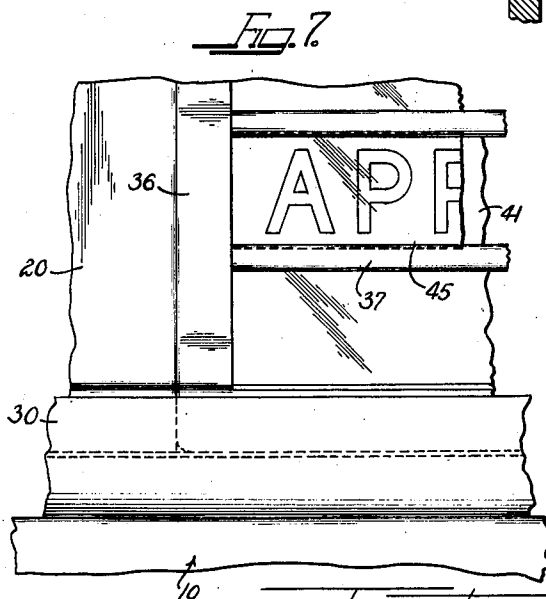
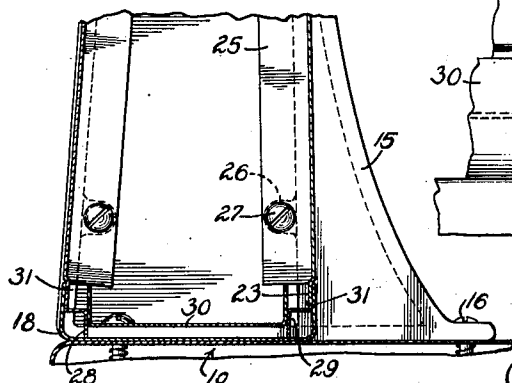
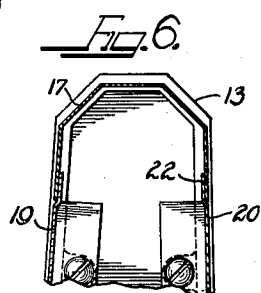
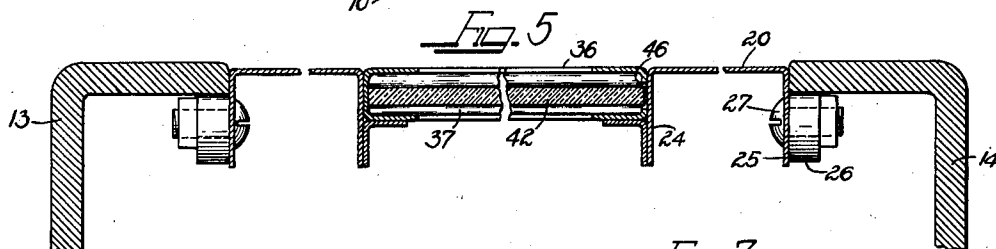
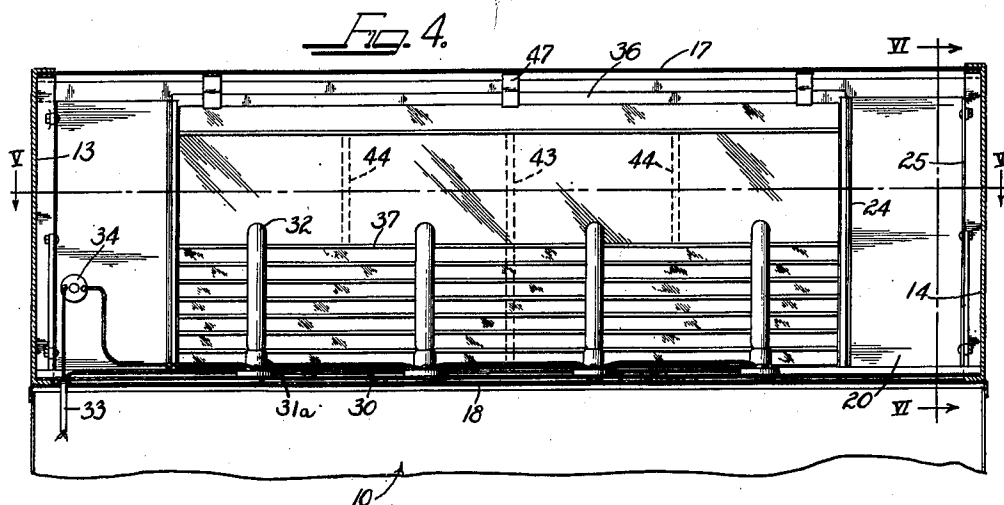
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ILLUMINATED DISPLAY SIGN

Filed Aug. 30, 1939

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,271,689

ILLUMINATED DISPLAY SIGN

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Application August 30, 1939, Serial No. 292,603

5 Claims. (Cl. 40—132)

The present invention relates in general to advertising devices and is more particularly concerned with improvements in illuminated display signs, especially signs of this type which may be associated with storage cabinets such as used for the merchandising and dispensing of confections, frozen foods, and the like.

Signs for such purpose have proved desirable not only as a sales stimulus, but also as a convenience to customers. In general, these signs as heretofore constructed have embodied a board or rack mounted on the top of the storage cabinet adjacent its forward wall. The rack or board has been arranged for viewing only from the front of the cabinet and has usually embodied a rack which is so constructed as to removably receive display pieces such as individual item strips, price tabs, photographs, and the like. Display signs constructed in this manner which are visible from only one side of the cabinet are objectionable in that they are not adapted for most efficient use, as, for example, in cases where the cabinet might be viewed from either the front or back due to its being positioned away from the store wall or on an island in the store.

It has been the general practice to illuminate the display rack by means of an exterior source of illumination such as electric lamps arranged at the top of the rack below a reflector. Such illuminating arrangements have been found to be objectionable in that shadows are cast on the display pieces with the result that the clearness and legibility may oftentimes be impaired. Moreover, since the electric lamps, which in use get quite hot, are exposed, these lamps constitute an attraction particularly to children who are inclined to touch them with their bare hands. While the lamps may not cause a serious burn, they are sufficiently hot to startle and frighten the child to the extent that the parent or other customers in the store may be objectionably disturbed and distracted from their shopping activities.

It, therefore, becomes necessary in display signs of the above construction to provide a separate additional light source on the back of the rack for illuminating the interior of the cabinet when it is opened for the removal of food or other items therefrom, or when placing the items in the cabinet.

Having in mind the foregoing as well as other objections to such signs as presently constructed, the present invention contemplates the provision of a sign with duplicate displays which may be viewed from the front or back of the cabinet; a sign in which the displays are illuminated from a single interior source such as electric lamps which are shielded from contact by the customers and children; and a sign in which the

illuminated display pieces are free from objectionable shadows.

A further object of the invention is to provide a display sign of the herein described character with display piece racks which may be readily removed to permit access to the source of illumination when necessary to replace a burned out lamp or for other purposes.

It is also an object to provide such a sign having a single source of illumination which may be utilized not only for the illumination of the display pieces, but which also serves to illuminate the interior of the storage cabinet when it is opened for the removal or placing of foods or other items therein.

Still further and other objects are to provide a sign for the herein described purpose, which is pleasing and attractive in appearance, which is of such construction as to enable its being easily cleaned, which is efficient in operation, and which embodies a novel construction permitting its being easily adapted for cabinets of varying length.

Other objects and features of the invention will more fully appear from the following detailed description taken in connection with the accompanying drawings which illustrate the preferred embodiment thereof, and in which:

Figure 1 is an isometric view showing the display sign of the present invention as being applied to a food storage cabinet;

Figure 2 is an enlarged transverse sectional view through the sign, taken substantially on line II—II of Figure 1;

Figure 3 is an enlarged fragmentary sectional view of a lower bottom edge of the sign to show its constructional details;

Figure 4 is a longitudinal sectional view taken through the sign to show the cooperative relationship between certain of its parts, taken substantially on line IV—IV of Figure 2;

Figure 5 is an enlarged fragmentary horizontal section through the same, taken substantially on line V—V of Figure 4;

Figure 6 is an enlarged fragmentary section showing the manner in which the end wall panels are secured to the end supports, taken substantially on line VI—VI of Figure 4; and

Figure 7 is an enlarged front elevational view of a portion of the display sign.

As shown on the drawings:

Referring to Figure 1, the display sign of the present invention is disclosed as being applied to a storage cabinet, as generally indicated at 10, such as used for the storage of confections, frozen foods, and the like, and for the dispensing and merchandising of such products. As is the usual practice, such cabinets are provided with top closure members or doors 11, which may be opened

to permit placing of food into the cabinet or removing it therefrom.

The display sign of the present invention, as generally indicated at 12, comprises in general an upright structure mounted at the forward upper edge on the top of the cabinet adjacent the doors 11. This sign is provided with display panels wherein photographs of the various foods or items may be displayed and item strips and price tabs may be mounted in a position where they may be readily and easily viewed by customers.

More specifically, the present invention embodies right hand and left hand end members 13 and 14 which are constructed of an enameled surface material. These members are of generally hollow construction and are open on their inner side faces. The end members, it will be noted, are flared towards their bottom ends, and the rearwardly disposed edges at the bottom ends of the members are carried rearwardly, as shown at 15, to form a foot portion at the lower end of the member which is adapted to be secured to the top of the cabinet as by suitable screws 16—16.

Extending between the upper ends of the end members is a top frame member 17 of generally U-shaped construction, this frame member being disposed in inverted position so that it will open downwardly and form a channel extending between the end members.

The lowermost ends of the end members are connected by a U-shaped bottom frame member 18 which is disposed so as to open upwardly. Adjacent the respective end members, the upper and lower frame members 17 and 18 are connected by forwardly and rearwardly disposed spacer panels 19 and 20, which extend inwardly from the end members and cooperate with the frame members 17 and 18 to define an elongate, substantially rectangular opening 21 in the forward and rear walls of the upright structure 12.

The panels 19 and 20 are in each case provided with upper and lower projecting end portions 22 and 23 for making lapping engagement with the associated marginal edges of the leg portions of the frame members 17 and 18, and may be welded or otherwise secured thereto. The lateral edges of the spacer panels are deflected to form inwardly turned side flanges 24 and 25, the outermost of these flanges being arranged to make face engagement with securing lugs 26 along the open side of the associated end member, to which the flange may be secured as by suitable bolts 27.

It will be apparent that in the construction thus far described, the parts are rigidly held together and cooperate to form a generally hollow housing having openings 21 in the forward and rear walls thereof. Since display signs of the type described herein may be used with cabinets of different lengths, the foregoing construction is admirably adapted, with only slight changes, to be utilized with different cabinets. In other words, in order to adapt the housing for a longer or shorter cabinet, it is only necessary to cut the frame members 17 and 18 of proper length and utilize spacer panels of proper width to effect an opening 21 of standard predetermined size.

As shown in Figures 2 and 6, the respective legs of the frame member 18 are connected at their jointure with the bottom portion of the member by means of internal angle members 28 and 29. Secured to the angle members 28 and

29 is a U-shaped channel member 30 having leg portions which cooperate with the upstanding leg portions of the member 18 to form upwardly opening grooves 31 along the bottom of the openings 21—21 for a purpose which will later be explained in detail. The member 30 is formed of suitable reflecting material.

A plurality of lamp sockets 31a are suitably supported on the member 30 in spaced relation behind the wall openings 21—21, each of these sockets being adapted to receive and operatively support an electric lamp 32 of preferably elongate construction.

Electric service to the electric lamps for supplying electricity thereto may be brought into the interior of the sign structure through a suitable conduit 33, and the lamps may be controlled by means of a suitable switch 34 in the electric circuit. This switch is provided with an actuating member 35 which preferably extends through one of the spacer panels so that it may be readily actuated by the cabinet attendant.

Each of the openings 21 is arranged to have a display rack removably supported therein. This display rack or panel will now be described.

The display rack, as shown in Figures 2 and 3, comprises a rectangular frame 36 constructed of a channel member which opens inwardly. The frame 36 is provided with a plurality of longitudinally extending vertically spaced rail members 37, each of these members being so shaped as to form an upwardly opening, longitudinally extending groove 38 and a downwardly opening, longitudinally extending groove 39. The members 37 and grooved bushing members 40 at the top and bottom of the frame provide supports for flashed opal glass strips 41 having their upper and lower edges disposed in the facing grooves of adjacently disposed rails 37.

While any desired spacing may be utilized between the rails 37, it is preferred that the lower portion of the frame 36 have the rail members 37 rather closely spaced for receiving relatively narrow glass strips 41, and that the upper portion of the frame be arranged to receive relatively wider glass strips or panels 42.

The frame and rails 37 may be centrally braced, if desired, by means of a central upright member 43 which may be secured at its ends to the upper and lower frame portions and also to the respective cross rails. The upper portion of the frame may be further subdivided by upright members 44.

With the frame 36 having the glass panels mounted therein and subdivided as shown in Figure 1, it is proposed to provide translucent photographs or similar advertising display media, which may be disposed in the larger areas at the upper portion of the frame, and translucent item strips, as well as price indicating tabs of translucent material, which may be removably placed in the strip areas at the lower portion of the frame.

Both the photographs and item strips, as well as the price tabs, may be secured in front of the outer surface of a glass panel or strip in the manner disclosed in Figures 3 and 7. An item strip, as shown at 45, may be disposed in display position simply by transversely bowing the strip and inserting its upper and lower edges in the facing grooves of adjacent members 37—37 or between a member 37 and one of the bushings 40, so that the strip or photograph or price tab will overlies the glass strip or panel with which it is associated.

While it is not necessary to provide for ready replacement of the glass strips or glass panels, such an arrangement may be readily provided by slotting one or both ends of the frame 33, as shown at 45, so as to enable longitudinal withdrawal of the glass strips or panels from the frame or the insertion of new glass strips or panels to replace broken ones.

Provision is made for the ready removal or insertion of the display frame or rack into display position in the opening 21. This is accomplished by making the rack of a height greater than the height of the opening and providing resilient clips 47 at spaced intervals in the top frame member 17. Each of these clips is substantially U-shaped with inwardly deflected end portions 48-48, which are adapted to press against the rear upper edge of the forward and rear display racks and force them outwardly against the legs of member 17, and downwardly so that the lower edge of the rack is disposed flush, aligning engagement in the grooves 31-31. In order to remove one of the racks from its supported position, it is only necessary to shift the rack upwardly in an edgewise direction until the lower edge of the rack is free of its associated groove, whereupon the bottom edge of the rack may be swung outwardly and moved downwardly to free the upper edge thereof. The rack may be easily replaced by reversing this operation. When a display rack is removed, access may be had to the interior of the housing through the opening 21 for replacing burned out lamp bulbs or for other purposes.

It will be apparent that, with a display sign constructed as described herein, duplicate display racks are provided which are visible both from the front and back of the cabinet, and that both of these racks are simultaneously illuminated from a single source of illumination disposed on the interior of the sign and shielded from the contact of customers and children. Moreover, light rays passing from the source of illumination through the rack which faces the doors 11 in the top of the cabinet will serve to illuminate the interior of the cabinet when the doors are opened, without the necessity of having to provide additional illumination for such purpose.

From the foregoing description, it will be apparent that the present invention provides an improved illuminated sign having duplicate display panels which may be viewed from the front or back of the cabinet; which embodies a single source of illumination which is not only utilized for illuminating the display panels, but also serves to illuminate the interior of the cabinet with which the sign is associated; in which the source of illumination is shielded from contact by customers and children; a display sign which is free of objectionable shadows; in which the display panels may be readily and easily removed to permit access to the source of illumination, when desired; which may be readily adapted for storage cabinets of different lengths; and which is pleasing in appearance and may be kept in a clean and attractive condition.

It is, of course, to be understood that, although I have described in detail the preferred embodiment of my invention, the invention is not to be thus limited but only insofar as defined by the scope and spirit of the appended claims.

I claim as my invention:

1. In a device of the character described, a pair of end members adapted for securing in an upright position to the top of a storage cabinet, upper and lower rail members extending between the end members, end upright wall panels adjacent the end members respectively secured at their upper and lower ends to the rail members, means removably connecting the panels to their adjacent end members, said panels and rails co-operating to define an opening, and a display panel removably supported in said opening.

2. In a device of the character described, a pair of end members adapted for securing in an upright position to the top of a storage cabinet, upper and lower rail members extending between the end members, spaced upright forward and rear wall panels connected to each end member and the associated rails, said panels and rails co-operating to form forward and rear openings, and forward and rear display panels respectively removably supported in said openings.

3. In a device of the character described, a pair of end members adapted for securing in an upright position to the top of a storage cabinet, upper and lower rail members extending between the end members, spaced upright forward and rear wall panels connected to each end member and the associated rails, said panels and rails cooperating to form forward and rear openings, forward and rear translucent display panels respectively removably supported in said openings with a space therebetween, and a common light source behind the display panels in said space.

4. In a device of the character described, a pair of end members adapted for securing in an upright position to the top of a storage cabinet having a plurality of top access openings, upper and lower rail members extending between the end members adjacent said openings, upright wall panels adjacent the end members connected to the end members and associated rails, said panels and rails cooperating to define an opening adjacent the cabinet top access openings, a translucent display panel in said opening, and a light source behind the translucent panel positioned to emit rays therethrough and into the interior of the cabinet through its access openings.

5. In a display device of the character described, a hollow upright frame structure defining spaced walls having opposed openings therein, an upwardly opening groove adjacent the bottom of each opening, translucent display panel inserts for respectively closing said openings, each of said panels when disposed with its upper edge margin behind the wall at the top of its associated opening being upwardly shiftable edgewise to enable disposition and seating of its lower edge margin in the groove at the bottom of the opening, and a retaining member common to said panels having yieldable end portions, said end portions being angularly disposed relative to the faces of said panel and respectively associated with the rear upper edge margins of the panels for pressing the same laterally against their associated walls and deflecting the same downwardly so that the lower edge thereof is in a completely seated portion in the upwardly opening groove.

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