

July 4, 1967

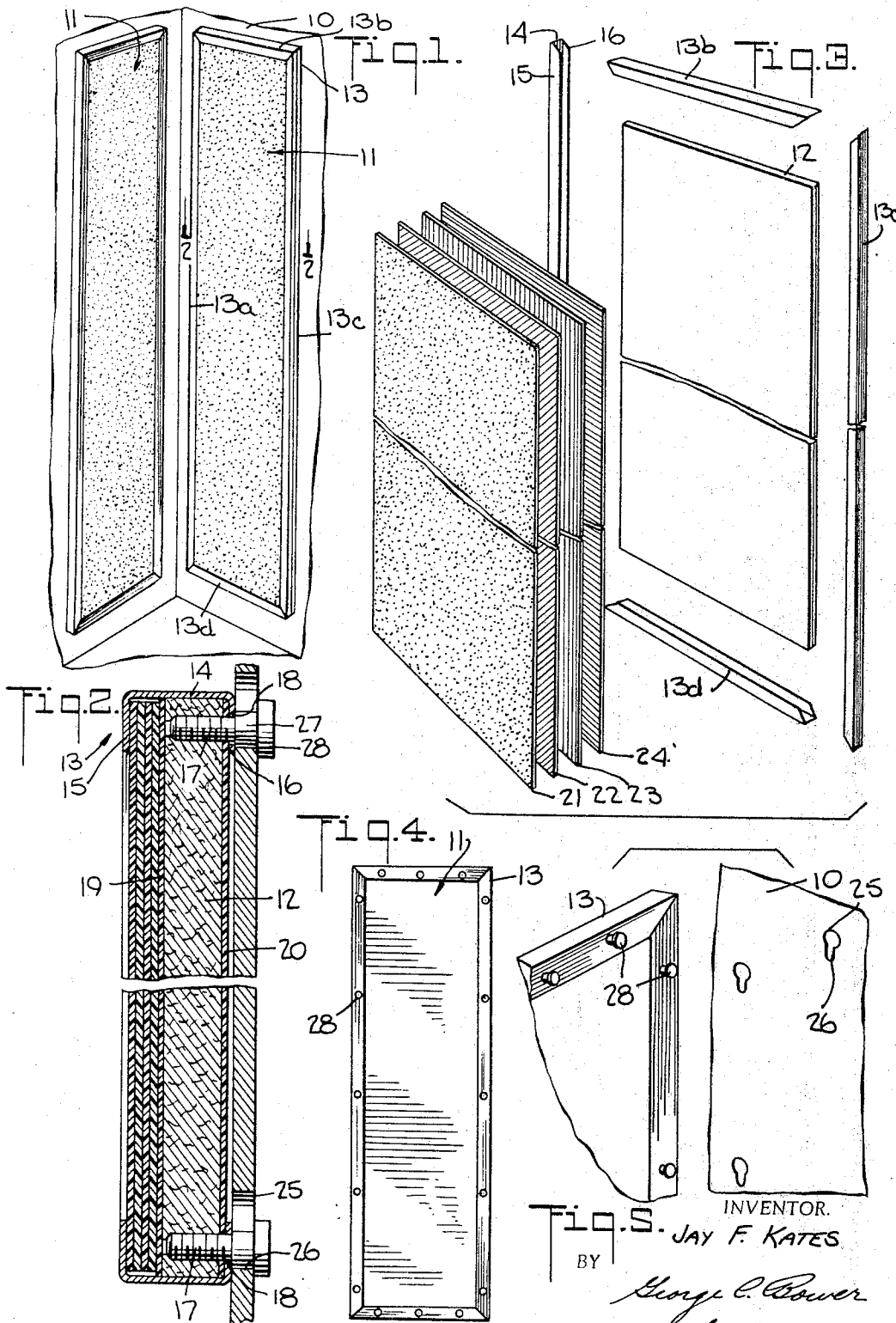
J. F. KATES

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PANELING FOR ELEVATOR CABS

Filed Oct. 29, 1964

3 Sheets-Sheet 1



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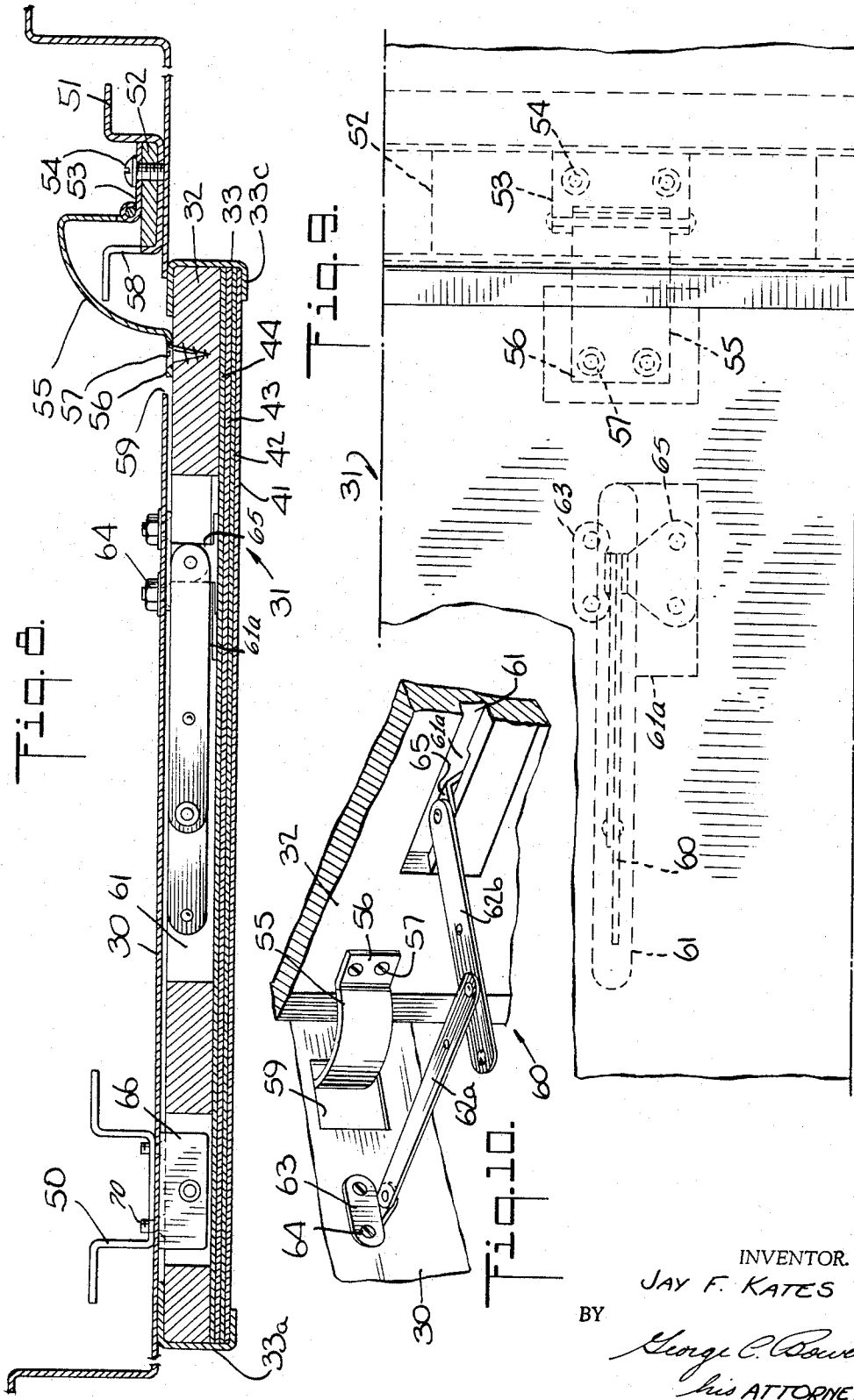
J. F. KATES

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INVENTOR.
JAY F. KATES
BY
George C. Bauer
his ATTORNEY

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PANELING FOR ELEVATOR CABS

Jay F. Kates, Jamestown, N.Y., assignor to Watson Manufacturing Company, Inc., Jamestown, N.Y., a corporation of New York

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1 Claim. (Cl. 52—65)

This is a continuation-in-part of my co-pending application Ser. No. 346,334, filed on Feb. 20, 1964 and entitled "Paneling for Elevator Cabs."

This invention relates to paneling and is directed particularly to interior panels for elevator cabs.

Elevator cabs used in passenger service are designed to have a pleasing interior. In many instances, such as department stores which change the interior decorations of the building to conform to the seasons of the year, it is desirable to also change the interior of the elevator cabs to conform to the rest of the building. Heretofore this has not been possible except for minor decorations on the ceiling and the like due to the smallness of the space and the structure of the elevator cab. Also, in many installations it is very desirable to change the interior decoration of the elevator cab to correspond with the seasons of the year. In order to do this, it was necessary to refinish the paneling of the cab, which is expensive and time consuming. Also, the interiors of elevator cabs are subject to rather excessive marring due to the smallness of the size of the cabs and the crowding that inevitably occurs from time to time. This means that either the cab has to be repeatedly refinished or be left in a rather shabby condition.

An object of the invention is to provide paneling for the walls of an elevator cab on which the interior effect can be easily and quickly changed.

Other and further objects and advantages are apparent from the following description taken in connection with the drawings, in which:

FIG. 1 is a fragmentary perspective view of the corner of an elevator cab with the paneling in place;

FIG. 2 is a sectional view of a panel taken along lines 2—2 of FIG. 1;

FIG. 3 is an exploded view of a panel;

FIG. 4 is a rear view of a panel illustrating the mounting means;

FIG. 5 is a fragmentary view illustrating the mounting of the panel on the frame of the cab;

FIG. 6 is a front view of a hinged embodiment of the paneling;

FIG. 7 is a side view of the hinged embodiment of FIG. 6;

FIG. 8 is a sectional view of the paneling in the closed position taken along lines 8—8 of FIG. 6;

FIG. 9 illustrates the panel supporting means when the panel is in a closed position;

FIG. 10 illustrates the stay partly opened;

FIG. 11 is a sectional view of the paneling in the open position;

FIG. 12 illustrates a front view of the locking means; and

FIG. 13 is a sectional view of the locking means taken along lines 13—13 of FIG. 12.

The frame 10 of the elevator cab may be of the conventional type with the panels 11 mounted thereon to form an interior wall. The panel 11 comprises a mounting board 12 of substantially the same length and width as the panel (FIGS. 2 and 3). Around the edges of the panel is a stainless steel frame 13 formed in four separable strips 13a, 13b, 13c, 13d, each of a U shape and having beveled ends matching at the corners in abutting relation. The strips 13a to 13d have a center piece 14 and front and rear pieces 15 and 16 at right angles thereto. The mounting board is preferably a flake board. However, it may be

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made of wood or a plywood sheet. The board has a substantial thickness A to form the main rigid supporting member of the panel. The strips 13a to 13d are secured to the back of the mounting board by screws 17 extending through holes 18 in the rear pieces of the strips and threaded into the mounting board. Thus the frame is rigidly secured to the mounting board to form a unitary member. Thin laminated sheets 19 and 20 are provided on the front and rear surfaces of the mounting board to provide a surfacing on both sides coextensive with the mounting board. As illustrated in FIG. 2, the center pieces 14 extend forwardly of the mounting board to space the front pieces 15 a distance B from the mounting board and form a channel or groove around the frame.

Four sheets 21, 22, 23, 24, of the same size as the frame and mounting board are positioned in layer relation between the front pieces 15 of the frame and the mounting board and fitting in the groove or channel formed thereby, with the foremost sheets 21 being presented for the interior surfacing of the panel. The four sheets may be made of a plastic material, such as "Formica," which may be rigid or slightly flexible. The plastic sheets may be of solid colors or have decorative designs thereon depending upon the type of interior that is desired. The sheets 21 to 24 may be easily removed from the frame by removing the screws 17 holding the strip 13a or 13c and sliding the sheets out. The sheets then may be changed in position and reinserted into the frame. Thus the sheets may be easily changed and at the same time stored for use at a subsequent time.

The mounting board 12 forms a firm rigid backing for the substantially thinner sheets 21 to 24. Thus the sheets may be thin and not occupy too great a space while providing a simple storage of the sheets for future use. The panels may be mounted on the frame 10 of the cab in any suitable manner so that the panels can be easily removed for rearrangement of the sheets 21 to 24. As illustrated in FIGS. 2, 4 and 5 the frames 10 have a combination hole 25 and slot 26 and the screws 17 have a head 27 and a flange 28 which is larger than the head 27. The flange fits through the opening 25 and is smaller than the slot 26 so that the head 27 can be dropped into the slot 26 and the panel firmly held in place.

In FIGS. 6 to 13 another embodiment of the paneling is illustrated in which the panel 31 is hingedly mounted on the frame 30. The panel is swung substantially normal to the frame for changing the decorative sheets.

The panel 31 comprises a mounting board 32 similar to mounting board 12. As shown in FIGS. 6, 8 and 11 a stainless steel frame 33 formed by four U-shaped strips 33a, 33b, 33c and 33d having beveled edges matching at the corners in abutting relation, similar to strips 13a—d, is secured to the mounting board by screws 37 in a similar manner as frame 13. At the front of the mounting board the strips are spaced therefrom to accommodate the four decorative facing sheets 41, 42, 43, 44 in layer relationship. The sheets 41, 42, 43, 44 are similar to sheets 21, 22, 23, 24.

As indicated in FIG. 6, on the right-hand edge are three hinge means 45, 46, 47 for hingedly supporting the panel in the open and closed position. On the back of the frame 30 are two channel shaped members 50, 51 secured by welding or other suitable means to the frame which is, in this embodiment, a sheet metal member. The channel shaped members 50 and 51 extend the full length of the panel (FIGS. 8 and 11). At the respective hinge means are reinforcing strips 52 in the channel. The hinge mounting 53 is fastened to the reinforcing member and channel by bolts 54. The panel supporting member 55 is generally U-shaped and is hingedly fastened to the hinge mounting 53 along one edge and to the mounting board by a flange 56 and screws 57 along the other edge. Notches 58 in the

U-shaped member and openings 59 are provided at each hinged means to permit the pivoted member to swing through the frame 30. Two collapsible stays 60 (FIGS. 8, 9 and 11) at the top and bottom of the panel hold the panel in the open position. The recesses 61 receive the collapsed stays when the panel is in the closed position against the frame. The upper stay is illustrated in FIG. 10 and comprises beams 62a, 62b pivotally connected, with the beam 62a having a knob fitting in a recess to hold the beams in an aligned position. The beam 62a is pivotally connected to the bracket 63 which is securely fastened to the frame 30 by nut and bolts means 64. The bracket 63 extends normal to the frame into the recess 61 when the panel is closed. The beam 62b is pivotally connected to a second bracket 65 fastened to the mounting board. The second bracket 65 is recessed in the notch 61a and extends into the recess 61 for pivotal attachment to the beam 62b. Thus the panel may be swung open for changing the decorative panels.

In the closed position the panel is locked in place and supported by L-shaped brackets 66 fastened to the frame 30 and the channel shaped member 50 by bolts 70 (FIGS. 6, 8, 11, 12 and 13). Angles are mounted at each corner and extend into recesses 71 in the mounting board. Bores or passages 72 extend through the mounting board into the recesses 71. Screws 73 are threaded in the bores and pass through holes 74 in the flanges 75 to lock and tightly hold the panel against the frame. When the decorative sheets are to be changed, the screws are threaded clear of the flanges and the panel opened. Due to the depth of the bores the screws remain in the mounting board.

The decorative sheets may be changed by unfastening the screws 73 and swinging the panel 31 outwardly to position the panel generally normal to the frame 30. The panel 31 is firmly supported in this position and the U-shaped strip 33c may be removed in a similar manner to the strip 13c and the decorative facing sheets removed or changed in position. When the desired sheet is in front, the strip 33c is replaced and the panel 31 closed. The screws 73 are then refastened in place to lock the panel on the frame. Thus the decorative sheets can be replaced or interchanged without removing the panel from the frame. This greatly expedites the change-over of the decorative sheets.

It is thus seen that the panels of the elevator cab can be easily removed or pivoted and one of the stainless steel strips removed for rearranging the decorative sheets. Or, in the case of redecorating, a new sheet or sheets may be readily inserted. An entire cab may thus be redecorated in a very short period of time at a very low cost. Further, the interior of the cab can be altered to conform with the season of the year or with any special holiday decorations. In the foregoing description four sheets have been described to correspond with the seasons of the year, but the invention is directed to a plurality of sheets and more than four may be used if desired.

The invention is set forth in the appended claim. I claim:

Mounting means for decorative facing sheets comprising a vertical frame with vertical supporting members on one side, a vertically positioned mounting board located on the other side of said frame from said vertical supporting members and having front and rear surfaces and horizontal and vertical edges, decorative facing sheets, means extending around said edges and attached to said mounting board to support said decorative facing sheets in interchangeable layer relationship with one of said facing sheets in front providing a decorative surface while the other sheets are stored between said front facing sheet and said front surfaces of said board, said facing sheet supporting means having a portion along a vertical edge detachable from said board for removal and insertion of said facing sheets parallel to said mounting board, a generally U-shaped panel supporting means movably extending through said frame and pivotally attached to one of said vertical supporting members on the opposite side of said frame to said mounting board and secured to said mounting board along a vertical edge opposite to said detachable portion of said mounting means for pivoting said mounting board in relation to said frame, a recess in said mounting board, an angle mounted on said frame for fitting into said recess, and fastening means extending through said mounting board generally normal to said angle to removably interfit therewith and lock said mounting board in cooperation with said U-shaped panel supporting means against said frame and permitting on removal thereof the pivoting of said mounting board into an angular position with said frame for removal of said detachable portion and rearrangement of said facing sheets by removal and insertion of said facing sheets at said exposed vertical edge of said mounting board opposite to the attachment of said U-shaped panel supporting means.

References Cited

UNITED STATES PATENTS

1,127,223	2/1915	Fogle	40—63
1,467,476	9/1923	Farner	40—102 X
1,475,025	11/1923	Newman	40—102 X
1,829,541	10/1931	Rider	40—63
1,834,423	12/1931	Rider	40—102 X
1,846,366	2/1932	Shattuck	52—623
2,031,875	2/1936	Dobie	52—476
2,224,727	12/1940	Friede	52—32
2,621,429	12/1952	Teich	40—152.1
2,838,592	6/1958	Feketics	52—463
2,900,750	8/1959	Buelow	40—152.1
3,040,848	6/1962	Powell	52—623
3,103,708	9/1963	Pomeroy	52—623

FRANK L. ABBOTT, *Primary Examiner*.

R. A. STENZEL, *Assistant Examiner*.