

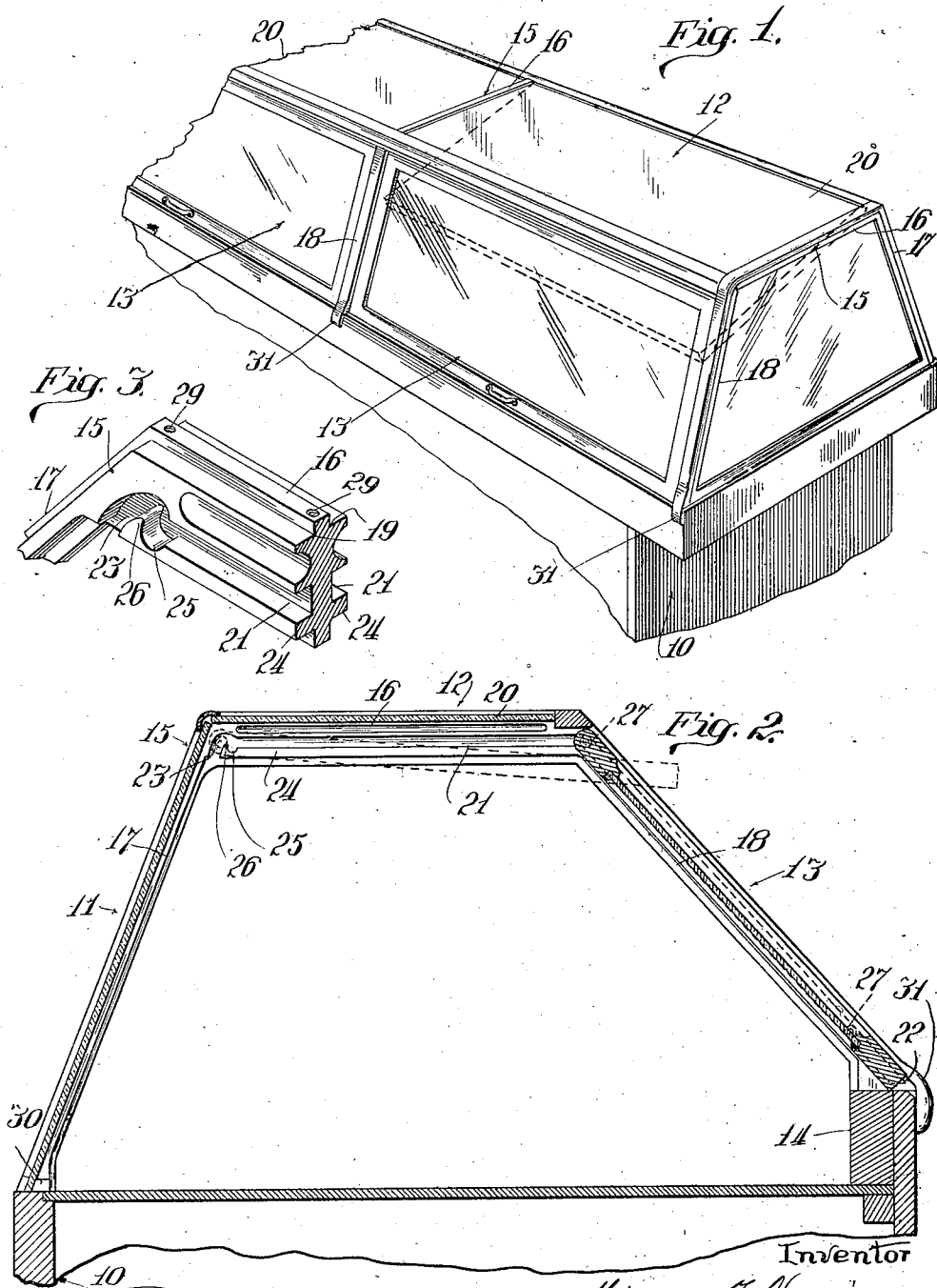
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DISPLAY CASE

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DISPLAY CASE.

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My invention relates to a refrigerator counter or display case for perishable articles of food, such as meat and the like; the invention relating more particularly to the casing frame and method of mounting the doors at what may be termed the rear side of the case.

The object of my invention is to provide a construction whereby the doors, which are arranged to slide vertically, will be held in more or less non-air admitting relation with the frame, while at the same time permitting the easy removal of the door or sash from the casing for purposes of cleaning or when occasion requires and also permit the door or glass panel to be quickly put back into place.

The objects and advantages of my invention will be readily comprehended from the detailed description of the drawing, wherein:—

Figure 1 is a perspective view of a portion of a display case with my improvement; the open or raised position of one of the doors or glass-holding sashes being shown in dotted lines.

Figure 2 is a vertical cross-sectional view, with portions of the bottom broken away.

Figure 3 is a detail perspective view of the upper forward corner of the frame.

The invention relates to the method of mounting the upwardly sliding doors or panels of a display case adapted to be placed or mounted on a suitable supporting structure or counter, partially shown at 10 in Figure 1. Cases of the type in question are usually of the elongated rectangular construction shown having the rearwardly inclining front wall 11, top wall 12, while the rear wall consists of a suitable number of slide doors or sashes 13 usually arranged at a somewhat greater inclination to the perpendicular as shown more clearly in Figure 2; the lower end of the door or sash when closed being in contact with the lower rear wall portion 14 of the case.

The case consists of the transversely arranged frame members located at 15, a portion whereof is shown in Figure 3; the frame members being located at the ends of the display case and also at intermediate points, especially when the case is of such length as to require a number of doors or sashes.

The frame members, which may be of any suitable material, preferably metal, consist

of the intermediate top portion 16, and the two downwardly sloping end portions 17, 18; the end portion 18 being preferably arranged at a greater inclination to the perpendicular than the front portion 17. The frame member disclosed in the drawing is formed of metal, with the upper outer surface of the top and forward end portions kerfed as shown at 19 to provide a suitable ledge for the glass panels 20, 20.

The top intermediate portion 16 and the rear end portion 18 are provided in the side face thereof with a channel or groove 21. The groove extends from the point 22 at the lower end of the rear end or leg 18, upwardly and continues in the angularly disposed manner, extending lengthwise of top intermediate frame portion 16, and terminates in the upwardly and downwardly curved open end 23, see Figure 3.

The longitudinal rib 24 of the top intermediate frame portion 16 which forms the lower wall of channel or groove 21, at the open curved end of the groove, is socketed at 25 so as to provide a pocket or recess slightly beneath the plane of the groove or channel; the end of rib 24 being of slightly greater thickness so as to provide the upstanding lip 26 which extends into the horizontal plane of the groove 21, intermediate of socket 25 and the downwardly disposed open end 23 of the groove or channel 21.

The glass-holding sash of the doors 13 is adapted to fit in sliding relation with the sides of opposing frames 15; and the opposite ends of the sliding sash—which may be of wood or other suitable material—are each provided with projecting pins or small rollers, indicated at 27, 27 projecting from points adjacent to the upper and lower edges of the sash or door frames. These pins or projecting rollers are adapted to enter the groove 21 to retain the sash or door in place, while at the same time permitting the sash to slide upwardly into open position.

The glass holding sash or door is put into place by first passing the pins at the lower end of the sash through the end 23 of the channel so as to pass the pin over the lip or lug 26 into groove or channel 21; then sliding the sash rearwardly until the pin adjacent to the top of the sash is brought to register with slot end 23, moving said pin upward and over lip 26 and into the groove or channel 21, at which time the sash will be in place

and may be moved rearwardly and downwardly into closed position with the lower sash pin or roller 27 at the lower end of groove or channel 21.

5 The frame members 15 are usually provided with a finish strip or metal trim, secured to the frame for example by small screws which screw into suitable tapped holes in the top edge or surface of the frame
10 members, as shown at 29 in Figure 3. Where the sash is not in snug sliding relation at its sides with the frame members, it is apparent that after one end of the sash or door has been freed from the channel or groove 21,
15 that forward movement of one end of the sash and rearward movement of the other end of the sash will free the other pins or rollers from the grooves or channels. The sash may be slid upwardly into open position as shown in dotted lines in Figure 1, to
20 permit access to the interior of the case and its contents; the pins at the upper end of the sash, due to the weight of the sash, dropping into the socket 25, causing the sash to
25 remain in open position.

As the sash when moved to open position is disposed beneath the top glass panel 20, it is apparent that proper access for cleaning the inner surface of the glass is impos-
30 sible. For this reason, the mounting of the sash must be of a type that will permit the door or sash to be easily removed when occasion requires. This may be quickly accomplished by moving the top end of the sash
35 upwardly so as to cause the pins 27 at the end to move over the lip or lug 26 and thence through the open end 23 of slot 21. The sash, with its top end free and dropped down, is then moved forwardly until the pins
40 27 at the lower end of the sash are brought at the open end 23 of the slot. The sash is now free from the case and may be removed therefrom. Where entire removal of the sash is not desired or necessary, it is appar-
45 ent that after the pins at the top end of the sash have been passed through the open end 23 of the groove 21 as described, the bottom end of the sash may be moved backward so as to bring the lower pins 27 adja-
50 cent to the bottom 22 of the groove or channel 21, permitting the free end of the sash to rest on the bottom of the case.

To replace the sash, the pins 27 at the top free end are brought to register with the
55 open end 23 of the groove and forced upwardly over the lip or lug 26; and where the sash has been entirely removed, the pins 27 at the lower end of the sash are first brought to register with the open end 23 of
60 the groove or channel 21 and forced over lip 26; the lower end of the sash moved toward the rear end of the case sufficiently to permit the top of the sash to be swung upwardly until the pins at the top register with
65 the slot end 23, when they are forced over

the lip 26, thus placing the sash in proper position.

Where the frames 15 are at the ends of the display case, merely one side of the frame is provided with the pin receiving channel or
70 groove 21; while the intermediate frame or frames, namely where a sash is arranged on opposite sides of the frame, it will be understood that both side surfaces of such inter-
75 mediate frames are provided with similar grooves or channels 21.

The ends of the frames 15 are provided with suitable extensions as at 30 and 31, whereby the frames may be properly secured
80 to the body portion of the display case; the extension 31 at the rear side of the display case being preferably formed to extend downwardly in lapping relation with the rear wall portion 14 of the display case.

I have shown and described what I be-
85 lieve to be the simplest embodiment of my invention; it being understood, however, that certain modifications may be made without departing from the spirit of my inven-
90 tion.

What I claim is:

1. In a display case of the character described, transversely disposed frame members arranged in predetermined parallel
95 spaced relation, each member constituting a top and two side portions, the opposing surface of the top and one side portion intermediate of the upper and lower edges thereof being provided with a continuous channel
100 extending from the lower end of said side portion upwardly lengthwise of the top portion and terminating in an open end in the forward end of the top portion, an up-
105 wardly disposed stop lug, integral with the member arranged in advance of said open end arranged so as to permit passage there-
above, in combination with a sash provided with projecting pins at both ends adapted to enter said channel and to slide lengthwise
110 thereof and arranged to permit passage over said stop-lug.

2. In a display case of the character described, a plurality of transversely disposed frame members arranged in predetermined
115 spaced parallel relation, each member comprising a continuous metal bar formed to provide a top portion and two side wall portions having perpendicular side faces, the side faces of one side portion and of the top
120 portion being provided with a channel extending continuously throughout said side portion and the top portion with the channel in the top portion terminating in an up-
125 wardly and thence downwardly disposed end opening at the lower longitudinal edge of said member, and a sash adapted to slide upwardly between the opposing faces of the members, the opposite ends of the sash being
each provided with a pair of projecting pins located adjacent to the upper and lower ends 130

of the sash and adapted to slide in the channels.

3. A display case of the character described, comprising transversely arranged
5 upstanding single piece frame members formed to provide a top wall and two side wall-supporting portions, the top and one of the side wall portions being chamfered to support the top and side wall glass panels,
10 the other side portion and the top supporting portion being provided with a channel extending from the lower end of said side portion upwardly and lengthwise of the top portion, the channel terminating in the top
15 portion in an upwardly and thence downwardly curved open end, and a glass holding sash having outwardly disposed pins adjacent to the top and bottom in the opposite ends thereof, said pins being adapted to
20 enter said channels to permit vertical sliding movement of the sash and removal of said sash by passing the pins through the upwardly and thence downwardly curved open ends of the channels.

4. A display case of the character described, comprising transversely arranged
25 frame members composed of a single piece formed to provide a top wall supporting and two side wall supporting portions, the top and one side wall supporting portion being
30 chamfered to receive top and side wall forming panels, while the top beneath said chamfer and the other side wall supporting portion are provided with a channel extending
35 upwardly from the lower end of said side wall portion and lengthwise of the top and terminating in the top portion adjacent to the first mentioned side wall portion in a
40 downwardly disposed open end, a depression or socket in said channel adjacent to the open end, an integral upwardly disposed stop lug in said channel intermediate of the
45 socket and said open end, and a rigid sash provided with projections at opposite ends, adapted to enter the channels of the cor-
related frame members whereby the sash may be moved upwardly into open position.

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