Aug. 9, 1938. F. W. HOLDERLE ET AL 2,126,111

DISPLAY CASE

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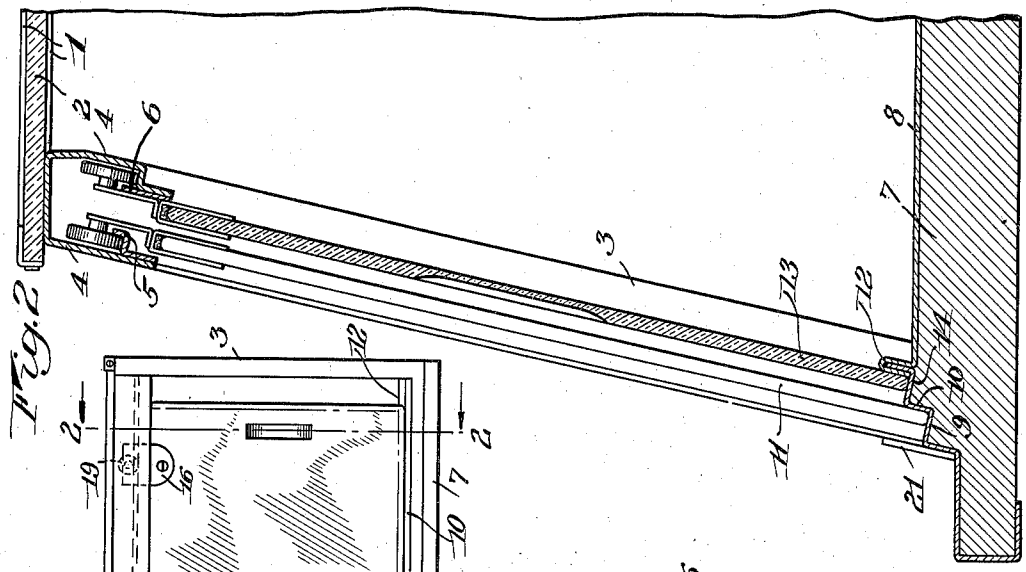

Fig. 2

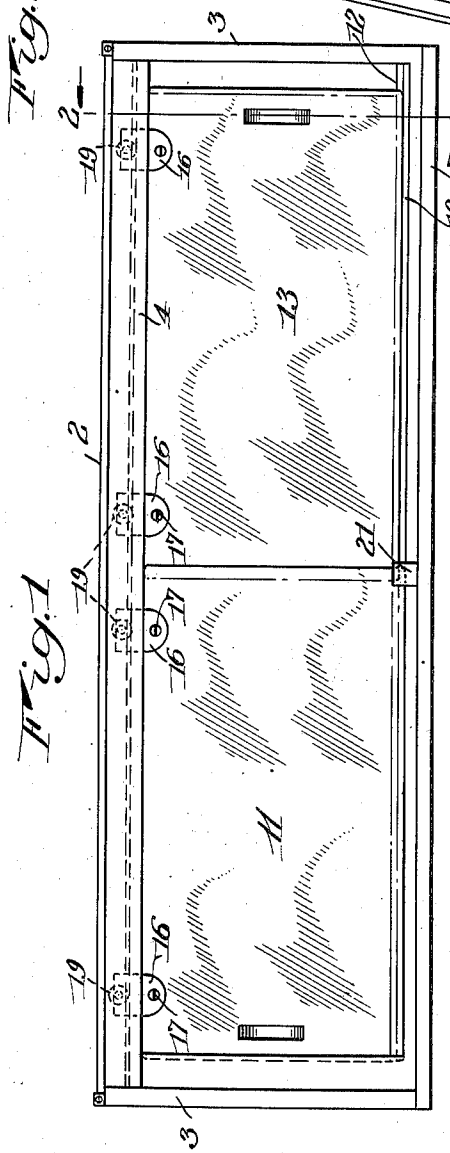

Fig. 1

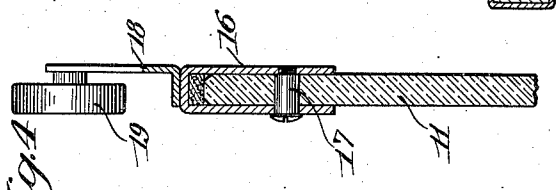

Fig. 4

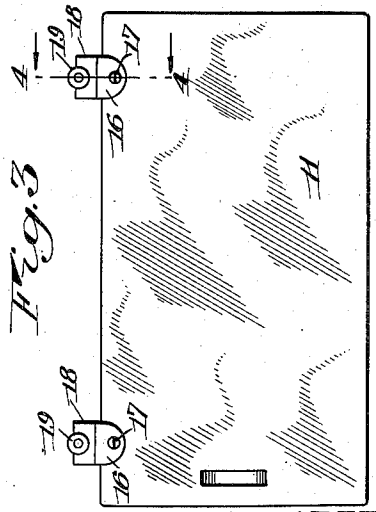

Fig. 3

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DISPLAY CASE

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Application May 25, 1937, Serial No. 144,685

4 Claims. (Cl. 312—138)

This invention relates to a display case, with more particular reference to the general type of case which contains top and front walls of glass and is accessible from the rear through slidably removable closures or doors.

One object of the invention is to afford a slidable door construction adaptable to a display case of the type mentioned, which can be easily manipulated when in operative relationship and which is easily positionable in or removable from the case.

A further purpose of the invention is to afford a structure that can be advantageously used in connection with a glass door or closure, so that the glass is held firmly with little likelihood of accidental breakage, and can be easily moved by a sliding action back and forth to permit access to the interior of the case.

Still a further purpose of the invention is to afford an arrangement that permits of easily removing the door from operative position when the case is to be disassembled or for cleaning purposes, and which eliminates unsanitary and unclean channels or guideways for the bottom edge of such a door, while at the same time arranging the door in such a manner that it closes the case effectively and tightly.

To these and other ends, the invention consists in the construction and arrangement of parts that will appear clearly from the following description when read in conjunction with the accompanying drawing, the novel features being pointed out in the claims following the specification.

In the drawing:

Fig. 1 is a view in rear elevation of a display case provided with slidable doors or closures constructed in accordance with one embodiment of the invention;

Fig. 2 is a transverse vertical sectional view on the line 2—2 of Fig. 1 looking in the direction indicated;

Fig. 3 is a view in elevation of one of the doors removed from the case, and

Fig. 4 is a transverse vertical sectional view on the line 4—4 of Fig. 3 looking in the direction indicated.

The invention may be applied in different ways, and is illustrated in conjunction with a display case which includes transverse top metal partitions 1 for supporting the glass panels 2, the partitions 1 being supported on uprights 3. Permanently connected to the uprights 3, at its ends, is a channel member 4 which is provided with longitudinally extending tracks at the front and rear formed by the front and back walls of the channel member and by the flanges 5 and 6 respectively. The walls of the channel member are so constructed and arranged that said tracks are inclined to a horizontal plane, and disposed one slightly above the other, as shown in Fig. 2.

The base of the display case is indicated at 7, formed of wood or other suitable material and covered with Monel metal or other sheet metal as indicated at 8. The base and metal covering are formed to afford an inclined bottom surface 9 and an upwardly extending inclined surface 10 against which the outer door 11 rests, and the metal covering 8 is preferably constructed to afford a longitudinal, upwardly extending inclined flange 12 against which the inner door 13 rests at its lower edge, while 14 is a bottom surface on the base extending parallel to the lower edge of the inner door 13. The previously mentioned uprights 3 are preferably inclined, and likewise the tracks in the channel member 4, to the same extent as the surface 10 and flange 12 of the base, so that the doors 11 and 13 when in operative position are in the inclined position shown in Fig. 2, resting at their lower edges and by their own weight against the inclined surfaces 10 and 12 of the base.

Each door is removably supported on one of the tracks in the channel member, preferably by a pair of carriers, each of which includes a U-shaped member 16 secured to the glass door by a screw 17 extending through one arm of the member 16, through an opening in the glass door, and having threaded engagement with the other arm of the member 16. Permanently attached to the member 16, as by a welded connection or otherwise, is an L-shaped arm 18 carrying a roller 19.

This is the preferred construction employed for the door 11 which occupies the rearmost plane, and the forwardly positioned door 13 is supported by similarly constructed carriers, except that the rollers extend from opposite sides of the arms 18, as shown in Fig. 2. The doors are mounted in two different planes and arranged so that one may be moved past the other. Intermediate the ends of the doors when in closed position, there is arranged a retaining member 21 in the form of a plate or lug permanently attached to the base by welding or otherwise in the position shown in Fig. 2, and extending upwardly adjacent to the outer surface of the outermost door. In order to remove the doors, the outer door 11 is lifted until its lower edge clears the lug 21 and then by swinging its upper end inwardly

until its rollers 19 clear its track, it can be dropped downwardly and entirely removed from the case, after which the inner door 13 can be similarly removed, these parts being positioned within the case by movements the reverse of that just described.

While the invention has been set forth in connection with a specific arrangement, it is not confined to the precise details herein shown, and this application is intended to cover any departures or modifications coming within the intent of the improvements or the scope of the following claims.

We claim:

1. In a display case, the combination with a track that is inclined to the horizontal and includes an upstanding inclined flange and an opposite inclined wall, of a carrier including an arm slidably engaging said flange and projecting therabove, a roller mounted on said arm and having a narrow cylindrical engaging surface seated on the track between said flange and the opposite wall, the roller being spaced from said wall, an inclined door supported on said carrier, and a base having an upwardly inclined surface against which the lower part of said door rests and a bottom surface beneath the lower edge of said door.

2. In a display case, the combination with a supporting channel having tracks extending along its opposite walls, said tracks being inclined to the horizontal, located one above the other and including upwardly extending flanges spaced from the side walls of the channel and from each other, a base having bottom surfaces one above the other and inclined upwardly extending surfaces one above the other, inclined doors having their lower edges in juxtarelation to the aforesaid bottom surfaces and resting against the aforesaid upwardly inclined surfaces, said doors being provided at their upper ends with supporting rollers having narrow cylindrical engaging surfaces traveling on the aforesaid tracks between the side walls of the channel and said upwardly extending flanges, the latter being spaced from each other sufficiently to permit the removal of said rollers therebetween, and the channel having sufficient space above said rollers to permit the doors being lifted so that the rollers may clear said flanges to permit removal.

3. In a display case, the combination with parallel inclined tracks located one above the other and including upwardly extending flanges at their adjacent edges, a base having bottom surfaces one above the other and inclined upwardly extending surfaces one above the other, inner and outer inclined doors having their lower edges in juxtarelation to the aforesaid bottom surfaces and resting against the aforesaid upwardly inclined surfaces, said doors being provided at their upper ends with supporting carriers each including an arm extending above the aforementioned flanges on the tracks, rollers mounted on said arms and seated on the tracks between said flanges and the opposite walls, the aforesaid arm of the inner door engaging the adjacent flange on its track with its roller in spaced relation thereto and the roller on the outer door engaging the flange on its track with its arm in spaced relation thereto.

4. In a display case, the combination with a supporting channel having tracks extending along its opposite walls, said tracks being inclined to the horizontal, located one above the other and including upwardly extending flanges spaced from the side walls of the channel and from each other, a base having bottom surfaces one above the other and inclined upwardly extending surfaces one above the other, inner and outer inclined doors having their lower edges in juxtarelation to the aforesaid bottom surfaces and resting against the aforesaid upwardly inclined surfaces, carriers secured to the upper ends of the doors and including arms extending above the aforesaid flanges of the tracks, rollers mounted on said arms and having narrow cylindrical surfaces traveling between said flanges and the side walls of said channel, said arms on the inner door engaging said flange on the inner track with their rollers spaced therefrom, and the rollers on the outer door engaging the adjacent flange of the outer track with their arms spaced therefrom, the flanges being spaced from each other sufficiently to permit removal of said rollers therebetween, and the channel having sufficient space above said rollers to permit the doors being lifted so that the rollers may clear said flanges to permit removal.

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