

No. 764,923.

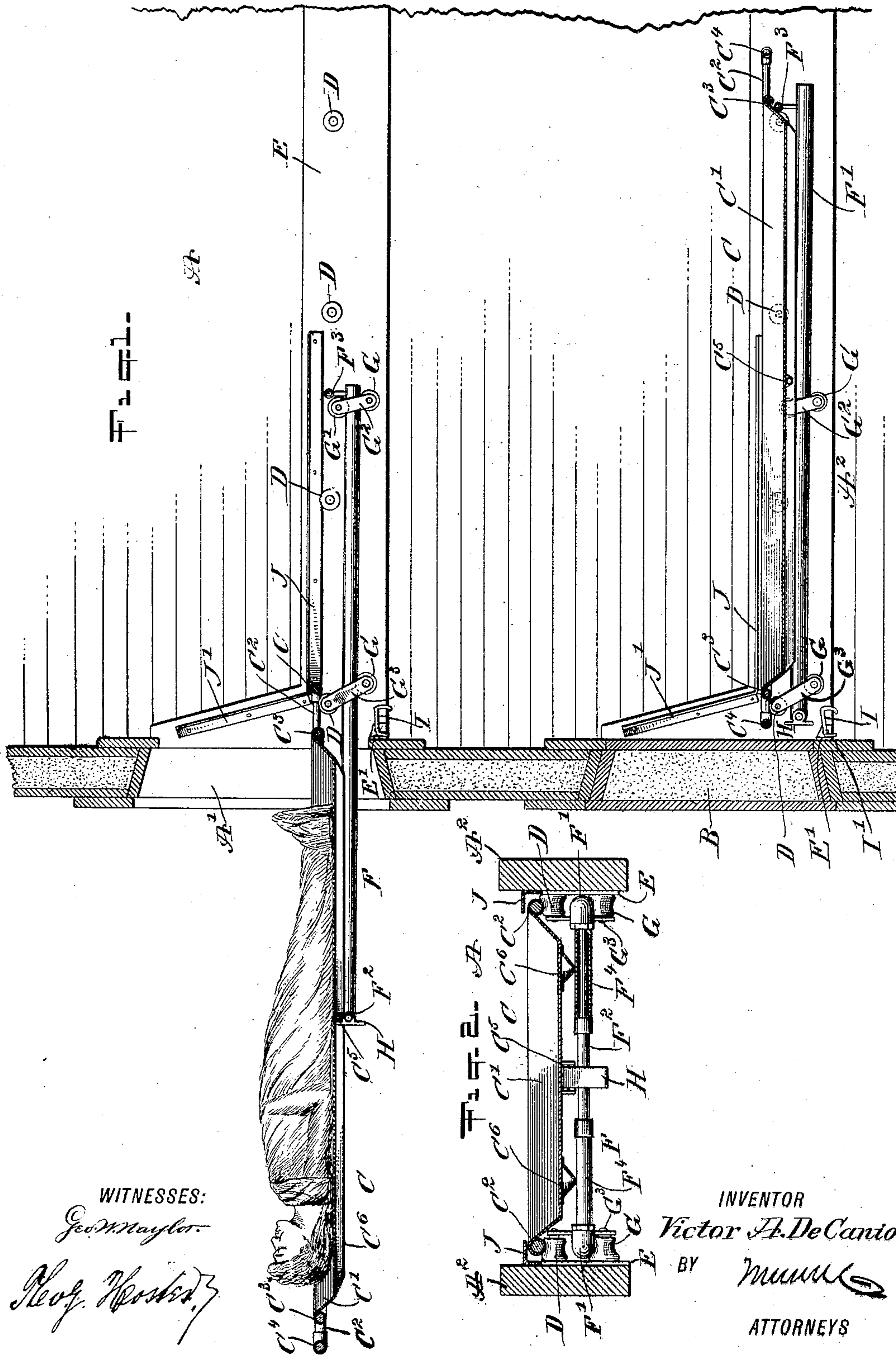
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V. A. DE CANIO.
SUPPORT FOR REFRIGERATING CHAMBERS.

APPLICATION FILED DEC. 3, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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SUPPORT FOR REFRIGERATING-CHAMBERS.

SPECIFICATION forming part of Letters Patent No. 764,923, dated July 12, 1904.

Application filed December 3, 1903. Serial No. 183,599. (No model.)

To all whom it may concern:

Be it known that I, VICTOR A. DE CANIO, a citizen of the United States, and a resident of Union Hill, (Weehawken P. O.,) in the county of Hudson and State of New Jersey, have invented a new and Improved Support for Refrigerating-Chambers, of which the following is a full, clear, and exact description.

The invention relates to refrigerators; and its object is to provide a new and improved movable support for use in ice-boxes and other refrigerating-chambers—such, for instance, as are used in hospitals, morgues, and the like—and arranged to permit convenient removal of the supporting-tray from the refrigerating-chamber or replacing it therein.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement as applied to a refrigerating-chamber such as is used in morgues, hospitals, and like institutions. Fig. 2 is a transverse sectional elevation of the same. Fig. 3 is an enlarged sectional side elevation of the improvement, showing the tray and frame within the chamber. Fig. 4 is a perspective view of the tray; and Fig. 5 is a perspective view of the supporting-frame, parts being shown dismembered.

The refrigerating-chamber A, of any approved construction, is provided with the usual door-openings A', each adapted to be closed by a door B, and through each opening is adapted to be moved a tray or like supporting structure C for supporting a corpse or an article or a substance to be kept cool in the chamber A. The tray C shown in the drawings consists of a shallow body C', preferably made of sheet metal and having the upper ends of the sides and ends attached to tubular side rails C² and end rails C³, connected with each other, of which the side rails C² are somewhat

extended beyond the end rails C³, and the extended portions are connected with each other by cross-bars C⁴, forming handles for conveniently carrying the tray and its load about or otherwise manipulating the tray, as hereinafter more fully described. The side rails C² of the tray C are adapted to travel on longitudinal guideways D, preferably in the form of grooved rollers, journaled on studs attached to plates E, secured to the side walls A² of the chamber A, as plainly indicated in Figs. 1 and 2.

Underneath the tray C is arranged a frame F, preferably rectangular in shape (see Fig. 5) and formed by side rails F' F', a front cross-bar F², and a rear removable cross-bar F³, the side rails F' of the frame F being mounted to travel on guideways G, preferably in the form of rollers and similar to the guideways D and likewise journaled on studs carried by the plates E.

On the front cross-bar F² is hung a gravity-catch H, adapted to be engaged by a roller or similar projection C⁵, held on the under side of the body C' of the tray and located approximately midway between the front and rear ends of the tray.

When the several parts are in the position shown in the lower portion of Fig. 1—that is, the tray C and frame F are contained within the chamber A—and it is desired to remove the tray from the chamber through the open door-opening A', then the operator takes hold of the front cross-bar C⁴ of the tray and pulls on the same, so as to slide the tray lengthwise out through the door-opening A', and when the projection C⁵ comes in contact with the catch H then on the further outward movement of the tray the frame F is carried along, the latter sliding along on its guideways G. When the tray and frame reach the outermost position, as shown in the uppermost portion of Fig. 1, then the tray can be readily lifted off from its first roller on the guideway D and off the front cross-bar F² of the frame to carry the tray and its contents to a desired place.

On the under side of the body C' of the tray are arranged longitudinally-extending guide

ways or rails C^6 , adapted to travel on friction-rollers F^4 , journaled on the front cross-bar F^2 of the frame F , so that when the tray is returned to be passed back into the chamber A then the rear ends of the said rails C^6 are placed on top of the friction-rollers F^4 of the extended frame F , and then the operator by pushing on the front cross-bar C^4 can readily slide the tray inward, so that the side rails C^2 quickly engage the guideways D in the chamber A . When the projection C^5 moves in contact with the upper end of the gravity-catch H , then it merely swings the catch H in a horizontal position for the projection C^5 to pass onto when the tray C has advanced sufficiently far inward for the outer cross-bar C^4 to come over the cross-bar F^2 of the frame F , and then the operator can also take hold of the cross-bar F^2 to shove the frame and tray simultaneously into the final position within the chamber A , as indicated in the lower portion of Fig. 1. (See also Fig. 3.)

In order to prevent the frame F from tipping over when in an outermost position, retaining-rollers G' are provided, journaled on the frame E and located above the rollers or guideways G , the rollers G' engaging the top surfaces of the side rails F' of the frame. The rollers G' also form stops for the outward movement of the frame F , as the rear cross-bar F^3 abuts against the rollers G' at the time the frame F has moved into an outermost position. (See Fig. 1.)

In order to prevent the frame F from leaving its guideways, the rear rollers of the guideways G are connected with the rollers G' by retaining-plates G^2 , extending along the inner faces of the side rails F' of the frame F , and similar plates G^3 connect the front rollers of the guideways G and D with each other.

When it is desired to slide the tray C out of the chamber A without carrying the frame F along, as above explained, the following device is provided: Within the chamber A , at the inner face of the front wall thereof, is arranged a trip I , pivoted at I' on a suitable bracket E' , attached to the inner face of the front wall of the chamber, as plainly shown in Fig. 3. On the free end of the trip I is arranged an angular arm I^2 , adapted to engage the gravity-catch H , when the trip I is swung upward into the position shown in Fig. 3, to hold the gravity-catch H in a horizontal position, so that when the tray C is drawn outward its projection C^5 passes over the top of the gravity-catch H without taking the latter and the frame F along. The trip I when in an uppermost position extends into the door-opening A' , as plainly indicated in Fig. 3, and when the door B of the chamber is closed then it moves in contact with the trip I to swing the same downward into an inactive position to release the gravity-

catch H , which then again assumes its normal vertical position. The trip I is provided at its pivoted end with a heel I^3 , abutting against the bracket E' at the time the trip I is swung into a lowermost inactive position, as indicated in Fig. 1 and in dotted lines in Fig. 3. The gravity-catch H is provided in its hub with a longitudinal slot H' , (see Fig. 3,) through which extends a pin H^2 , secured to the cross-bar F^2 , so as to limit the swinging motion of the said gravity-catch H from a vertical to a horizontal position, as will be readily understood by reference to the drawings.

In order to prevent the tray C from tipping over accidentally when drawn into an outermost position, together with the frame F , as previously explained, a retaining guide-rail J is provided, secured to each plate E and adapted to extend over the corresponding side rails C^2 of the tray at the time the tray is drawn outward, together with the frame F . Each rail J is provided at its front end with a guard-rail J' , slightly inclined forwardly and upwardly to enable the operator to readily guide the rear cross-bar C^4 down under the rail J and onto the guideway D when placing the tray C in position for pushing the tray back into the chamber A .

The roller forming the projection C^5 is preferably covered with rubber or similar material to reduce the noise incident to the roller coming in contact with the catch H .

The rear cross-bar F^3 is held removably on the side rails F' of the frame to permit of removing the cross-bar F^3 whenever it is desired to draw the frame F out of the chamber A for repairs or other purposes.

Although the device is shown in connection with a refrigerating-chamber, I do not limit myself to this application, as it may be used for other purposes, and I also do not limit myself to the detail construction shown and described, as the same may be varied without deviating from the spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A support for refrigerating-chambers and the like, comprising a slidable frame having a limited sliding motion in the chamber, and a removable tray slidable on the said frame, the tray and frame having independent guided movement in the chamber, as set forth.

2. A support for refrigerating-chambers and the like, comprising a frame slidably held in the chamber, and a tray removably held on the frame and mounted to slide partly on supports in the chamber and partly on said frame, as set forth.

3. A support for refrigerating-chambers and the like, comprising two sets of guideways in the chamber, a frame mounted to slide on one set of the said guideways, and a tray removably held on the said frame and mounted

to slide lengthwise on the other set of guideways and partly on the frame, as set forth.

4. A support for refrigerating-chambers and the like, comprising a frame mounted to slide in the chamber and partly through a door in the chamber, to extend to the outside thereof, and a tray having longitudinal rails at the under side and mounted to travel over rollers journaled in the front end of the frame, as set forth.

5. A support for refrigerating-chambers and the like, comprising two sets of guideways in the chamber, a frame mounted to slide on one set of the said guideways, a tray removably held on the said frame and mounted to slide lengthwise on the other set of guideways and partly on the frame, means for limiting the outward movement of the frame in the chamber, and means for limiting the outward movement of the tray on the frame, as set forth.

6. A support for refrigerating-chambers and the like, comprising sets of guideways in the chamber, a frame slidable on one set of the said guideways, to extend partly through the door of the chamber to the outside thereof, a tray removably held on the said frame and mounted to slide on the second set of the said guideways and the said frame, means for limiting the outward and inward sliding movement of the said frame in the chamber, and means for limiting the outward and inward sliding movement of the said tray on the frame, as set forth.

7. A support for refrigerating-chambers and the like, comprising a frame slidable in the chamber, a tray slidable on the frame and having guided movement in the chamber above the frame and independent of that of said frame, and means on the tray for engaging the frame after the tray is partly drawn out, to draw the frame out on the further outward movement of the tray, as set forth.

8. A support for refrigerating-chambers and the like, comprising a frame slidable in the chamber, a slidable tray having guided movement in the chamber, above the frame and independent thereof, a movable catch on the outer end of the frame, means on the bottom of the tray for engaging the said catch at the time the tray is partly drawn out of the chamber, to draw the frame out by the tray on the further outward movement thereof and means for holding the catch out of the path of the means on the tray to permit the tray to be drawn out without drawing out the frame, as set forth.

9. A support for refrigerating-chambers and the like, comprising a frame slidable in the chamber, a tray slidable in the chamber, above the frame and independent thereof, a movable catch on the frame, means on the tray for engaging the said catch at the time the tray is partly drawn out of the chamber, to draw the frame out by the tray on the

further outward movement thereof, and a trip in the chamber, for engaging the catch, to hold the latter out of the path of the said means, as set forth.

10. A support for refrigerating-chambers and the like, comprising a frame slidable in the chamber, a tray slidable in the chamber, above the frame and independent thereof, a movable catch on the frame, means on the tray for engaging the said catch at the time the tray is partly drawn out of the chamber, to draw the frame out by the tray on the further outward movement thereof, and a trip in the chamber, for engaging the catch, to hold the latter out of the path of the said means, the said trip being arranged to extend into the door-opening of the chamber, for the door to move the trip into a non-active position on closing the door, as set forth.

11. A support for refrigerating-chambers and the like, comprising a slidable frame, a slidable tray, the tray and frame having independent guided movement in the chamber, means for moving the frame with the tray after the latter has been partly withdrawn from the chamber, to partly withdraw the frame from the chamber, for the outer end of the frame to support the tray, and means in the chamber for engaging the inner end of the tray, to hold the latter in a horizontal position when the tray and frame are both drawn into an outermost position, as set forth.

12. A support for refrigerating-chambers and the like, comprising a slidable frame, a slidable tray, the tray and frame having independent guided movement in the chamber, means for moving the frame with the tray after the latter has been partly withdrawn from the chamber, to partly withdraw the frame from the chamber, for the outer end of the frame to support the tray, means in the chamber, engaging the said frame, to prevent the latter from tipping when drawn out, and means in the chamber for engaging the inner end of the tray, to hold the latter when it and the frame are drawn into an outermost position, as set forth.

13. A support for refrigerating-chambers and the like, comprising a frame mounted to slide in the chamber and adapted to pass with its front portion through the door-opening of the chamber, a gravity-catch on the front end of the frame, and a trip pivoted in the casing and adapted to hold the said catch in a non-active position, the trip extending into the door-opening, to be engaged by the door when closing the same, to swing the trip out of engagement with the catch, to release the latter, as set forth.

14. A support for refrigerating-chambers and the like, comprising a frame mounted to slide in the chamber and adapted to pass with its front portion through the door-opening of the chamber, a gravity-catch on the front end of the frame, and a trip pivoted in the casing

and adapted to hold the said catch in a non-active position, the trip extending into the door-opening, to be engaged by the door when closing the same, to swing the trip out of engagement with the catch, to release the latter, 5 the said catch having a limited swinging motion on the frame, as set forth.

15. A movable support for refrigerating-chambers and the like, provided with two sets 10 of guideways in the chamber, a frame mounted to slide on one set of guideways, a tray having side rails, adapted to travel on the other set of guideways, a retaining-rail over the guideways, for preventing upward movement 15 of the frame side rails, and a guide-rail extending upwardly and forwardly from the

front end of the guard-rail, to guide the tray in position on the guideways, as set forth.

16. A movable support provided for refrigerating-chambers and the like, provided with 20 guideways and retaining-rollers in the chamber, and a frame slidable on the guideways and having a removable rear cross-bar, as set forth.

In testimony whereof I have signed my name 25 to this specification in the presence of two subscribing witnesses.

VICTOR A. DE CANIO.

Witnesses:

SAM. E. MILLER,

HARRY K. LETTERMAN.