

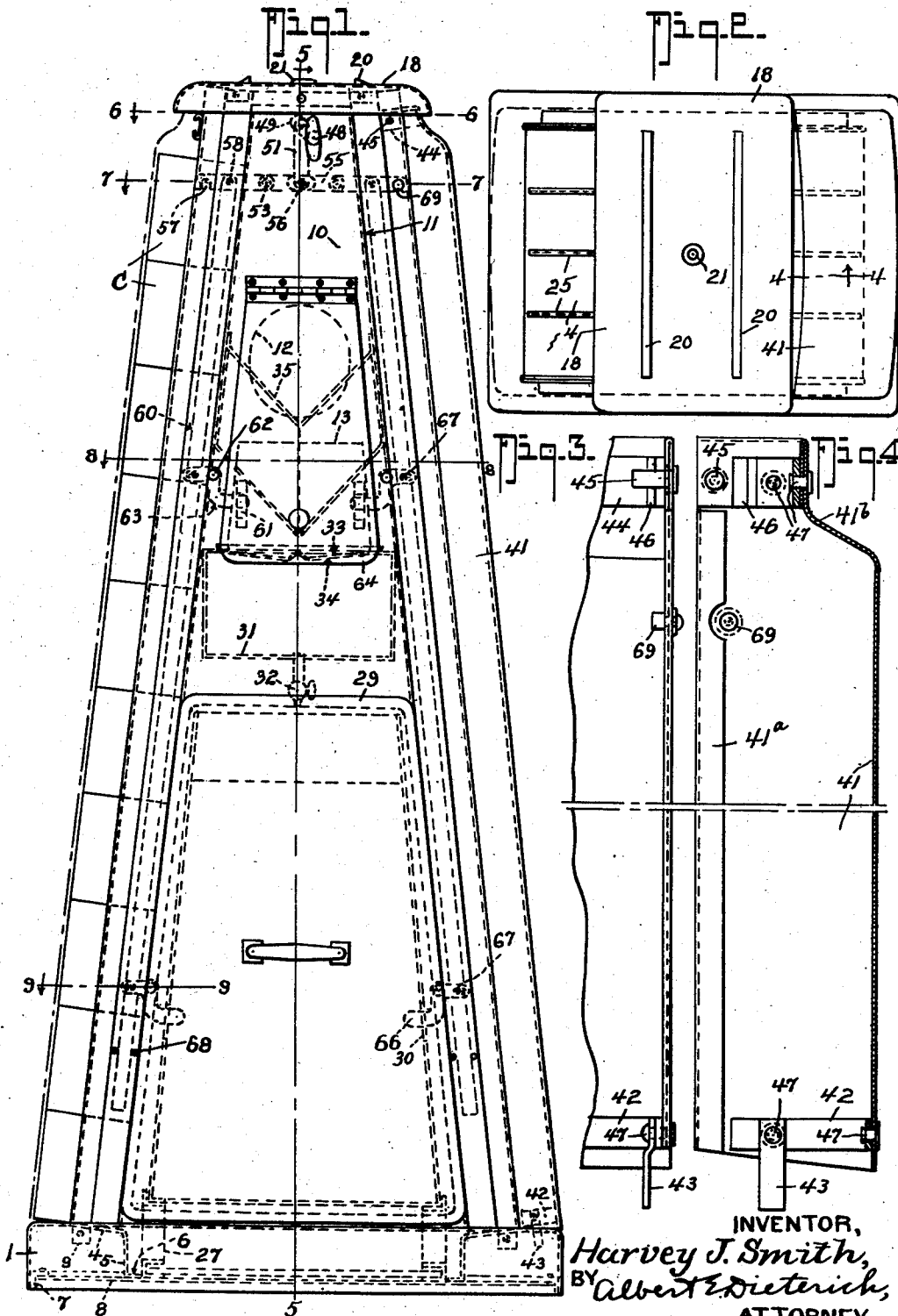
June 22, 1948.

H. J. SMITH
COMBINED CABINET, RACK, CLOSURES
AND LATCHING DEVICE

2,443,837

Filed Nov. 19, 1945

3 Sheets-Sheet 1



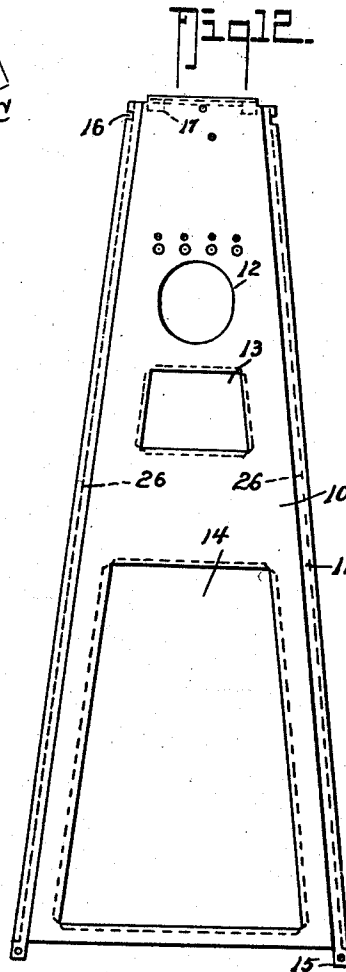
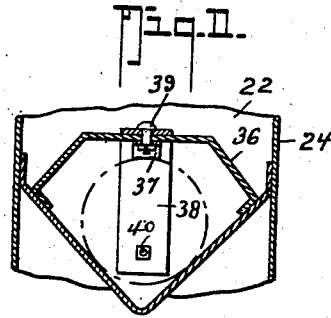
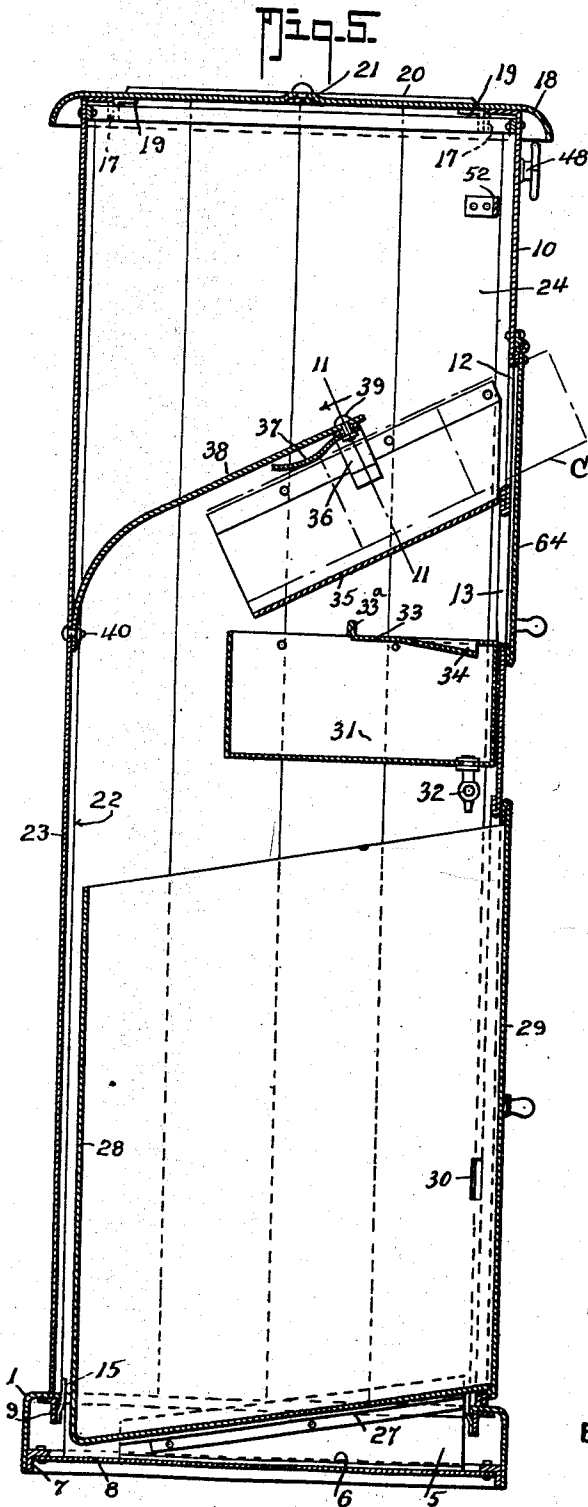
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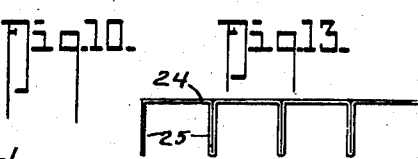
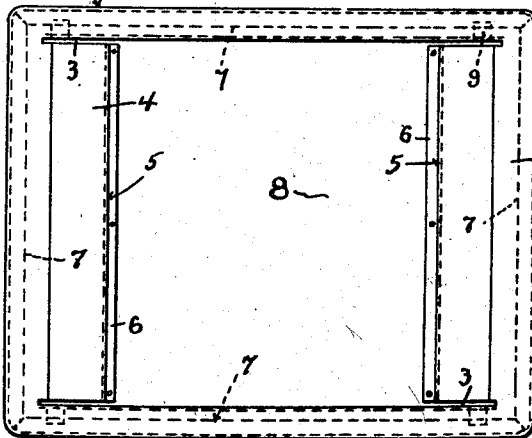
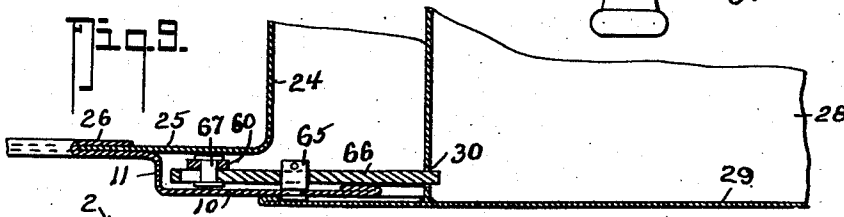
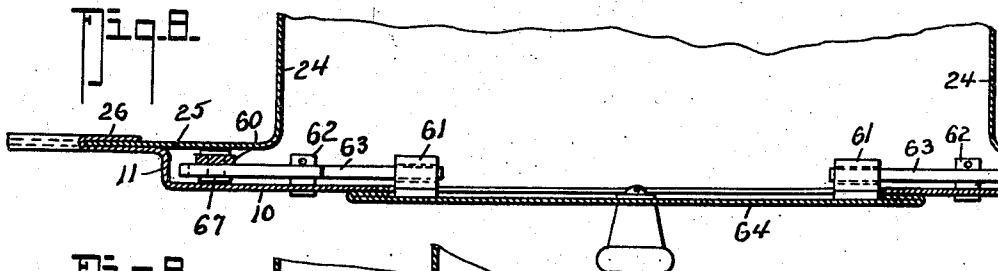
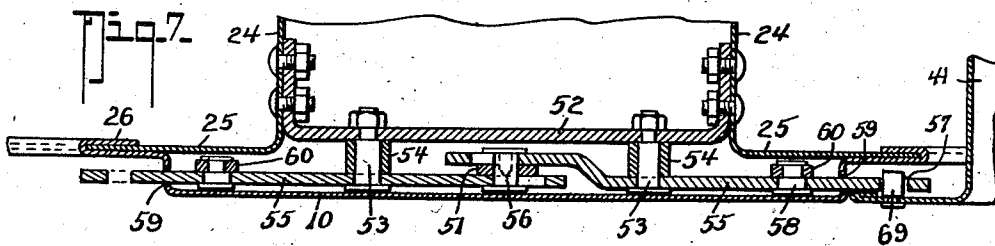
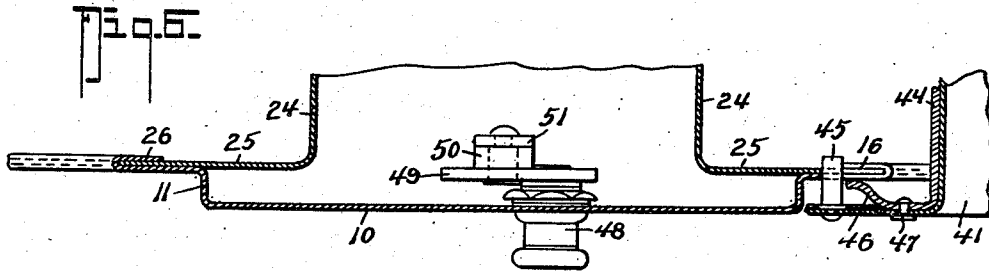
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UNITED STATES PATENT OFFICE

2,443,837

COMBINED CABINET, RACK, CLOSURES,
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13 Claims. (Cl. 312—193)

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My invention relates to racks of the kind disclosed in and covered by my Letters Patent #2,320,159 issued May 25, 1943, and #2,343,248 issued March 7, 1944.

The present invention has for its objects to provide a rack having removable doors or closures to cover the stacks of cans on display in the rack when desired, and to provide a single locking means to secure all doors in their closed positions when oil is not being sold, to prevent theft of full cans, etc.; also to provide improvements in the structures of the rack proper and in the oil reservoir.

Other objects will in part be obvious and in part will be pointed out hereinafter.

To the attainment of the aforesaid objects and ends, the invention further resides in those novel details of construction, combinations and arrangements of parts, all of which will first be described in detail and then be specifically pointed out in the appended claims, reference being had to the accompanying drawings in which:

Fig. 1 is a front elevation of my improved rack with one can cover or door in place, in full lines, and the other in place, in dot and dash lines.

Fig. 2 is a top plan view of the same.

Fig. 3 is an enlarged detail rear elevation of one of the can stack-covers or doors.

Fig. 4 is an enlarged detail vertical section of the cover taken on about the line 4—4 of Fig. 2.

Fig. 5 is a vertical longitudinal section on the line 5—5 of Fig. 1.

Figs. 6, 7, 8 and 9 are detail enlarged horizontal sections on the line 6—6, 7—7, 8—8 and 9—9 respectively of Fig. 1.

Fig. 10 is a top plan view of the base per se.

Fig. 11 is a detail section on the line 11—11 of Fig. 5.

Fig. 12 is a front elevation of the front wall of the cabinet.

Fig. 13 is a detail top plan view on a reduced scale of a side wall and can stack separator of the rack.

In the drawings, in which like numerals of reference indicate like parts in all the figures, 1 represents the base of the rack. It is composed of a flat top and depending sides and ends 2, formed from sheet metal. Portions of the top of the base are inclined downwardly-inwardly, as at 4, the metal then being bent vertically downward as at 5 and horizontally inward as at 6, the latter portions comprising flanges to which the sheet metal bottom plate 8 is riveted. The plate 8 is also secured to bracing angle irons 7 around the four sides of the base (Figs. 1, 5 and

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10). The base is also slotted, as at 3, to receive the fastening lugs 15 of the front and back walls 10 and 23 respectively, angles 9 being welded to the base, to which angles the lugs 15 are secured in any suitable way.

The front wall 10 has offset sides 11, a can-passing opening 12, an opening 13 through which can-opening tools can be passed, a door opening 14, anchor-pin-receiving recesses 16 and angles 17, the latter being suitably secured to angles 19 welded to the top 18.

The front wall 10 and back wall 23 are of the same construction except that the back wall 23 has no openings. The back wall's offset flanges are numbered 22 in Fig. 5.

The top 18 may be provided with sign-stop ledges 20 and an opening 21 through which a sign holding pole may be mounted on the top. As the signs and pole are not claimed herein, they have not been illustrated and described.

The stacks of cans C are supported by the side walls of the rack. These walls 24 are composed of sheet metal bent to form partitions 25 (see Fig. 13). They are secured in place by bending over the sides of the offset flanges over the side partitions 25, as at 26 (Figs. 6 to 9, inclusive).

Downwardly-inwardly inclined tracks 27 are fastened to the vertical walls 5 of the base and support the waste can drawer 28.

The inclination of the tracks serves to keep the front 29 of the drawer against the front wall 10 (see Fig. 5). The drawer 28 has latch-receiving slots 30 in its sides adjacent its front 29.

The oil pan 31, which constitutes one of the present improvements, combines the pan 22 and tool-receiving cup 20 of my Patent No. 2,320,159 into one unit. This unit comprises the oil receptacle 31 having a portion of its top closed by a plate 33 having a drain trough 34 and a fence 33^a. The plate 33 forms a shelf on which the can-opening tool may be laid when entered via opening 13. The pan 31 and shelf 33 are formed as a unitary structure and are permanently mounted in the cabinet of the rack, a cock 32 being provided for draining the pan.

The can chute 35 is mounted on the side walls 24 and carries a bridge 36 to which the can retarding leaf-spring 37 and the can deflecting member 38 are fastened, as at 39. The member 38 is also fastened, at 40, to the rear wall 23.

The construction of the side covers is best shown in Figs. 1, 3, 4, 6 and 7, by reference to which it will be seen that each cover comprises an arched body 41, the edges of whose sides are bent over to form stiffeners 41^a. The bottom of

each door is shaped to fit on the inclined surfaces 4 of the base 1 and the upper end of each door is constructed as at 41^b to fit beneath the flange of the hooded top 18. A stiffening strap 42 is fastened by rivets 47, or otherwise, to each door or cover 41 near the bottom, and is provided with flat lugs or legs 43 to enter the slots 3 in the base. At its upper end each door is of double thickness metal and is reinforced with a strap 44 whose ends are bent into side stops 46 that engage the sides of the front and back walls when the cover is in place.

The sides of the covers are provided with anchor pins 45 to fit into the recesses 16 of the front and back walls 10 and 23 respectively (see Fig. 6). The sides are also provided with latching studs 69.

The locking mechanism, which constitutes a part of the present invention, is best illustrated in Figs. 1, and 6 to 9 inclusive, by reference to which it will be seen that 48 designates a lock knob having an arm 49 to which is pivoted a link 51 separated from the arm by a spacer 50.

A bridge bar 52 is secured to the side walls 24 and carries two studs 53, one adjacent each side wall. Right and left latching levers 55 are provided. One of said latching levers is pivoted to one of the studs 53 and the other latching lever is pivoted to the other stud 53. The levers are each spaced from the bar 52 by a spacer 54 on its respective stud 53.

A lock-pin 56 connects the overlapping slotted ends of the levers 55 together and to the link 51 (Fig. 7). Each lever 55 has a notch 57 to fit over the latching studs 69 of the covers 41. The offset sides of the wall 10 have slots 59 through which the levers 55 may project. Pivoted at 58 to the levers 55 are the connecting bars or flat rods 60, which also are pivoted to the bell-crank latches 63 and 66, respectively, by pivots 67.

The hinged door 64 has catch straps 61 to receive the free ends of the bell-crank levers 63, the levers being pivoted on studs 62, as shown in Fig. 8.

The lower bell-crank levers 66 are pivoted on studs 65 and their free ends are designed to enter the slots 30 in the drawer when in locking position.

Fixedly located guide pins 68 serve to steady the lower portions of the connecting rods 60.

When the rack is in use, the covers 41 are removed, but when it is desired to cover the cans C the legs 43 of the cover 41 are placed in the slots 3, its anchor pins passed into the slots or notches 16, and the cover then rests on a wall 4. The knob 48 is then turned to the right to bring the levers 55 down over the studs 69, and at the same time the free ends of the bell-crank levers 63 and 66 are projected into the straps 61 and slots 30 respectively to secure the door 64 and drawer 28 in their closed positions (Fig. 1). The knob 48 may be part of a suitable lock of known construction whereby the covers, door and drawer may be locked as well as latched in closed position.

In operation, the covers are taken off and the door and drawer unlatched. When a sale of oil is made, the operator lifts door 64, removes the can-opening spout-tool from shelf 33, and opens a can of oil.

When the oil has been dispensed from the can, he again lifts door 64, inserts the empty can, open end first, through opening 12 into chute 35 where it remains for a time to drain oil into receptacle 31. He also replaces the tool on shelf

33 and then drops the door. As cans are inserted into the chute 35, other cans are pushed therefrom and are deflected down into drawer 28. The covers taken off are set aside until it comes time to put them on again.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, operation and advantages of my invention will be clear to those skilled in the art.

What I claim is:

1. In apparatus of the class described wherein is provided a hollow body having opposite side walls, a front wall and a back wall, said side walls having recesses for stacked oil cans, there being a can-receiving opening and a drawer opening in said front wall, a can-collecting drawer located within said hollow body and having means to close said drawer opening, the improvement which includes: closure doors, one each for covering the recesses in the respective side walls, means for latching said closure doors and said drawer in closed positions, and a single means for operating all said latching means.

2. In apparatus of the class described wherein is provided a chambered body having two sides, a front wall and a back, can-stack racks on said sides, a waste-can drawer in said body which drawer has entry via an opening in said front wall, a can chute within said chambered body accessible through a second opening in said body, and a door on said body for closing said second opening, the improvement which includes: closures for said racks, latches carried by said chambered body for securing said closures, said door and said drawer in their closed positions, and means carried by said chambered body for simultaneously operating said latches to latch or release said closures, said door and said drawer accordingly as said means is in one position or another.

3. In apparatus of the class described wherein a chambered body has recesses on opposite sides for stacked oil cans, a can-collecting drawer within said body and insertable and removable through an opening in said body, and a can chute within said body which is accessible through a second opening in said body, the improvement which includes: a door for closing the second of said openings, removable covers for the recesses, and means carried by said chambered body for simultaneously securing said covers, said door and said drawer in closed position.

4. In apparatus of the class described wherein a chambered body has recesses on opposite sides for stacked oil cans, a can-collecting drawer within said body and insertable and removable through an opening in said body, and a can chute within said body which is accessible through a second opening in said body, the improvement which includes: a door for closing the second of said openings, removable covers for the recesses, latches carried by said body for each cover, for said door and for said drawer, and means to operate all said latches simultaneously to secure or release said covers, said door and said drawer accordingly as said means is in one position or another.

5. In apparatus of the class described: a base unit having cover-leg-receiving slots; a body including a front wall, a back wall and side walls, the latter having on their outer faces can-stack-receiving recesses, and a top secured to said walls, said walls being mounted on said base unit; removable covers for said recesses, each of which

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covers comprises a front wall and side walls, reinforcing straps secured to the front and side walls of each cover adjacent the top and bottom ends thereof; anchoring pins on said covers, the walls of said body having anchoring-pin-receiving recesses for said anchoring pins; legs on said covers to enter said cover-leg-receiving slots; latching studs on said covers; and a latching device mounted on said body and having elements to operatively engage said studs for latching both covers in place on said body.

6. In apparatus of the class described: a base unit having cover-leg-receiving slots; a body including a front wall, a back wall and side walls, the latter having on their outer faces can-stack-receiving recesses, and a top secured to said walls, said walls being mounted on said base unit; removable covers for said recesses, each of which covers comprises a front wall and side walls, reinforcing straps secured to the front and side walls of each cover adjacent the top and bottom ends thereof; anchoring pins on said covers, the walls of said body having anchoring-pin-receiving recesses for said anchoring pins; legs on said covers to enter said cover-leg-receiving slots; latching studs on said covers; and a latching device mounted on said body for simultaneously latching both covers in place on said body, said latching device including two latching levers having recesses to fit over said studs, a link pivotally connected to both said levers, and a rotatable lock-handle having an arm pivoted to said link.

7. In apparatus of the class described wherein is provided a base having slots, a chambered body including front, back and side walls and being mounted on said base and having a display rack on each side wall, the improvement which includes: removable covers for said racks, said covers each having legs to engage said slots in the base and having latching studs adjacent the tops of the covers; latching means mounted on said body and including connected latch levers with recesses to hook over said studs; a locking device mounted on said body and including a handle located on the outside of said body and an arm located within said body; and a link connecting said arm to said latching levers.

8. Apparatus according to claim 7 wherein there is provided an opening in said body for access to the interior of the body, a door hinged to the body for covering said opening; latch receiving catches at the sides of said door; door latches pivoted to said body adjacent the sides of said door and cooperating with said catches; and connecting rods between said door latches and said latching levers.

9. In apparatus of the class described wherein is provided a base having slots, a chambered body including front, back and side walls and being mounted on said base and having display racks on its side walls and two openings in its front wall one above the other, a drawer in the chamber of the body and operable through the lower of said openings, a can chute within the body above the drawer and accessible through the upper of said openings, the improvement which includes: removable covers for said racks, said covers each having legs to engage the slots in said base and having latching studs adjacent the tops of the covers; latching means mounted on said body and including connected latching levers with recesses to hook over said studs; a locking device mounted on said body and including a handle located on the outside of said body and an arm located within said body; a link connecting said arm to said latching levers; a door carried by

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said body to cover the upper one of said openings; latch receiving catches at the sides of said door; door latches pivoted to said body adjacent the sides of said door for cooperation with said catches; said drawer having latch-receiving slots; drawer latches pivoted to said body at the sides of said drawer to enter said latch-receiving slots; and connecting rods between said latching levers and said door and drawer latches, by virtue of which said covers, said door and said drawer may be latched or unlatched with one operation of said handle.

10. In apparatus of the class described wherein a hollow body has front, back and side walls and has a display rack on one side wall, a hinged door on another of said walls, said body having an opening covered by said hinged door, and having a drawer receiving opening, a sliding drawer in the body with means to close said drawer opening, the improvement which comprises: a removable cover for said rack, a single locking system for securing said removable cover, said hinged door and said drawer in closed position, said system including a bridge bar located between and connected to said side walls, at least one cover-latching lever pivoted to said bar, a rotatable lock mounted on a wall of said body and having a handle and an arm, a link connecting said arm to said cover-latching lever, a latch for said door mounted on said body, a latch for said drawer mounted on said body, and a connecting rod between said cover-latching lever and said door and drawer latches, said door and said drawer having latch-receiving means.

11. In apparatus of the class described wherein a hollow body has front, back and side walls, and has a display rack on one side wall, a hinged door on another of said walls, said body having an opening covered by said hinged door, and having a drawer receiving opening, a sliding drawer in the body with means to close said drawer opening, the improvement which comprises: a removable cover for said rack, a single locking system for securing said removable cover, said hinged door and said drawer in closed position, said system including a bridge bar located between and connected to said side walls, at least one cover-latching lever pivoted to said bar, a rotatable lock mounted on a wall of said body and having a handle and an arm, a link connecting said arm to said cover-latching lever, a latch for said door mounted on said body, a latch for said drawer mounted on said body, and a connecting rod between said cover-latching lever and said door and drawer latches, said door and said drawer having latch-receiving means, said latching lever and said door and drawer latches being located within an offset portion of said another of said walls.

12. In apparatus of the class described, wherein is provided a chambered body having a wall that is provided with a set of stacked can-receiving recesses and having another wall that is provided with a can-receiving opening and a drawer opening, a can-collecting drawer located within said chambered body and having means to close said drawer opening, the improvement which includes: a closure door for said set of stacked can-receiving recesses, latching instrumentalities carried by said chambered body and having cooperative connection with said drawer and with said closure door for holding the same in closed positions, and a single means for operating all said latching instrumentalities.

13. In apparatus of the class described, a cham-

bered body having a wall that is provided with a set of stacked can-receiving recesses and having another wall that is provided with a can-receiving opening, a door for closing said opening, a closure door for said set of stacked can-receiving recesses, latching instrumentalities carried by said chambered body and having cooperative connection with said doors, and a single means for operating the latching instrumentalities for both said doors.

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The following references are of record in the file of this patent:

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