This invention relates to oil display, storage, and can draining service cabinets for use in automobile service stations and more particularly to a display and can draining service cabinet having in combination with a conventional display area, a cabinet-retained partition for locking the cabinet when the service station is closed. Related display cabinets having national distribution by the same inventor are disclosed in United States Patent Nos. 2,320,159; 2,343,248; 2,432,445; 2,443,837; 2,525,002; 2,619,150; and 3,028,206, among others.

Motor oil display service cabinets that are presently employed in automobile service stations utilize removable panels or doors for closing the cabinet to protect the displayed contents of a cabinet when the service station is not operating and usually several locking devices may be required to seal the cabinet and its contents. Frequently, storage space for a pair of panels in a service station is at a premium or is not convenient, and the task of positioning the separable panels to a cabinet requires the attention of a service station attendant. The daily removal and installation of the separable panels become annoying particularly with the other duties that must be performed in and around a busy service station. Bent or distorted cabinet closing panels may require that the service station attendant remove the cans of oil displayed in the cabinet at closing time otherwise they may be stolen. Frequently the separable panels must be repainted as they become scratched or mutilated due to frequent and often abusive handling.

It is, therefore, an object of this invention to provide a unitary combination service station oil display cabinet for displaying cans of motor oil in stacked relation and to provide closing partitions or panels which are cabinet-contained.

Another object of this invention is the provision of an oil display and can draining service cabinet for automobile service stations in which cabinet slidable closing partitions are employed for protecting cans of motor oil and other merchandise during the time when the service station is not operating and by providing mechanism for releasably locking the partitions and the auxiliary accessories of the cabinet.

A further object of this invention is the provision of a unitary oil display and can draining service cabinet for service stations in which cabinet supported closure panels are slidably and conceivably retained in the cabinet open position and the partitions, an oil can draining drawer and a drained oil container access door may be releasably locked.

Still another object of this invention is to provide a unitary cabinet in which display closure panels are permanently supported within the cabinet and a drained oil can compartment for supporting drained oil can-receiving receptacle may be removed from within cabinet periodically without the necessity of disassembling the cabinet.

Yet another object of this invention is to provide a unitary oil display and can draining service cabinet for service stations which will obviate the necessity of removing closure panels and one in which the entire cabinet may be locked utilizing a single mechanism which will prevent pilfering while reducing maintenance of the cabinet to a minimum.

Other objectives of this novel oil display cabinet will become more readily apparent from the following detailed description of one preferred embodiment in which like characters of reference designate corresponding parts throughout the several views, and wherein:

FIG. 1 is a front perspective view of a combination oil can display and can draining service cabinet in the closed cabinet position with the opposite front side being substantially identical to that shown;

FIG. 2 is a front perspective view of the oil can display cabinet of FIG. 1 illustrating one front of the cabinet with the slidable articulated partition or panel in a partially elevated position for displaying motor oil cans and the lower front slidable panel partially elevated to expose the drained oil can-receiving receptacle with the oil can draining drawer in a partially open position;

FIG. 3 is a somewhat enlarged rear sectional view of the cabinet taken substantially along the plane of section line 3—3 of FIG. 1;

FIG. 4 is an exploded perspective view of the oil can draining drawer;

FIG. 5 is an enlarged partial transverse and fragmentary sectional view illustrating the locking mechanism in conjunction with the oil can draining drawer and the drained oil container and closure gate;

FIG. 6 is an enlarged fragmentary transverse sectional view taken substantially along the plane of section line 6—6 of FIG. 5;

FIG. 7 is an enlarged fragmentary perspective view of the interior of the drained oil container closure panel gate and the cabinet combination locking mechanism;

FIG. 8A is a side elevational view of the partition or cabinet closure panel track;

FIG. 8B is a transverse sectional view taken substantially along the plane of section line 8B—8B of FIG. 8A; and

FIG. 9 is an enlarged end view of the hinge connection between partition sections or slats of the cabinet closure flexible partition.

Referring to the drawings and particularly to FIGS. 1, 2, and 3 there is illustrated, without restriction, one preferred embodiment of a unitary combination service cabinet 10 for displaying, storing, draining, and collecting drained oil cans in which a rectangular base 11 is provided with base pads or feet 12 for supporting the base a short distance above the ground to reduce base corrosion with the cabinet plate 13 bearing directly on the upper portion of base 11. A pair of trapezoidal end panels 14 and 15 are laterally spaced from each other with each panel having vertically extended turning edges or sides 16 that form a vertically extending front molding. A crowned hood or top wall 17 of substantially rectangular configuration with downwardly extending flanges provides a weatherproof hood or casing for the cabinet.

At each side of the end panels 14 and 15, and in the upper section 18 of the cabinet interior is a pair of oil can storage and display racks 19 and 20 that extend transversely across the cabinet fronts which fronts are on each side of the cabinet 10. Each of the oil can racks 19 and 20 has a bottom horizontal can-supporting plate 21 and a top plate 22 with vertically extending side connecting plates 23 secured to the end panels 14 and 15. A plurality of laterally spaced and vertically extending tubular channel forming members 24 the ends of which are suitably flared form therebetween laterally spaced vertical can-receiving channels 25 for receiving and supporting cans of oil 26 in stacked relation against the rear rack wall 27. Each of the oil can storage racks 19 extend transversely between the end panels 14 and 15 and face out-
wardly to display the oil can supporting channels 25 and the inclination of the racks is substantially parallel to the inclined sides of the end panels.

Adjacent to and aligned with the end panel sides is an inverted U-shaped track 25a formed in the elongated plate 26 with the upper section 27 having an arcurate or curved 29 directly above the lower rack section 22 thereby substantially enclosing within the inverted U-shaped track each of the racks 19 and 20. A flexible partition or panel 30 is slidably and guidedly retained in the inverted U-shaped track 25a for positioning either directly in front of the rack 19 or 20 in the cabinet closed position as shown in FIG. 1 or in the right side of FIG. 3 or in the open or partially open position as shown in FIG. 2 and in the left side of FIG. 3. It will be noted that partition 30 follows the contour of the inverted U-shaped track or guide rail and may be positioned within the cabinet directly behind or substantially behind the rear rack wall 27 eliminating the necessity for removing a panel or door to a remote location and replacing it on the cabinet front periodically.

The flexible partition 30 is formed from a plurality of hingedly connected horizontally extending slats 31 which are interconnected to form a flexible panel. The lower edge 32 of each slat is provided with a right angle bend and a return bend 33 with the upper portion of the slat having a return bend 34 and a partially circular bend 35 for cooperatively receiving therein the bead 33 from an adjacent slat 31 thereby providing for the flexibility as pivoting between adjacent slats. It will be appreciated that other forms of connection or a unitary sheet sufficiently flexible may be utilized for this partition provided it will be weatherproof and sufficiently flexible.

A Z-shaped rail 36 is secured to the front lower edge 37 of the partition 30 and serves as a handle for raising and lowering the partition while reinforcing the lower edge 37.

The lower section of the cabinet is provided with an empty or drained motor oil can-receiving chamber 39 which receives and supports therein a removable empty can-receiving container 40 that is slidably removable on the plate 13 extending from the front of the cabinet when the lower sliding panel 41 is elevated by sliding in the front portion 42 of track 25a. The front panel 41, duplicated on each side of the cabinet, is provided with a top horizontal projecting rail 43 which serves as a handle and also an abutment against which the Z-shaped channel 36 may engage in the closed cabinet position. The empty can-receiving container 40 may be removed from either side of the cabinet.

End panel 14 is provided with a top drain drawer-receiving opening 44 for cooperatively receiving a can draining and supporting chute, and closure plate 46. Directly beneath the drawer-receiving opening 44 is a drained oil-receiving receptacle opening 47 having a closure gate 48 slidably connected to the rear of panel 14. The can supporting and draining drawer 46 is slidably retained on the laterally spaced-apart angle irons 50 and 51 that reach and are secured to the end panels 14 and 15. Each of the angle irons 50 and 51 is provided with a short channel section 52 having a forward shoulder 53 and an upturned can-retaining lip 54 the forward section 55 of which is separated from the channel section 52 and turned inwardly forming a resilient spring for yieldably retaining a can while draining. A can-retaining lip 55 having laterally extending edges 56 is cooperatively and slidably retained on the angle irons 50 and 51 with the upturned terminal edges 57 engaging with the shoulders 53 to limit withdrawal of the drawer 46.

The lower portion 58 of the drawer is provided with a trough or drain chute for receiving oil being drained from a can 59 positioned and supported on the slidable drawer. Oil will flow from the can into the trough 58 and drain through the port or trough opening 60 into a receptacle 61 positioned beneath the trough for collecting the drained oil.

The flanged door 62 is sufficiently large to seal or cover the opening 44 and is secured to the rear drawer plate 63 by means of the fastening screw 64 which threadably engages the drawer knob 65. The lower section 66 of plate 63 is provided with a right angle return bend in which there is provided a depending drawer locking lug 67 stamped out of the section 66 leaving the opening 68. A can opening and pouring spout receiver 70 is provided with an open pocket 71 and a base plate 72 for fastening directly to the trough as shown in FIG. 3. A means such as welding or other suitable means for retaining the can opening and pouring spout 73 in a suitable position to the rear of the plate 63.

When a can 59 is positioned horizontally on the drawer and is drained, a following can to be drained forces or urges the can 59 toward the other end 75 of the drawer which is spaced from the panel 15 sufficiently to permit the drained can to drop by gravity downward against the baffle plate 76 so as to fall into the empty can-receiving container 40.

The drained oil container 61 is mounted on the shelf 77 that extends beneath the drawer 46 to receive oil drained from the opening 60 in the trough 58 into the container 61. The shelf 77 is securely fastened to the rear walls 27 of the racks with the shelf being provided with suitable upturned flanges 78 for positioning the container 61.

The rear side of closure gate 48 is provided with an upper projecting locking lug 80 securely fastened to the gate 48 and the gate lifting handle 81 on the front side of the gate. A pair of substantially similarly shaped cabinet locking plates 82 and 83 are securely fastened as by welding in overlapping relation on the rear of gate 48. The larger plate 82 is provided with forwardly extending guide flanges 84 that diverge downwardly and are substantially parallel to the diverging inner flanges 85 on the smaller plate 83 and substantially parallel with the outer flanges 84. A pair of downwardly extending divergent camming members 86 are fastened at the upper ends to flanges 86 and reach downwardly substantially to the terminal lower ends 87 of the outer flanges 84 and closely adjacent thereto for urging the L-shaped partition locking members 88 outwardly, as shown in FIG. 7, enabling the free ends 89 to engage and retain the lower partition rail 37 in locking engagement as shown in the right side of FIG. 3. The partition locking members 88 are guidably slidable in the sleeve members 90 each of which has an offset 91 for cooperatively receiving the partition locking member 88 therein. The sleeve members 90 are securely fastened to the interior of end panel 14 permitting the return bend section 92 of each of the locking members 88 to be cooperatively received between the flanges 88 and 85 and 86. In the cabinet closed position, as shown in FIGS. 1 and 3, the camming members 86 urge the locking members 88 outwardly to releasably lock the partitions in the closed position while in the closure gate lowered position, as shown in FIG. 2, the locking members 88 will be retracted by the flanges 84 as the gate 48 is lowered.

A unitary cabinet locking mechanism 94 is positioned between the end panel 14 openings 44 and 47 in which the key tumbler 95 is rotatably retained in a pilot hole 14 with the tumbler supporting thereon a locking latch 96 at the lower end of which is a closure gate lug-receiving recess 97 for releasably retaining the closure gate lug 80 therein, and the upper end 98 of latch 96 cooperatively engages the rear of the depending lug 67 extending from the rear plate 63 whereby locking the oil can drain drawer 46 in position in the locked position when the key 99 is rotated to position the latch in the vertical position as shown in FIGS. 3 and 5.

In the cabinet closed position, as shown in FIG. 1,
8,297,877 S the right side of FIG. 3, FIG. 5 and FIG. 7, the drawer 46, the closure gate or panel 48 and the flexible partitions 30 will permit the locking latch 96 to lock the cabinet as when the service station is closed for business. The partition locking members 88 will retain the partitions 30 in the lowered or closed position in the panel or gate 48 when the drawer 46 will be retained in the position shown in FIGS. 1 and 5. In the cabinet open position, the locking latch 96 will be rotated upon turning the key 99 and tumbler 95 thereby disengaging the panel lug 90 from the latch recess 97 and the depending lug 97 permitting both the drawer 46 and the sliding gate or panel 14 to be slidably mounted from the cabinet shown in FIGS. 1 and 48 to be lowered retracting the partition locking members 88 permitting the partitions 30 to be raised individually for sliding upwardly and to the rear of the oil can display racks.

It will be readily apparent that the partitions 30 may extend for a greater length to cover the lower section of the cabinet of desirable, and the lower portion of the cabinet may be omitted depending upon the space limitations and requirements of the particular service station and the cabinet to be utilized. Although an articulated flexible partition has been described in detail, a flexible continuous panel may be utilized as previously described.

Obviously many modifications and variations may be made to the various components as well as the unitary locking mechanism within the purpose and spirit of this invention and such modifications and alterations are contemplated within the scope of the appended claims.

What is claimed is:

1. A combination service cabinet for displaying and storing motor oil cans comprising; a pair of end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil container-receiving opening in spaced vertical relation, a top panel extending across said end panels at each side thereof, pairs of partition guiding tracks mounted on each end panel, each of said tracks at least partially enscripting said racks, a flexible partition reaching between said end panels and slidably mounted in a pair of opposite tracks for enclosing said end and cans positioned thereon in the partition closed position and for exposing the rack and cans thereon in the partition open position, a can-supporting drawer slideable through said end opening having an oil draining trough and movable through said other end panel opening.

2. A combination service cabinet for displaying and storing motor oil cans comprising; a pair of end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil container-receiving opening in spaced vertical relation, a top panel extending across said end panels forming a cover for said cabinet, a can display rack having a plurality of laterally spaced vertical can-displaying and storage channels supported between said end panels at each side thereof, pairs of inverted U-shaped tracks mounted on each said end panel, each of said tracks at least partially enscripting said racks, a flexible partition reaching between said end panels and slidably mounted in a pair of opposite inverted U-shaped tracks for covering a rack and cans positioned thereon in the partition closed position and for exposing the rack and cans thereon in the partition open position when said partition is at least partially retained behind said rack, a can-supporting drawer slideable through said end panel opening having an oil draining trough and a panel for sealing said end panel opening, and a drained oil-receiving container supported beneath said oil draining trough and movable through said other end panel opening.

3. A combination service cabinet for displaying and storing comprising; a pair of substantially trapezoidal end panels, a top cover wall extending across said end panels, a can display and storage rack having a plurality of laterally spaced vertical can-displaying and storage channels supported between said end panels at each side thereof, a pair of inverted U-shaped tracks mounted on each end panel at the sides thereof, each of said tracks at least partially enscripting said racks, a partition reaching between said end panels and slidably mounted in a pair of said tracks for covering a rack and cans positioned thereon in the partition closed position and for exposing the rack and cans thereon in the partition open position.

4. A combination service cabinet for displaying, draining and collecting drained motor oil cans comprising; a pair of substantially trapezoidal end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil-container-receiving opening in spaced vertical relation, a top wall extending across said end panels forming a cabinet cover, a can display and storage rack having a plurality of laterally spaced vertical can-displaying and storage channels supported between said end panels beneath said top wall at each said thereof, pairs of inverted U-shaped tracks mounted on each end panel, each of said tracks partially enscripting said racks, a flexible partition having a plurality of hinged horizontally extending slats reaching between said end panels and slidably mounted in a pair of opposite inverted U-shaped tracks for enclosing a rack with cans positioned thereon in the partition closed position and for exposing the rack and cans thereon for display in the partition open position, a can-supporting drawer slideable through said panel end opening having an oil draining trough and a panel for sealing said panel end opening, and a drained oil-receiving container supported beneath said oil draining trough and movable through said other end panel opening.

5. A combination service cabinet for displaying, storing, draining and collecting drained motor oil cans comprising; a pair of end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil container-receiving opening in spaced vertical relation, a top panel extending across said end panels forming a top cover wall for the cabinet, a can display and storage rack having a plurality of laterally spaced vertical can-displaying and storage channels supported between said end panels at each side thereof, pairs of partition supporting tracks mounted on each end panel, each of said tracks partially enscripting said racks, a partition having a plurality of hinged horizontally extending slats reaching between said end panels and slidably mounted in a pair of opposed tracks for covering a rack and cans positioned thereon in the partition closed position and for exposing the rack and cans thereon in the partition open position, a can-supporting drawer slideable through said panel end opening having an oil draining trough and a panel for sealing said panel end opening, a drained oil-receiving container supported beneath said oil draining trough and movable through said other end panel opening, and a container for receiving drained cans discharged from said oil draining trough positioned between said end panels and below said racks.

6. A combination service cabinet for displaying, storing, draining and collecting drained motor oil cans comprising; a pair of end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil-container-receiving opening in spaced vertical relation, a top wall extending across said end panels forming a cabinet cover for said cabinet, a can display rack having a plurality of laterally spaced vertical can-displaying and storage channels supported between said end panels at each side thereof, partition supporting and guide tracks mounted on each end panel, a flexible partition reaching between said end panels and slidably mounted in a pair of opposite inverted U-shaped tracks for covering a rack and cans positioned thereon in the partition closed position and for exposing the rack and cans thereon in the partition open position.
supporting drawer slidable through said panel end opening having an oil draining trough and a panel for sealing said panel end opening, a drained oil-receiving container supported beneath said oil draining trough and removable through said other end panel opening, a closure gate for said other end panel opening, a drained oil receiver being retained behind said drained oil-receiving container, and means releasably locking the partitions, drawer and closure gate in the cabinet closed position.

7. A combination service cabinet for displaying, storing, draining and collecting drained motor oil cans comprising: a pair of substantially trapazoidal end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil container-receiving opening in spaced vertical relation, a top panel extending across said end panels forming a cabinet cover, a can display and storage rack having a plurality of laterally spaced vertical channels supported between said end panels at each side thereof, pairs of inverted U-shaped tracks mounted on each end panel, each of said tracks partially encircling said racks, a partition having hinged slats reaching between said end panels and slidable mounted in a pair of said tracks for covering a rack and cans position therein in the partition closed position and for exposing the rack and cans thereon in the partition open condition, said partition in the partition open position being supported substantially behind said racks, a can-supporting drawer slidable through said panel end opening having an oil draining trough and a panel for sealing said panel end opening, a drained oil-receiving container supported beneath said oil draining trough and removable through said other end panel opening, a closure gate for said other end panel opening, means for collecting drained oil cans discharged from said drawer between said end panels, and means for releasably locking the partitions, drawer and closure gate in the cabinet closed position.

8. A unitary combination service cabinet for displaying, storing, draining and collecting drained motor oil cans comprising: a base, end panels mounted on said base one of which panels having vertically spaced-apart openings, a top wall extending between said end panels, said top wall forming an interior cabinet chamber having upper and lower sections, said upper section having exposed display fronts on opposite sides between end panels and below said top wall, a plurality of vertical can-stacking channels in the upper section between end panels for displaying motor oil cans on opposite sides between said end panels, a removable received container in the lower section of the chamber, a lower partition slidable received between end panels for enclosing lower sections of the chamber, a flexible partition slidable retained by and extending between end panels for covering said cans in the closed cabinet position, said flexible partition being retained behind said cans, an end panel supported slidable drawer having a drain chute for introducing a can through one of said end panel openings for oil drainage in the upper section, a drained oil-receiving container supported beneath said drain chute slidable between said end panel opening, a closure gate for said other end panel opening, and means for releasably locking the drawer, closure gate and partitions in the cabinet closed position.

9. A combination motor display, draining and storage cabinet comprising: a base, end panels supported on said base, one of said panels having vertically spaced openings, a top panel on said end panels, said base and end and top panels forming a cabinet chamber having partitions, a rack having a plurality of vertical channels for supporting and displaying motor oil cans facing outwardly supported between said end panels at each side thereof in the chamber upper section, a removable empty can-receiving container in the lower section of the chamber, a lower partition slidable received between end panels for enclosing said lower sections of the chamber, a flexible partition slidable retained by and extending between end panels for covering said cans in the closed cabinet position, said flexible partition being retained behind said cans, an end panel supported slidable drawer having a drain chute for introducing a can through one of said end panel openings for oil drainage in the upper section, a drained oil-receiving container supported beneath said drain chute slidable between said end panel opening, a closure gate for said other end panel opening, and means for releasably locking the drawer, closure gate and partitions in the cabinet closed position.

10. A combination service cabinet for displaying motor oil cans comprising: a pair of end panels and a top panel extending between said end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil container-receiving opening in spaced vertical relation, a rack having a plurality of vertical can-displaying storage channels supported between said end panels at each side of said end panels mounted on each of said end panels for each of said racks, and a flexible partition slidable mounted in said tracks for closing said racks from view in the cabinet closed position and exposing the rack and cans supported thereon in the cabinet open position with the partition displaced substantially to the rear of each of said racks, a can-supporting drawer slidable through said panel end opening having an oil draining trough and a panel for sealing said panel end opening, and a drained oil-receiving container supported beneath said oil draining trough and removable through said other end panel opening.

11. A combination service cabinet for displaying motor oil cans comprising: a pair of end panels and a top panel extending between said end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil container-receiving opening in spaced vertical relation, a rack having a plurality of vertical can-displaying and storage channels supported between said end panels at each side of said end panels, a flexible partition-receiving and supporting means mounted on each of said end panels for each of said racks, and a flexible partition slidable mounted in said partition-receiving and supporting means for closing said racks from view in the cabinet closed position and exposing the rack and cans supported thereon in the cabinet open position with the partition displaced to the rear of each of said racks, and means for releasably locking the partitions in the closed cabinet position, a can-supporting drawer slidable through said panel end opening having an oil draining trough and a panel for sealing said panel end opening, and a drained oil-receiving container supported beneath said oil draining trough and removable through said other end panel opening.

12. A combination service cabinet for displaying and storing motor oil cans, and for draining and collecting drained motor oil cans comprising: a pair of end panels, one of said end panels having a can draining drawer-receiving opening and a drained oil container-receiving opening in spaced vertical relation, a top wall extending across and at the top of said end panels forming a cover, a rack having a plurality of vertical can-displaying and storage channels supported between said end panels at each side thereof, pairs of inverted U-shaped tracks mounted on each end panel, each of said tracks partially encircling said racks, a flexible partition reaching between said end panels and slidable mounted in a pair of said tracks for enclosing a rack and cans positioned thereon in the cabinet upper and lower sections of the chamber, a can-supporting and draining drawer slidable through said panel end opening having an oil draining trough and a panel for sealing said panel end opening, said drawer hav-
means for releasably receiving a locking member in the drawer closed position, a drained oil-receiving container supported beneath said oil draining trough and removable through said other end panel opening, a closure gate for said other end panel opening vertically slideable between a closed to an open position, a pair of partition locking members movable between partition locking and unlocking positions mounted to one of said end panels, means for shifting said partition locking members between locking and unlocking positions on said closure gate, and a key operated locking means for releasably locking said closure gate and drawer with the drawer and closure gate closed positions securing the partitions in the cabinet closed position.

References Cited by the Examiner

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Date</th>
<th>Inventor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,198,593</td>
<td>8/1965</td>
<td>Dorie</td>
</tr>
<tr>
<td>2,743,039</td>
<td>4/1956</td>
<td>Smith</td>
</tr>
<tr>
<td>2,688,527</td>
<td>9/1954</td>
<td>Wright</td>
</tr>
<tr>
<td>2,654,508</td>
<td>10/1953</td>
<td>Wright</td>
</tr>
<tr>
<td>2,432,455</td>
<td>12/1947</td>
<td>Smith</td>
</tr>
<tr>
<td>2,320,159</td>
<td>5/1943</td>
<td>Smith</td>
</tr>
<tr>
<td>2,000,333</td>
<td>5/1935</td>
<td>Kahn</td>
</tr>
<tr>
<td>1,784,166</td>
<td>12/1930</td>
<td>Washington</td>
</tr>
</tbody>
</table>

CLAude A. LE ROY, Primary Examiner.

CHANCELLOR E. HARRIS, Examiner.