Jan. 18, 1966 E. F. HAMILTON ET AL 3,230,025

CABINET

Filed Oct. 17, 1963 3 Sheets-Sheet 1

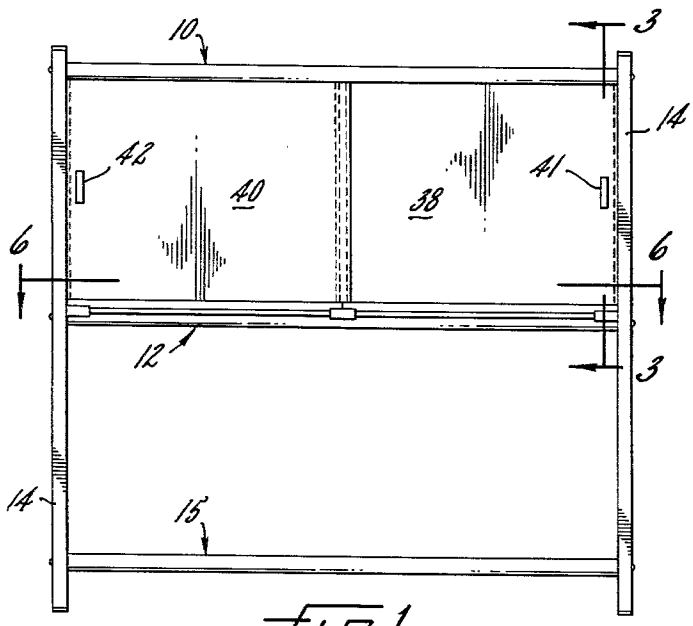


Fig. 1.

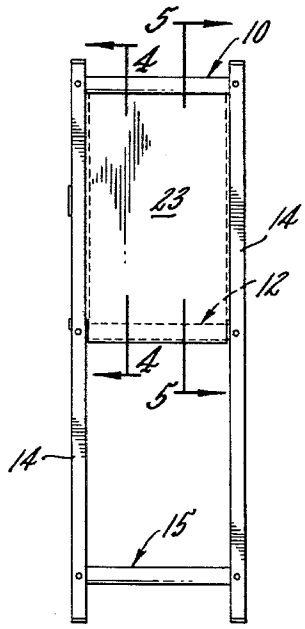
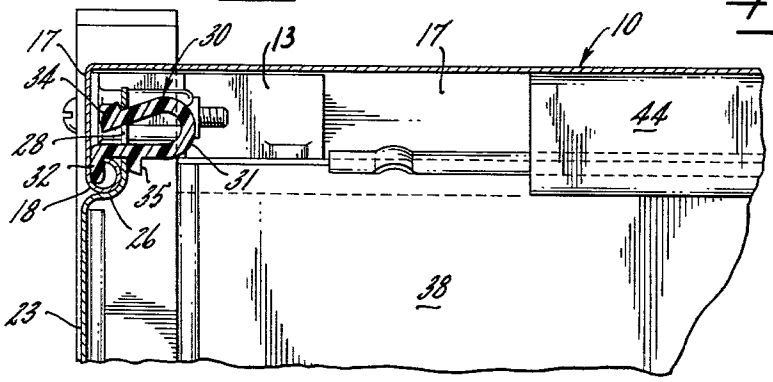


Fig. 2.



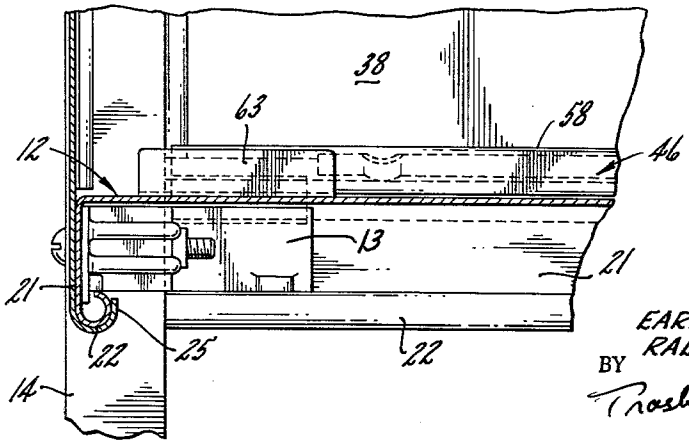


Fig. 4.

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CABINET

Filed Oct. 17, 1963 3 Sheets-Sheet 2

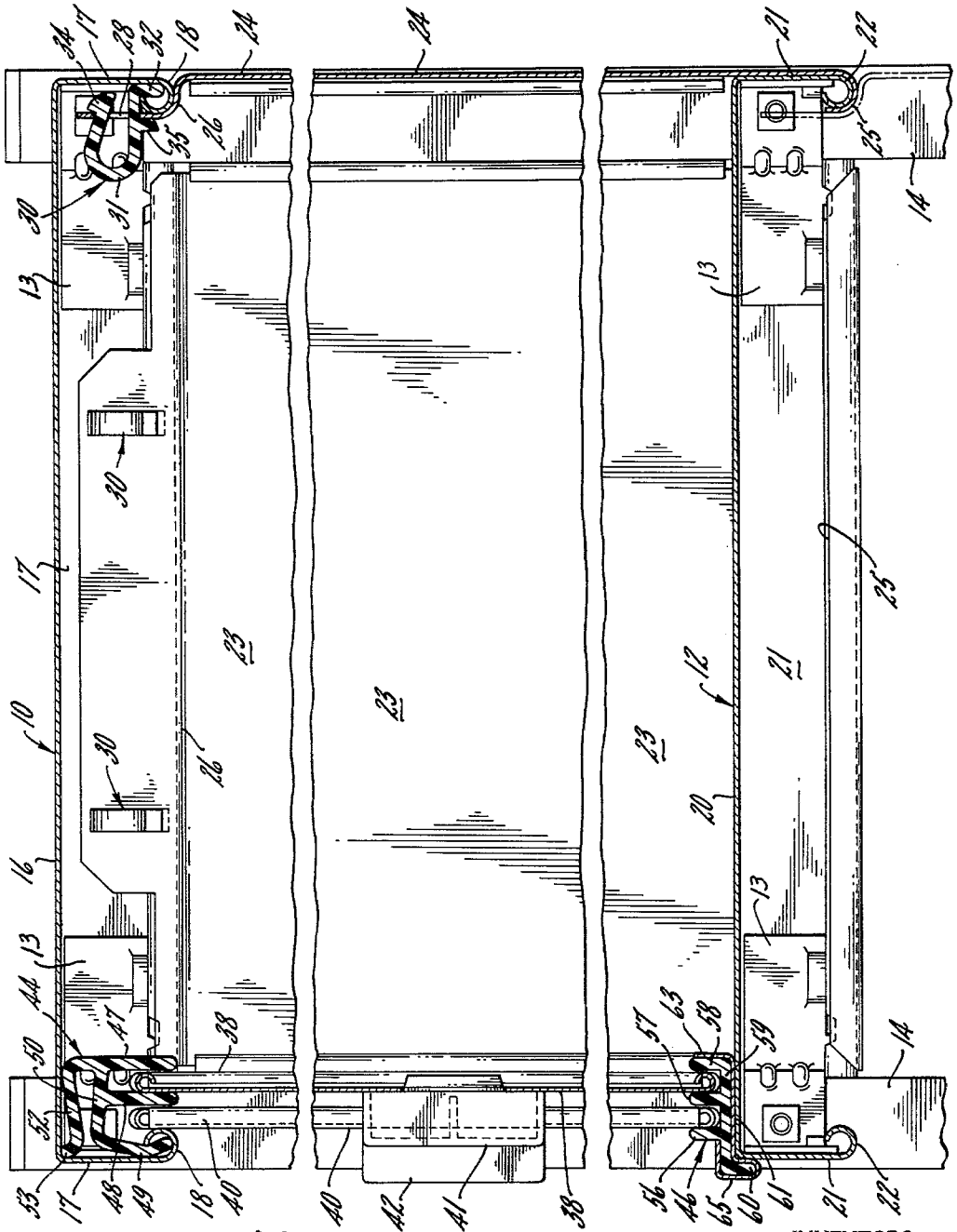


FIG. 3.

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CABINET

Filed Oct. 17, 1963 3 Sheets-Sheet 3

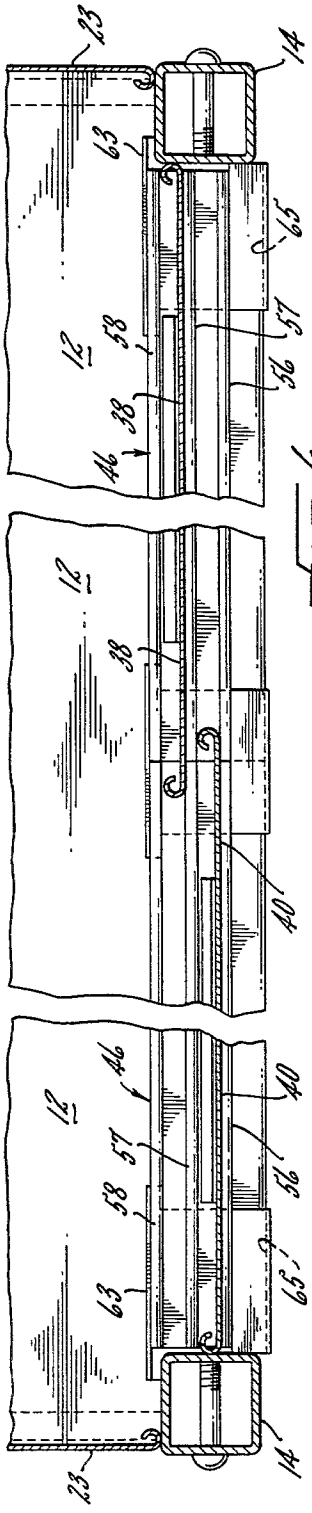


FIG. 6.

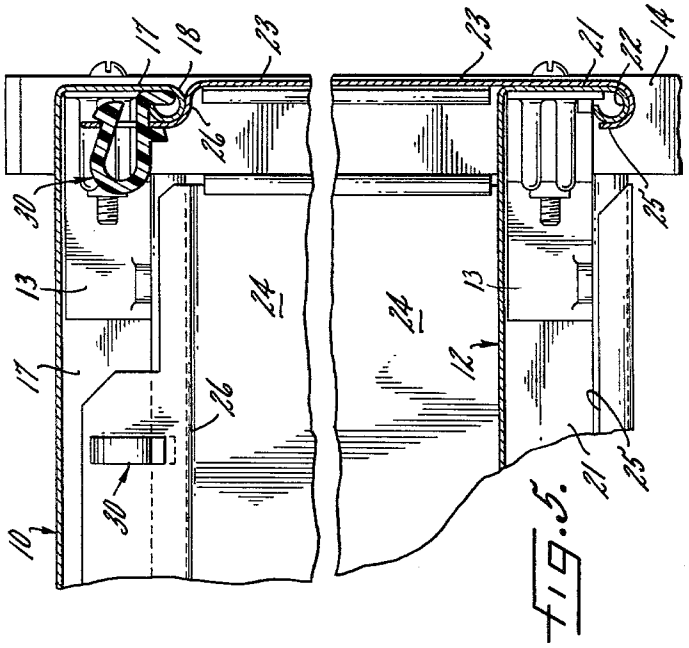


FIG. 5.

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United States Patent Office 3,230,025 Patented Jan. 18, 1966

3,230,025

CABINET

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Filed Oct. 17, 1963, Ser. No. 316,889
10 Claims. (Cl. 312—257)

This invention relates to a cabinet, and more particularly to a cabinet formed on a pair of shelves.

It is an object of the invention to provide a cabinet which can be quickly and easily formed on a pair of shelves, which will have an easily accessible interior, and which will be of attractive appearance.

According to the preferred form of the invention, the cabinet is formed on a pair of interconnected upper and lower rectangular shelves each having a depending border skirt terminating in an inwardly directed bead. A plurality of brackets are mounted on the skirt of the upper shelf along three sides thereof. Said brackets are lockingly engageable with a plurality of panels extending downwardly from the upper shelf with their lower ends received under the skirt on the lower shelf. Said panels thus enclose the space between said pair of shelves along three sides thereof and form the cabinet side and back walls, the upper and lower cabinet walls being formed by the pair of shelves.

An upper track is mounted on the upper shelf skirt along the fourth or front side thereof and provides a pair of downwardly open, longitudinally extending grooves. A lower track is mounted on the lower shelf along its fourth or front side and provides a pair of upwardly open, longitudinally extending grooves disposed in vertical alignment with the upper track grooves. The grooves in each of the tracks are disposed in spaced front to rear relationship with the forwardly disposed grooves in said pair of tracks slidably supporting the upper and lower edges of a first door and the rearwardly disposed grooves in said pair of tracks slidably supporting the upper and lower edges of a second door. Conveniently, each of said doors is slidable along the length of the front side of the shelves to render the interior of the cabinet easily accessible.

Other objects and features of the invention will become apparent from the more detailed description which follows and from the accompanying drawings, in which:

FIG. 1 is a front elevation of a shelf structure having a cabinet embodying the invention mounted thereon;

FIG. 2 is an end elevation of the shelf structure shown in FIG. 1;

FIG. 3 is an enlarged vertical section taken on the line 3—3 of FIG. 1;

FIG. 4 is an enlarged vertical section taken on the line 4—4 of FIG. 2;

FIG. 5 is an enlarged vertical section taken on the line 5—5 of FIG. 2; and

FIG. 6 is an enlarged horizontal section taken on the line 6—6 of FIG. 1.

As shown, the invention comprises a cabinet formed on a pair of vertically spaced, rectangular shelves 10 and 12 mounted on a plurality of ground-engaging legs 14 at each of their corners, as by brackets 13 bolted to said legs. Although the cabinet is formed on only the pair of shelves 10 and 12, the shelf structure may comprise one or more additional shelves 15 mounted on the legs 14 in vertically spaced relationship to the shelves 10 and 12. Conveniently, the shelves 10 and 12 are formed

from sheet-metal and are identical in construction. As shown, the shelf 10 includes a horizontally disposed supporting surface 16 which terminates along its edges in a downwardly projecting border skirt 17 having an inwardly rolled bead 18. Similarly, the shelf 12 incudes a horizontally disposed supporting surface 20 which terminates along its edges in a depending border skirt 21 having an inwardly rolled bead 22. As will become more apparent hereinafter, the surfaces 16 and 20 form the top and bottom walls, respectively, of the cabinet.

The end and back walls of the cabinet are formed by a pair of end panels 23 and a back panel 24 extending between the shelves 10 and 12. The ends of the panels 23 abut the adjacent faces of the pairs of legs 14 at the ends of the shelves and the ends of the panel 24 abut the adjacent faces of the pair of legs 14 at the rear of the shelves so that said panels completely enclose the sides and back of the cabinet. The panels 23 and 24 are identical in construction and differ only in the longer length of the panel 24 which interconnects the rearwardly disposed longitudinal edges of the pair of shelves. Each of the panels 23 and 24 has its lower end hooked inwardly, as at 25, for reception under the lower shelf bead 22. Said panels lie in the general vertical planes of the skirts 17 and 21 and have their upper margins offset inwardly, as at 26, to dispose said margins inwardly of the upper shelf bead 18. A plurality of spaced openings 28 are formed in the margin 26 for the reception of a plurality of brackets 30. Each of said brackets comprises a strip of yieldable material, such as vinyl, formed into a loop 31 projecting inwardly through the associated panel opening 28. A finger 32 extends outwardly from one end of the bracket and is press-fit between the bead 18 and the inner face of the skirt 17 for mounting the bracket on said skirt. A first nose 34 is formed on the opposite end bracket to engage the outwardly disposed face of the panel margin 26 adjacent the opening 28, and a second nose 35 is formed on the loop 31 to engage the inwardly disposed face of the panel margin 26 adjacent said opening. In this manner, the loop 31 may be inserted through its associated panel opening 28 and bindingly retained therein by its inherent resiliency and by the locking action provided by the noses 34 and 35.

The fourth side or front wall of the cabinet is enclosed by a pair of sliding doors 38 and 40 conveniently provided with outwardly projecting handles 41 and 42, respectively. Said doors are slidably retained in the cabinet by an upper track 44 mounted on the shelf 10 and a lower track 46 mounted on the shelf 12. As shown in FIG. 3, the upper track 44 comprises a rearward rib 47, intermediate rib 48, and forward rib 49 in spaced front to rear relationship and projecting downwardly from a web 50. The ribs 47 and 48 are parallel to each other, and the rib 49 angles outwardly therefrom and is press-fit between the bead 18 and the inner face of the skirt 17. In this manner, the rib 48 acts in combination with the bead 18 to form a longitudinally extending groove for the reception of the upper end of the door 40 and in combination with the rib 47 to form a groove for the reception of the upper end of the door 38. The web 50 is provided with a retroverted extension 52 having an upwardly projecting nose 53 at its end remote from said web engaging the lower face of the shelf surface 16 at its juncture with the skirt 17. The extension nose 53 is spring-stressed into engagement with the shelf 10 at the juncture of the skirt 17 and

surface **16** by the inherent resiliency of the upper track so that said nose acts in combination with the rib **49** for bindingly retaining the upper track in position along the forward edge of the upper shelf.

The lower track **46** is formed from a pair of aligned sections carried on the supporting surface **20** of the lower shelf and abutting each other in an end-to-end relationship. Each of said track sections comprises a forward rib **56**, an intermediate rib **57**, and a rearward rib **58** projecting upwardly from a web **59**. The ribs **56–58** are disposed in spaced front to rear relationship to thus define a pair of grooves in vertical alignment with the grooves formed by the upper track **44** for slidably supporting the lower ends of the doors **38** and **40**. The forward end of the web **59** terminates in a downwardly directed tongue lying against the forward outer face of the skirt **21**.

The abutting ends of the pair of lower track sections are interconnected by a clip having a web **61** underlying the track section webs **59** and interconnecting a rearwardly disposed stretch **63** abutting the rear faces of the adjacent ends of the ribs **58** and a pocket **65** in which the adjacent ends of the ribs **58** and a pocket **65** in which the adjacent ends of the tongues **60** are received. Conveniently, the clip is formed as a sheet-metal and is press-fit over the adjacent ends of the track sections for rigidly interconnecting said sections. As shown in FIG. 4, the clip stretches **63** project laterally outwardly beyond the extent of the pocket **65**. In this manner, a pair of the clips may be mounted on the remote ends of the two lower track sections such that the ends of the stretches **63** project outwardly beyond the ends of said track sections for reception around the shelf-supporting legs **14** for thus retaining the lower track in position on the shelf **12**.

As shown in FIG. 3, the cabinet is mounted on the shelves **10** and **12** in a manner such that the skirt **21** on the shelf **12** is free to accept the mounting structure for the upper end of another cabinet. In this manner, a second cabinet may extend between the shelves **12** and **15**, thereby permitting a number of cabinets to be mounted on a plurality of vertically spaced shelves in a continuous vertical relationship.

We claim:

1. In a cabinet for shelving,
(a) a pair of interconnected upper and lower rectangular shelves each having a depending border skirt,
(b) means interconnecting said shelves and retaining them in vertically spaced relation,
(c) a plurality of vertically extending panels lockingly interconnected to the skirts on said shelves along three sides thereof,
(d) an upper track mounted on the skirt of said upper shelf along the fourth side thereof and providing a pair of longitudinally extending grooves,
(e) a lower track carried on said lower shelf along its fourth side and having a pair of longitudinally extending grooves formed therein in vertical alignment with the grooves in said upper track,
(f) means on said lower track receivable around said means interconnecting the shelves for mounting said lower track on said lower shelf, and
(g) a pair of doors slidably carried in said upper and lower tracks.

2. In a cabinet for shelving,
(a) a pair of interconnected upper and lower rectangular shelves each having a depending border skirt terminating at its lower edge in an inwardly rolled bead,
(b) a plurality of brackets mounted on the skirt of said upper shelf along three sides thereof,
(c) a plurality of vertically extending panels disposed along said three shelf sides with their upper ends lockingly engaging said brackets and their lower ends hooked under the skirt on said lower shelf,
(d) an upper track mounted on the skirt of said upper shelf along the fourth side thereof and providing a pair of longitudinally extending grooves,
(e) a lower track mounted on said lower shelf along its fourth side and providing a pair of longitudinally extending grooves formed therein in vertical alignment with the grooves in said upper track, and
(f) a pair of doors slidably carried in said upper and lower tracks.

3. The invention as set forth in claim **2** in which
(a) each of said brackets comprises a strip of yieldable material provided with a loop bindingly received in an opening in said panels,
(b) said strip having a finger at one of its ends interposed between said bead and skirt for mounting the bracket on said upper shelf.

4. The invention as set forth in claim **3** in which
(a) said strip has a pair of offsets formed thereon adjacent the ends of said loop and engaging the opposed panel faces adjacent said opening therein.

5. The invention as set forth in claim **3** in which
(a) said loop projects inwardly from said skirt and the upper margin of said panel is offset inwardly whereby the portion of said panel extending between said skirt and the lower shelf will lie in the vertical plane of said skirt.

6. The invention as set forth in claim **2** in which
(a) said upper track comprises a web interconnecting three downwardly projecting ribs in spaced front to rear relationship,
(b) the forwardmost one of said ribs being received between the bead and skirt on said upper shelf whereby the intermediate rib acts in combination with said bead and the rearwardmost one of said beads to form said upper track grooves, and
(c) means on said web bearing against the lower face of said upper shelf for bindingly retaining said track thereon.

7. The invention as set forth in claim **6** with the addition that
(a) said intermediate and rearwardmost ribs are parallel and said forwardmost rib angles outwardly therefrom, and
(b) said means comprises a retroverted extension on said web having an upwardly projecting nose at its end remote from the web bearing against the lower face of said upper shelf at its juncture with said skirt.

8. The invention as set forth in claim **2** in which
(a) said lower track comprises a web supported on the upper face of said lower shelf and interconnecting three upwardly projecting ribs in spaced front to rear relationship forming said lower track grooves,
(b) said web having a tongue at its forward end extending downwardly over the skirt on said lower shelf.

9. The invention as set forth in claim **2** with the addition that
(a) said shelves are interconnected at each of their corners by a plurality of vertically extending legs, and
(b) said lower track comprises a web supported on the upper face of said lower shelf and interconnecting three upwardly projecting ribs in spaced to spaced relationship forming said lower track grooves, and
(c) means mounted on said lower track projecting outwardly from the ends thereof and receivable around a pair of said legs for retaining said lower track on said lower shelf.

10. The invention as set forth in claim **9** in which
(a) said web has a downwardly directed tongue extending over said lower shelf skirt, and
(b) said means comprises a pair of clips at ends of said track, each having a pocket received over said tongue, a first stretch underlying said web, and a second stretch abutting said rearwardmost rib, said

second stretches projecting beyond the ends of said lower track for engagement with said pair of legs.

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