June 3, 1952 E. N. ELLERSON 2,599,240

CABINET AND DRAWER ASSEMBLY

Filed Aug. 24, 1948 2 SHEETS—SHEET 1

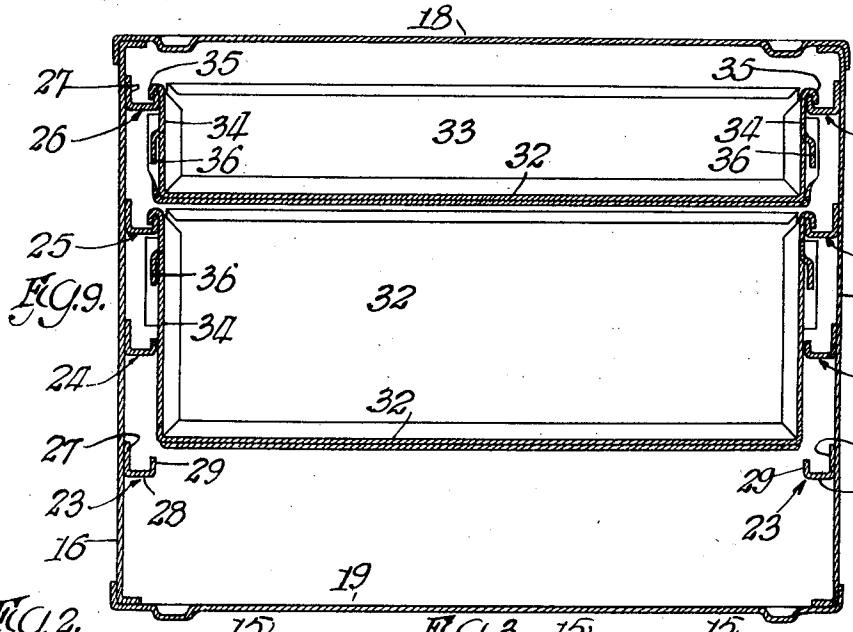


FIG. 2.

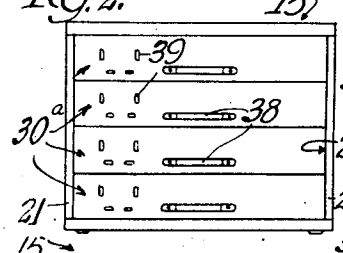


FIG. 3.

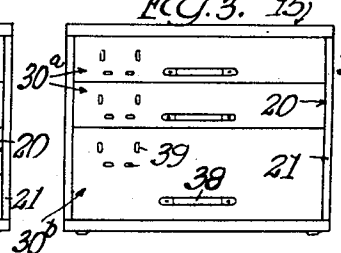
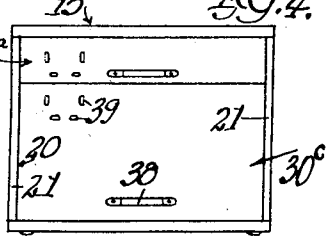
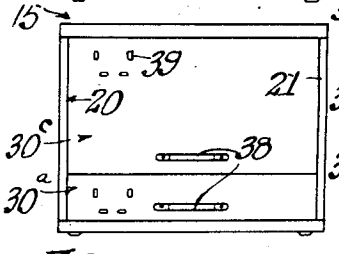
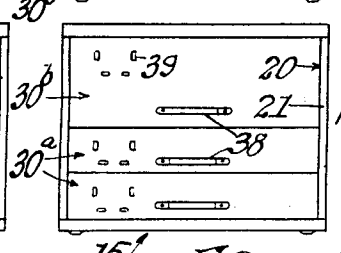


FIG. 4.







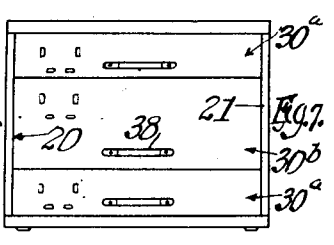


FIG. 7.

FIG. 5.

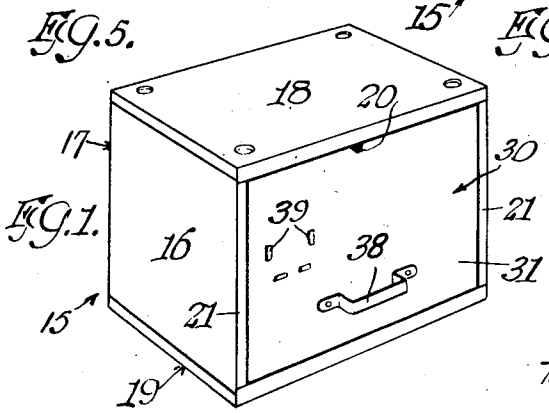


FIG. 1.

FIG. 6.

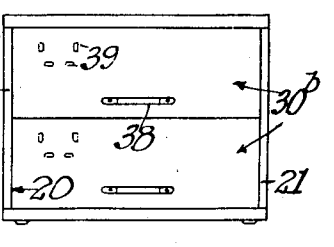


FIG. 8.

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CABINET AND DRAWER ASSEMBLY

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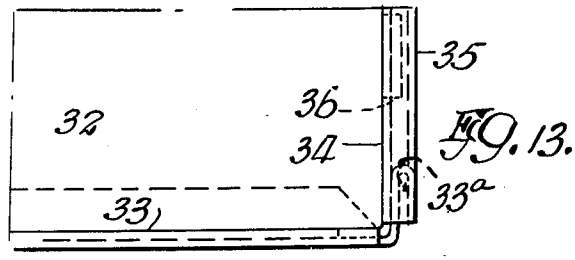


FIG. 13.

FIG. 11.

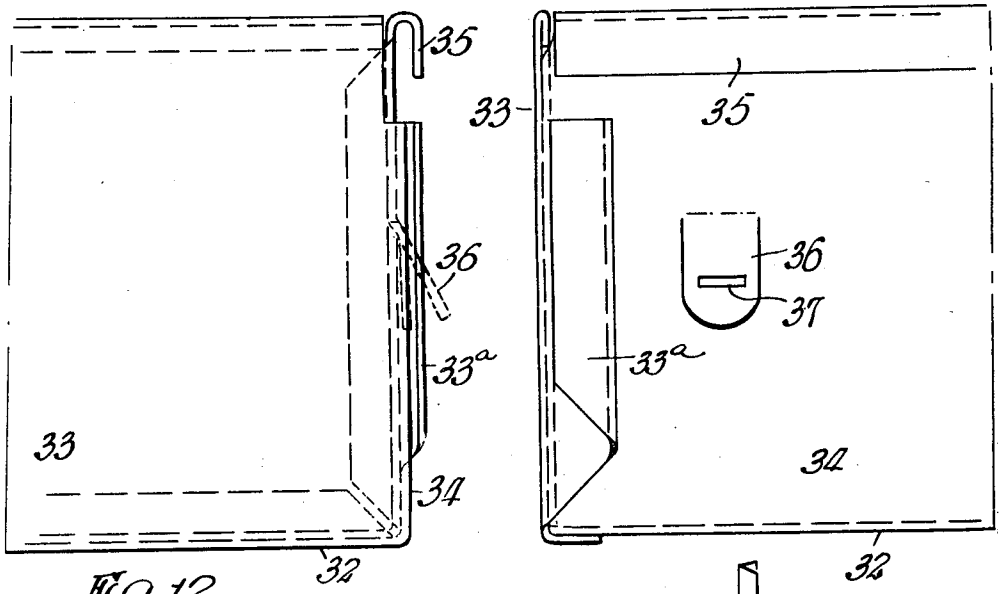
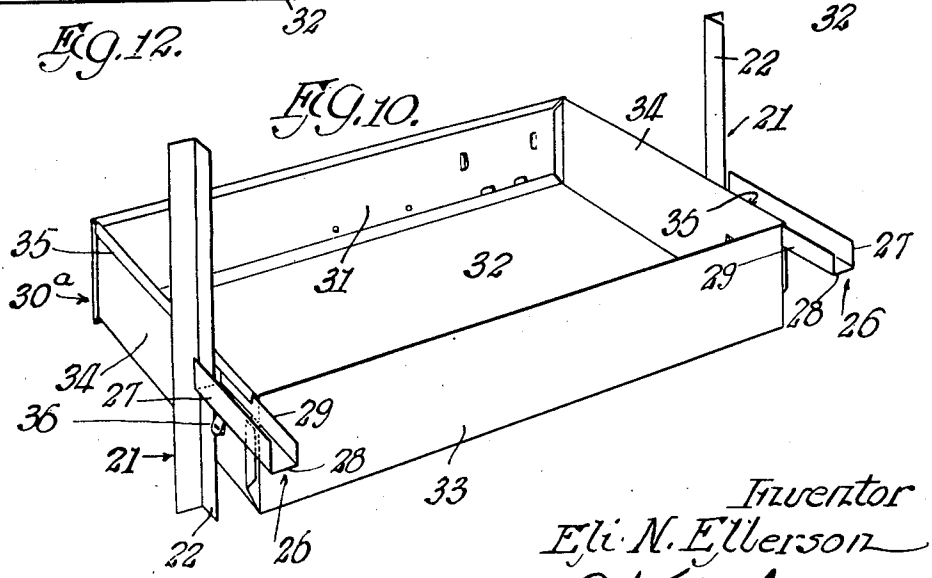


FIG. 12.

FIG. 10.



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CABINET AND DRAWER ASSEMBLY

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Application August 24, 1948, Serial No. 45,919

4 Claims. (Cl. 312—346)

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This invention relates to improvements in cabinet and drawer assembly and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

One of the objects of the present invention is to provide an assembly of this kind which though made entirely of a light gauge sheet metal at a low cost, is strong and rigid, with the parts so formed and arranged that the drawers will not bind on their associated rails of the cabinet in movement from one position to another therein.

Another object of the invention is to provide in an assembly of this kind, an arrangement of parts on the sides of the drawers and cabinet respectively, whereby the drawers are hung from the top for a sliding opening and closing movement and cannot tip downwardly when drawn outwardly of the cabinet to their limit in full open position.

Also, it is an object of the invention to provide in an assembly of this kind an arrangement of integral parts of the cabinet and drawers respectively whereby said drawers cannot be entirely withdrawn accidentally from the casing to spill the contents thereof, but can be withdrawn free of the cabinet when so desired, after bending certain ones of said parts out of their normal operative position, and which may upon reinsertion of the drawer, be bent back to said normal operative position preventing complete withdrawal of the drawer.

The above mentioned objects of the invention, as well as others, together with the advantages thereof will more fully appear as the specification proceeds.

In the drawings:

Fig. 1 is a perspective view of a cabinet and drawer assembly embodying one form of the invention and shows the use of a single deep drawer therein.

Figs. 2, 3, 4, 5, 6, 7 and 8 are views in front elevation showing a number of combinations of drawers of different and shallower depths that may be employed in the cabinet appearing in Fig. 1, without a change in the structure thereof.

Fig. 9 is a transverse vertical sectional view on an enlarged scale, through a cabinet and drawer when embodied in the drawer assembly appearing in Fig. 7 with the bottom drawer omitted therefrom.

Fig. 10 is a perspective detail view on a scale enlarged over that of Figs. 1 to 8 inclusive of one of the drawers of the cabinet and associated parts at the front thereof and more particularly shows the parts at the front of the cabinet and on the

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sides of the drawer to prevent the accidental complete withdrawal of the drawer from the cabinet.

Fig. 11 is a fragmentary view in side elevation on an enlarged scale of the rear end part of one side (the left side) of one of the drawers and which will be more fully referred to later.

Fig. 12 is a fragmentary view in rear end elevation of that part of the drawer appearing in Fig. 11.

Fig. 13 is a fragmentary top plan view of those parts of the drawers appearing in Figs. 11 and 12 respectively.

In general, the improved cabinet or drawer assembly includes an open front sheet metal casing adapted to receive therein a set of drawers of the least or shallowest depth, or another set of drawers, certain ones of which have a depth which is approximately a multiple of the smallest depth or a single drawer of the greatest depth, and which is approximately equal to that of the combined depth of the drawers in either of the outer sets. On the inner surface of the side walls of the casing are sets of front to rear rails and these rails are so spaced apart vertically that certain pairs thereof are adapted to be engaged by coacting rails on the sides of the drawers for the sliding support of any combination of depth of drawers it is desired to use. Thus, with one casing and four different depths of drawers, it is possible to provide many arrangements of different depths of drawers. The drawers are so constructed that they cannot be accidentally pulled out to clear the open front of the casing and spill the contents thereof. However, when it is desired to completely remove any drawer or plurality thereof from the casing, this may be readily and easily done even by inexperienced persons, as will hereinafter appear.

Referring now in detail to that embodiment of the invention illustrated in the drawings, the improved assembly includes a cabinet casing of rectangular shape and preferably made up of light gauge sheet metal. Said casing, which is indicated as a whole by the numeral 15 in Fig.1, is open at the front and includes upright side walls 16—16, a back wall 17 and top and bottom walls 18 and 19 respectively. The open front of the casing is indicated at 20 and at the sides thereof are angle bar-like posts 21—21 each having a side flange 22 (see Fig. 10) that extends toward the rear wall of the casing.

On the inner surface of each side wall 16 are sets of front to rear extending rails 23, 24, 25 and 26 respectively, all spaced vertically the same distance apart and which best appear in Fig. 9.

Each rail, which is of a channel shaped cross section, includes an outer vertical flange **27** that is preferably spot welded to the associated side wall **16**, a bottom web **28** and an inner vertical flange **29**, the vertical flanges facing upwardly and being of less depth than the flange **27**. The inner flanges **29** of all of said rails are so spaced laterally from the associated side walls **16** as to be disposed in a plane inwardly of the plane of the flanges **22** of the corner posts **21** at the front of the casing.

Associated with the cabinet casing structure just described, are one or more drawers, which may be inserted into and withdrawn outwardly of the open front **20** of the casing. Structurally all of the drawers employed with the casing are alike, the only difference between them being in their vertical depths and which depths are substantially multiples of the vertical spacing between the pairs of rails **23**, **24**, **25** and **26** respectively.

In Fig. 1 is shown the deepest drawer possible to use with the casing, and which drawer has substantially the depth of the open front **20** of the casing and is indicated as a whole at **30** in Fig. 1.

In Fig. 2 is illustrated the largest number of drawers it is possible to use in the casing, and such drawers are each indicated as a whole by the numeral **30***a*. Each drawer **30***a* has a depth that corresponds substantially to the vertical spacing between the rails **23**, **24**, **25** and **26** respectively and therefore are four in number.

In Fig. 8 is illustrated the use of but two drawers **30***b* in the casing, each of the same depth and which is substantially twice the depth of the drawers **30***a* and which approximates the spacing between any two alternate sets of the rails **23**, **24**, **25** and **26** respectively.

In Figs. 3, 6 and 7 are shown the use of different combinations or arrangements of the drawers **30***a* and **30***b* respectively in a casing **15**.

In Fig. 4 is illustrated the use of but one of the shallowest drawers **30***a* in combination with a drawer **30***c* of a depth approximating three times the depth of the drawer **30***a*. The drawer **30***c* is once and a half times the depth of the drawers **30***b*. Fig. 5 illustrates a different arrangement of the drawers **30***a* and **30***c* in the casing.

As before mentioned, all of the drawers are structurally alike and therefore a description of one will suffice for all and all are preferably made of a light gauge sheet metal.

Each drawer, which is open at the top, includes a front **31**, a bottom **32**, a back **33** and a pair of side walls **34**, **34**. The upper marginal portion of each side wall **34** is bent over forming a downturned flange **35**, which is spaced laterally from the associated side wall, as best appears in Figs. 9 and 12. The spacing between the flanges **35** of each drawer is slightly less than the spacing between the flanges **22** of the corner posts **21** of the cabinet casing **15** and is slightly more than the spacing between the flanges **29** of the rails **23**, **24**, **25** and **26** before mentioned. Thus, in the insertion of a drawer into the casing, the flanges **35** will pass the flanges **22** of said corner posts **21** and will enter the spaces between the flanges **27**—**29** of the associated rails and will provide a sliding support for the top of each drawer with its associated rails, as best appears in Figs. 9 and 10.

Lateral marginal parts of the rear wall **33** of each drawer are bent over as a double fold, as best appears in Figs. 11, 12 and 13 to form flanges **33***a* that lap over rear end parts of the side walls **34** of the drawer. These flanges **33***a* are disposed in the planes of the flanges **35** of the drawer and terminate at their top ends at such a distance below said flanges **35** as to permit the said flanges properly to engage the rail flanges **29** for sliding support thereon.

Each side wall **34**, toward its rear end, is provided with an integral bendable punched out tongue **36**. In each tongue a slot-like opening **37** is provided to receive the end of a simple tool, such as the end of the blade of an ordinary screw driver. As best appears in Fig. 11, each tongue is connected at its top end to the associated drawer side and it ordinarily stands within the vertical plane of the flange **35** on the associated side **34** of the drawer. Thus, it affords no interference when inserting the drawer in the casing as it easily passes the flanges **22** of the corner posts. After the drawer has been inserted to a point wherein the tongues **36** have passed said corner post flanges, and while said tongues are reachable from the front of the casing, the end of a screw driver blade is inserted into the opening **37** of each tongue and the tongue is then bent outwardly as indicated in dotted lines in Fig. 12 so as to project laterally outwardly beyond the plane of the flanges **22** of the corner posts **21**.

Thus, when the drawer is drawn outwardly, the bent tongues **36** function as shoulders for a stop engagement with the flanges **22** of the corner posts so that the drawer cannot be accidentally entirely pulled out of the casing. When the drawer is pulled to the limit of its outer position, the upper end edges of the flanges **33***a* thereon will engage the web **28** of the associated rails and will prevent the downward tipping of the forward end of the drawer. If it is desired to completely remove the drawer, the tongues **36** are bent back inwardly with said screw driver so as to pass the flanges **22**.

Each drawer is provided on its front **31** with a drawer pull **38** and with a group of punched out ears **39** arranged to hold a card, upon which may be inscribed the contents for which the drawer is used.

While in describing the invention I have referred in detail to the form, arrangement and construction of the parts embodied therein, the same is to be considered only in the illustrative sense and therefore I do not wish to be limited thereto, except as may be specifically set forth in the appended claims.

I claim as my invention:

1. A sheet metal cabinet assembly embodying therein an open front casing having side walls, upwardly facing edge-like rails spaced inwardly from and parallel with said side walls and extending forwardly and rearwardly thereof, at least one drawer in said casing having back and side walls, means providing a downwardly opening channel on each side wall of the drawer having a sliding supporting engagement each on the top edge of an associated rail on an adjacent side wall of the casing from open to closed positions therein, and means formed from parts of the back wall of the drawer that are double folded over upon the side walls of the drawer and forming shoulders below and adapted to engage the underside of the associated rail to prevent a downward tipping of the drawer when it is drawn outwardly of the casing toward its open position.

2. A sheet metal cabinet assembly embodying therein an open front casing having side walls, upwardly opening channels each including a bot-

tom web and outer and inner flanges, at least the latter of which is upwardly directed, the outer flange being fixed to the inside of each side wall to extend forwardly and rearwardly thereof, at least one drawer in said casing having back and side walls, means providing downwardly opening channels on each side wall of the drawer having a sliding supporting engagement upon the upper edges of the inner flanges of the channels on the side walls of the casing from open to closed positions therein, and means on each side wall of the drawer below the channel thereon and formed from parts of the back wall of the drawer that are folded over upon the side walls of the drawer, adapted to engage the underside of the web portion of the channel on the adjacent side wall of the casing to prevent a downward tipping of the drawer when it is drawn outwardly of the casing toward its open position.

3. A sheet metal cabinet assembly embodying therein an open front casing having side walls, upwardly facing edge-like rails spaced inwardly from and parallel with said side walls and extending forwardly and rearwardly thereof, at least one drawer in said casing having back and side walls, an upper marginal portion on each side wall of the drawer being bent outwardly and then downwardly to provide a downwardly opening channel having a sliding supporting engagement, each upon the top edge of the edge-like rail on one adjacent side wall of the casing from open to closed positions therein, and means on each side wall of the drawer below the channel thereon formed from parts of the back wall of the drawer and bent forwardly and engaged with the sides of the drawer and having a rearward return bend adapted to engage the under side of the associated rail to prevent a downward tipping of the drawer when it is drawn outwardly of the casing toward its open position.

4. A sheet metal cabinet assembly embodying therein an open front casing having side walls, upwardly facing edge-like rails spaced inwardly from and parallel with said side walls and extending forwardly and rearwardly thereof, at least one drawer in said casing having side walls and a back wall, means providing a downwardly opening channel on each side wall of the drawer having a sliding supporting engagement each on the top edge of an associated rail on an adjacent side wall of the casing from open to closed positions, parts of the back wall of the drawer being so formed as to be bent over upon the side walls thereof, to form upwardly facing shoulders below said channels thereof and adapted to engage the under side of the associated rail to prevent a downward tipping of the drawer when it is drawn outwardly of the casing toward its open position.

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