United States Patent

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[54] STEEL DRAWER

2 Claims, 6 Drawing Figs.

[52] U.S. Cl. 312/330
[51] Int. Cl. A47b 88/00
[50] Field of Search 312/330, 273, 278, 308, 309, 204

[56] References Cited

UNITED STATES PATENTS

2,968,519	1/1961	Weber	312/204
3,416,850	12/1968	Hilfinger et al.	312/330

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ABSTRACT: A front and a rear panel board constituting a front wall of a drawer having a backwardly and a forwardly bent flange on their edges, each of which flanges in turn has an inwardly or outwardly extending L-shaped flange. The L-shaped flanges on both lateral flanges of the rear panel board are cut off at their upper portions and the lower flanges are also cut off at their extreme ends. With the front and rear panel boards thus constructed, they are firmly secured to each other at their upper and lateral sides of the panel boards.

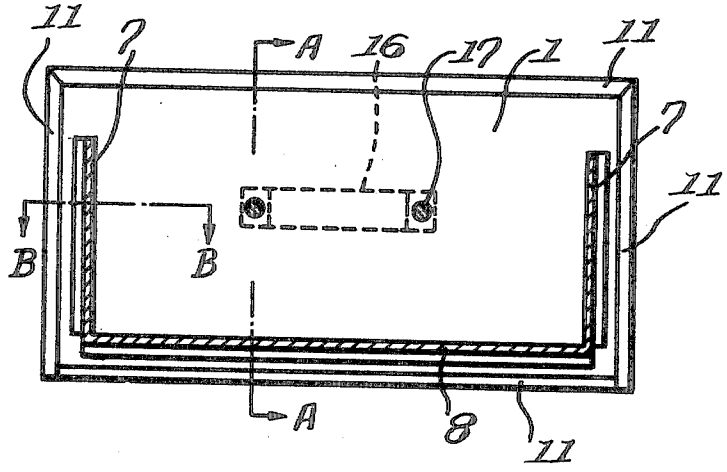


Fig. 1

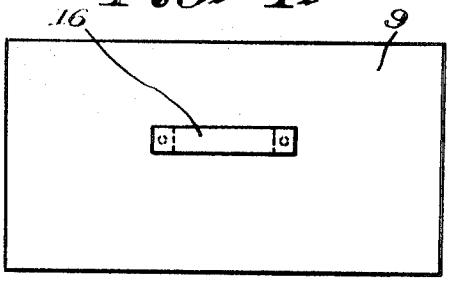


Fig. 2

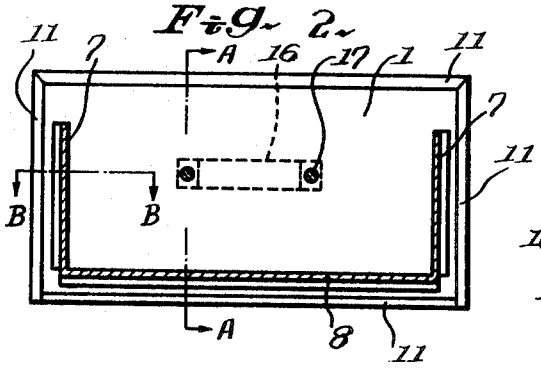


Fig. 3

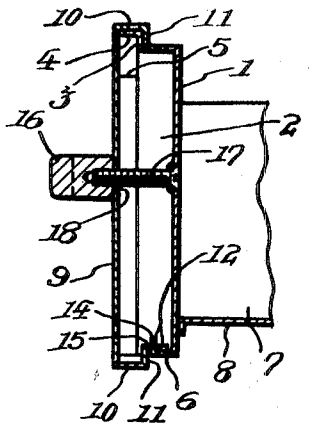


Fig. 4

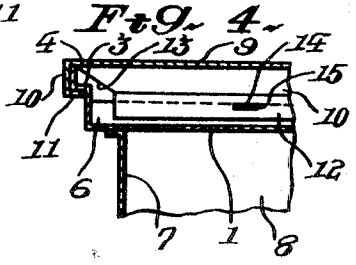


Fig. 5

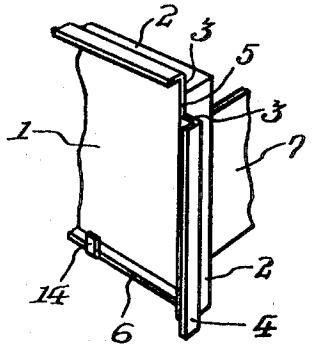
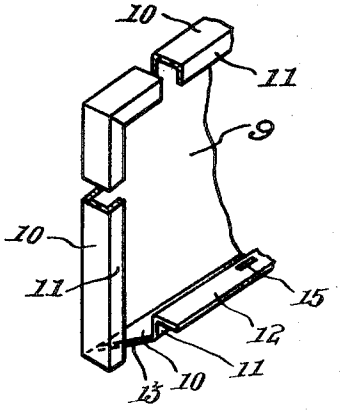


Fig. 6



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STEEL DRAWER

This invention relates to the structure of a steel drawer, and more particularly to the structure of a panel board of the steel drawer.

In the structure of a conventional drawer, a front and a rear panel board, which constitute a front wall of the drawer, are adapted to engage with each other only at their upper portions. There has been, therefore, a drawback that the front panel board rattles when pulled or it disconnects from the real panel board with a strong pull.

This invention has been proposed to remove such drawbacks and has as a feature that a rear panel board has a forwardly bent flange on the upper and right and left ends thereof, each flange has an outwardly extending L-shaped flange at the front end thereof, which flange has in turn a forwardly bent flange at the outer end thereof, the outwardly extending flange and forwardly bent flanges on both lateral edges of the rear panel board are cut off at their upper portions; the rear panel board is provided with forwardly bent flanges at the lower end thereof and a drawer body comprising side boards and a bottom board is fixed at its front end to the rear face of the panel board of a desk, and that a front panel board has a backwardly bent flange on the upper and lower and both lateral ends thereof, each bent flange has an inwardly extending flange at the rear end thereof, the lower flanges have a backwardly bent flange, and these lower flanges are cut off at their extreme ends, the flanges which are formed at the upper and the lateral ends of the front panel board, engage with an outwardly extending flange and a forwardly bent flange formed at the upper and the lateral ends of the rear panel board, when the former are combined with the latter and the lower flanges of the front panel board engage with the lower flanges of the rear panel board. This invention will be explained with reference to the accompanying drawings in which:

FIG. 1 is a front view of the steel drawer according to this invention;

FIG. 2 is a longitudinal rear sectional view;

FIG. 3 is an enlarged sectional view of the drawer taken along the line A–A in FIG. 2;

FIG. 4 is also an enlarged sectional view of a part of the drawer, which has taken along the line B–B in FIG. 2;

FIG. 5 is a perspective view of a part of the rear panel board of the drawer; and

FIG. 6 is a perspective view of a part of the front panel board of the drawer. A steel drawer according to the present invention comprises a front panel wall consisting of a front 9 and a rear 1 panel boards, sidewalls 7 on either side and a bottom wall 8. The rear panel board 1 has a forwardly bent flange 2 on the upper and right and left ends thereof. Each flange 2 has an outwardly extending L-shaped flange 3 at the front end thereof, which edge 3 has in turn a forwardly bent edge 4 at the outer end thereof. The L-shaped flanges 3 and 4 on both lateral sides of the rear panel board 1 are cut off at their upper portions as indicated by 5. The rear panel board 1 is provided with a forwardly bent flange 6 at the lower end thereof. A drawer body comprising side boards 7 and a bottom wall 8 is fixed at its front end to the rear face of this front panel board 1.

On the other hand, the front panel board 9 has backwardly bent L-shaped flanges 10 on the upper and lower and both lateral sides thereof. Each bent flange 10 has an inwardly extending flange 11 at the rear end thereof. Only the lower flange 11 has a backwardly bent flange 12, and the lower

flanges 10, 11 and 12 are cut off at their both extreme ends thereof as indicated by 13. The flanges 10 and 11, which are formed at the upper and the lateral ends of the front panel board 9, engage with the flanges 3 and 4 formed at the upper and the lateral ends of the rear panel board 1, when the former are combined with the latter. The lower flange 12 of the front panel board 9 engages with the lower flange 6 of the rear panel board 1.

14 is a projection provided on the lower flange 6 of the rear panel board 1 and adapted to fit into an opening 15 formed on the lower flange 12 of the front panel board 9. These lower flanges 6 and 12 may be screwed. 16 is a drawer pull, to the legs of which screws 17 are screwed through holes 18 of the front panel board 9 extending from the rear panel board 1.

In the assembly of the panel board, the lower flanges 10, 11 and 12 of the front panel board 9 are inserted into the inside of the rear panel board 1 through the cutout portion 5, and the front panel board 9 is moved down until the lower flanges 10, 11 and 12 engage with the lower flanges 3 and 4 from the outside thereof.

With the structure according to this invention, the front 9 and the rear 1 panel boards are firmly secured to each other at their upper and the lateral sides, and therefore such drawbacks as appears in the conventional drawer in which the front and the rear panel boards are secured only at their upper and lower edges, that is, back and forth rattling of the front panel board occurring at its center portion and disconnection between both panel boards with a strong pull can be removed. It is also to be noted that the front panel board can be easily connected with or released from the rear panel board.

I claim:

1. A steel drawer comprising a front wall made up of a front and a rear panel board, sidewalls and a bottom wall,

said rear panel board having a forwardly bent first flange on the upper and right and left sides thereof, each said first flange having an outwardly extending second flange at the front end thereof, said second flange having a forwardly bent third flange at the outer end thereof, said second flange and said third flange on both lateral sides of the rear panel board 1 being cut out at their upper portions said rear panel board being provided with a forwardly bent flange at the lower edge thereof, said sidewalls and bottom wall being attached to the rear face of said rear panel board;

said front panel board having a forwardly bent first flange on the upper and lower and both lateral sides thereof, each first flange having an inwardly extending second flange at the rear end thereof, the second flange on the lower side having a backwardly bent third flange, said flanges on the lower side being cut out at their extreme ends;

whereby said first and second flanges of the upper and the lateral sides of the front panel board engage with the second and third flanges of the upper and the lateral sides of the rear panel board when the former are combined with the latter, and said third flange on the lower side of the front panel board engages with said flange at the lower end of the rear panel board.

2. A steel drawer according to claim 1 wherein the third flange on the lower side of the front panel board has an opening therein and the flange on the lower edge of said rear panel board has a projection thereon, said projection being adapted to fit into said opening when the front and back panel boards are assembled together.