Oct. 6, 1959 B. N. LINDER ET AL 2,907,452

COLLAPSIBLE WARDROBE CROSS BAR

Filed May 14, 1956

FIG. 1.

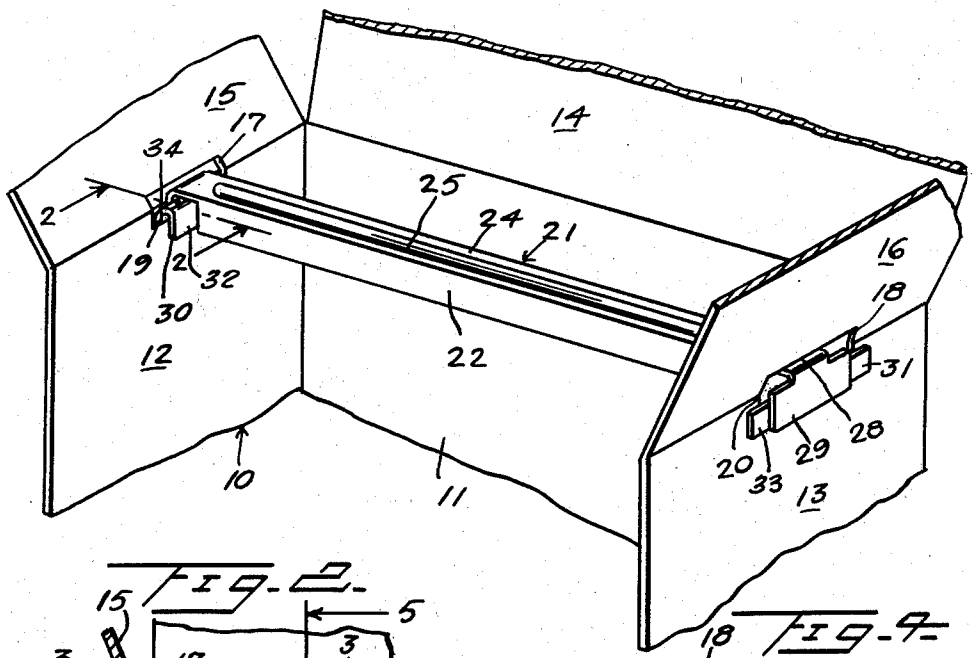


FIG. 2.

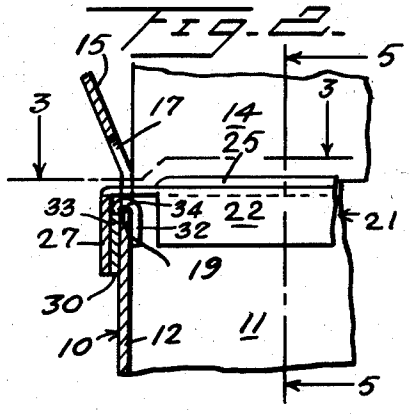
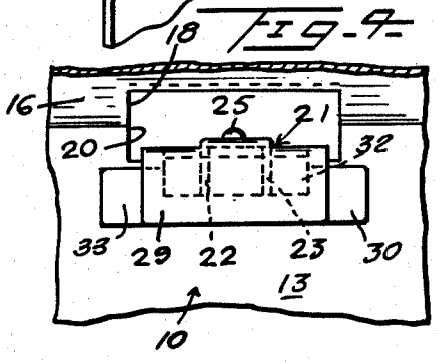


FIG. 4.



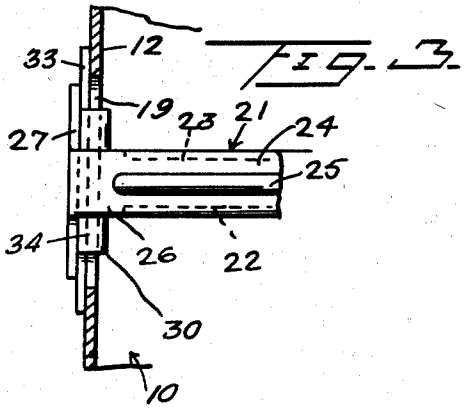


FIG. 3.

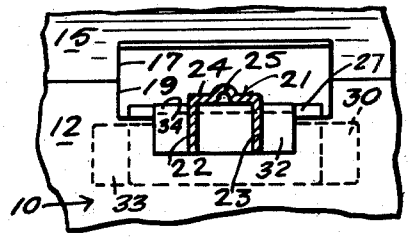


FIG. 5.

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COLLAPSIBLE WARDROBE CROSS BAR

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1 Claim. (Cl. 206—7)

The present invention relates to cross bars for collapsible wardrobes, and more particularly, to metallic cross bars which are adapted to cooperate with flexible paper collapsible wardrobes.

The primary object of the invention is to provide a cross bar for collapsible wardrobes wherein a large area of contact exists between the edges of the wardrobe and the ends of the cross bar.

Another object of the invention is to provide a cross bar for collapsible wardrobes which is formed of an integral metallic channel member and a pair of wardrobe edge reinforcing channels.

A further object of the invention is to provide a cross bar for collapsible wardrobes which will be inexpensive to manufacture, simple to use, and quite durable in service.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a fragmentary perspective of the invention.

Figure 2 is an enlarged fragmentary vertical cross-section taken along the line 2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is a fragmentary horizontal cross-section taken along the line 3—3 of Figure 2, looking in the direction of the arrows.

Figure 4 is a fragmentary end elevation of the invention.

Figure 5 is a vertical cross-section taken along the line 5—5 of Figure 2, looking in the direction of the arrows.

Referring now to the drawings in detail wherein like reference characters indicate like parts throughout the several figures, the reference numeral 10 indicates generally a collapsible cardboard wardrobe for clothes storage. The wardrobe 10 includes a back panel 11, opposite parallel end panels 12 and 13, a cover panel 14 hinged to the upper edge of the back panel 11, a cover panel 15 hinged to the upper edge of the end panel 12, and a cover panel 16 hinged to the upper edge of the end panel 13.

The wardrobe 10 additionally includes a bottom panel, a front panel, and a cover panel hinged to the front panel, none of which are shown since they do not form a part of the present invention.

The construction of the wardrobe 10 can be of any conventional nature requiring only minor modifications thereto to permit the use of our invention therewith.

In the construction of cardboard collapsible wardrobes the provision of suitable clothes hanger receiving bars have presented a problem since they must have sufficient strength to support the entire load of clothing placed within the wardrobe. While it has not been too difficult to produce a bar having sufficient strength to support the clothing hung thereon, the reinforcement of the wardrobe to support the bar has presented problems not heretofore adequately and efficiently solved.

The wardrobe 10 is adapted to receive our invention by forming slots 17 and 18 in the cover panels 15 and 16

and slots 19 and 20 in the end panels 12 and 13 in such a way that the slot 17 communicates with the slot 19, and the slot 18 communicates with the slot 20.

A cross bar generally indicated at 21 is formed of a generally channel shape having opposed parallel spaced apart side walls 22 and 23 which extend vertically and are connected by a top wall 24. A rib 25 is upwardly offset in the top wall 24 to provide an additional reinforcing for the cross bar 21. The top wall 24 extends beyond the ends of the side walls 22 and 23 to form an extension 26 at one end of the cross bar 21.

An elongated flange 27 is integrally secured to the outer end of the extension 26 and extends at right angles thereto, as best illustrated in Figure 2. The opposite end of the cross bar 21 is similarly formed having the top wall 24 extended as at 28 and provided with an elongated right angularly extending flange 29, as best seen in Figure 1.

The flanges 27 and 29 extend parallel to each other and are in spaced apart relation to the ends of side walls 22 and 23 of the cross bar 21.

A pair of elongated channel shaped edge reinforcing members 30 and 31 are positioned over the upper edges of the end panels 12 and 13 at the bottoms of the slots 19 and 20. The members 30 and 31 each have an inner leg 32 and an outer leg 33 connected together by a curved bight portion 34. The inner legs 32 have a horizontal length less than the horizontal length of the slots 17, 18, 19, 20 so that the inner legs 32 will pass therethrough for positioning over the upper edge of the end panels 12, 13 at the bottom of the slots 19, 20 respectively. The outer legs 33 have a horizontal length considerably greater than the horizontal length of the slots 17, 18, 19, 20. The members 30, 31, by reason of the greater length of the outer legs 33, greatly strengthen the end panels 12, 13 in the area around the slots 19, 20 which have been weakened by the provision of the slots 19, 20. The cross bar 21 is positioned so that its opposite ends overlie the channel members 30 and 31 with the flanges 27 and 29 extending downwardly over the outer faces, respectively, of the channels 30 and 31 so that the cross bar 21 is supported on the channels 30 and 31, respectively, thus reinforcing the upper edge of the end panels 12 and 13.

The provision of the slots 19 and 20 in the panels 12 and 13 permit the cross bar 21 to be positioned sufficiently low to allow the top panels 14, 15, 16, and the top panel forming a part of the front wall (not shown here) to be folded inwardly on top of the cross bar 21 without distortion of the end panels so formed.

The use of the channel reinforcing members 30 and 31 permit the wardrobe 10 to support any reasonable load placed upon the cross bar 21.

Having thus described the preferred embodiment of the invention, it should be understood that numerous structural modifications and adaptations may be resorted to without departing from the scope of the appended claim.

What is claimed is:

A suspension means for collapsible paperboard wardrobes of the type having upright end panels supported by upright side panels, cover panels integrally hinged to the upper edge of said end panels, each of said end panels and said connected cover panels having a rectangular slot partially in said end panel and partially in said cover panel and traversing the hinge line between said end panel and said cover panel, comprising a pair of elongated U-shaped end panel reinforcing members, each of said members having spaced apart parallel laterally extending inner and outer legs integrally connected by a curved bight portion, said outer legs having a substantially greater horizontal length than said inner legs and said slots, said inner legs having a horizontal length less than the length of said slots, an elongated

channel shaped bar having a horizontal top wall and spaced parallel side walls depending from the opposite side edges of said top wall, a horizontal extension formed integrally on each end of said top wall, and an elongated flange integrally depending from the outer end of each of said extensions, said flanges extending at each end thereof laterally substantially beyond said side walls, said horizontal extensions each resting on one of said reinforcing members engaging over the upper edge of said end panel with said reinforcing member and said end panel engaged between the outer ends of said side walls and the flange adjacent thereto.

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