Jan. 20, 1953 W. B. TURNER 2,626,059

COLLAPSIBLE DISPLAY RACK

Filed June 23, 1950 4 Sheets-Sheet 1

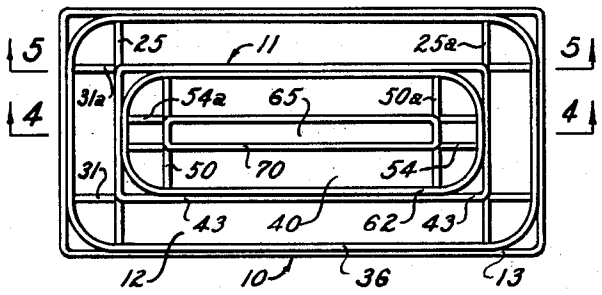
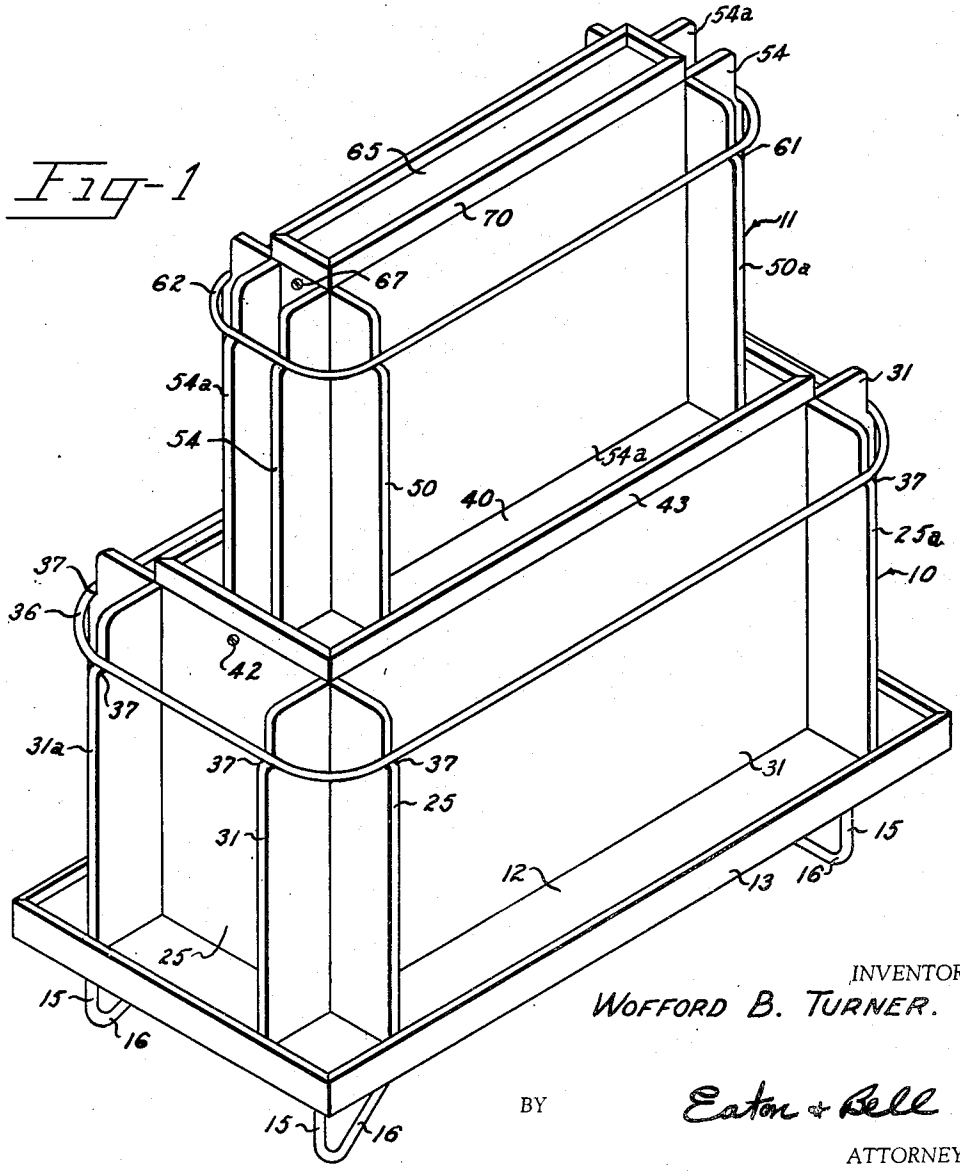


Fig-2

Fig-1



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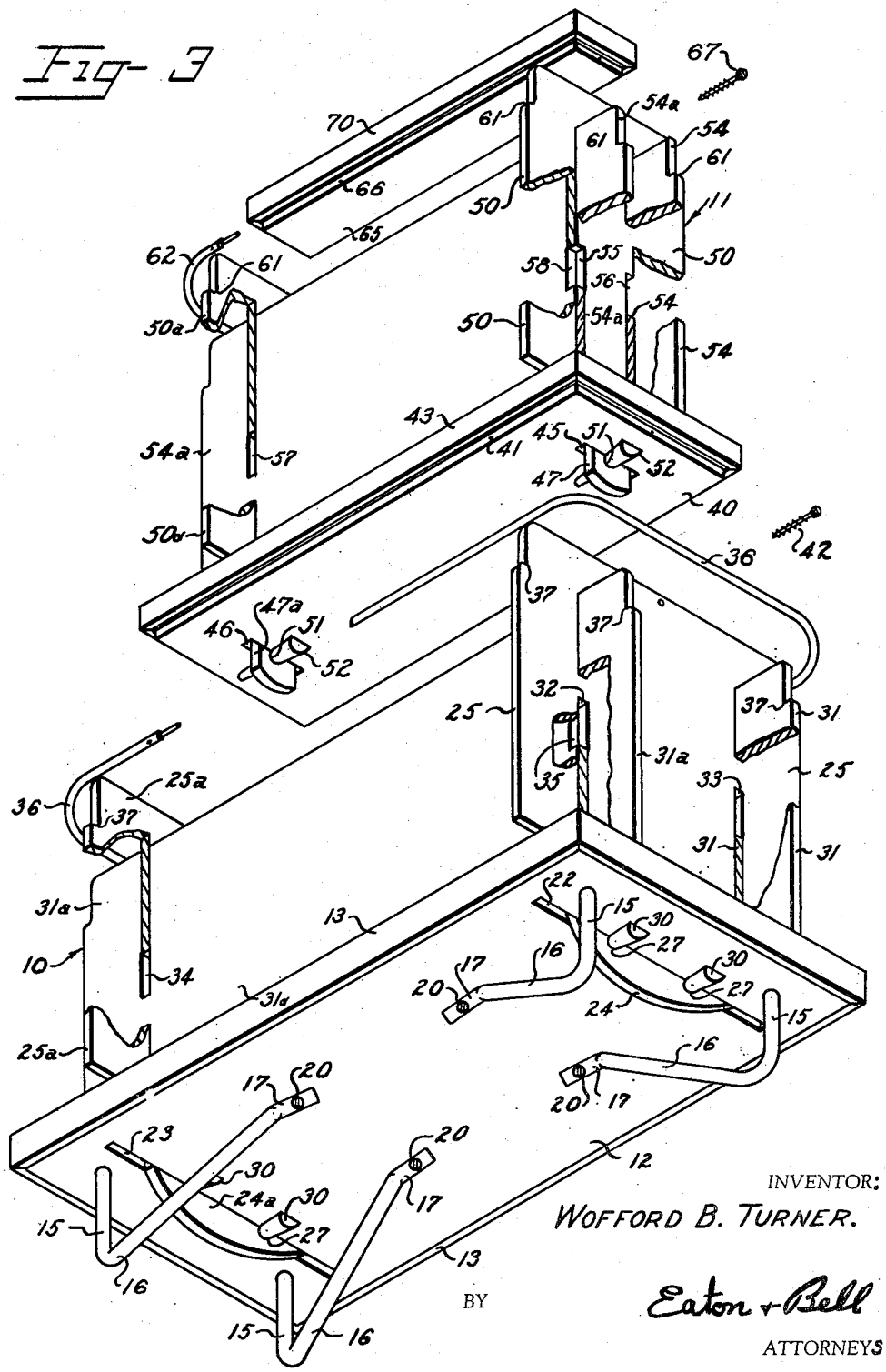
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COLLAPSIBLE DISPLAY RACK

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Fig- 3



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COLLAPSIBLE DISPLAY RACK

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Fig-4

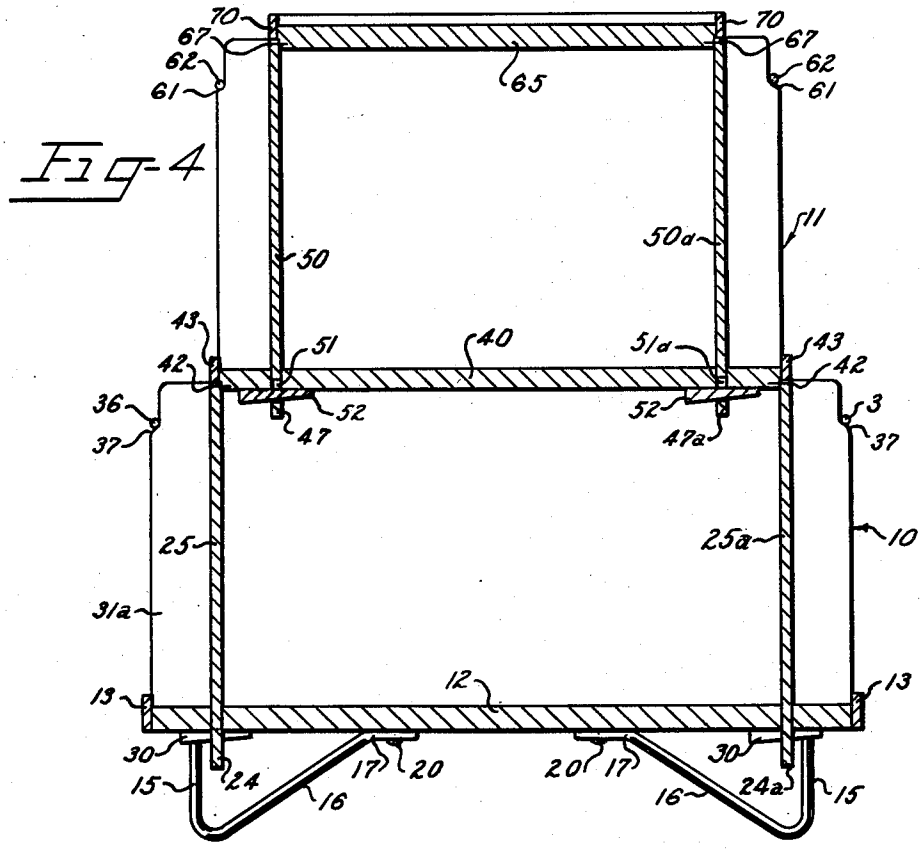
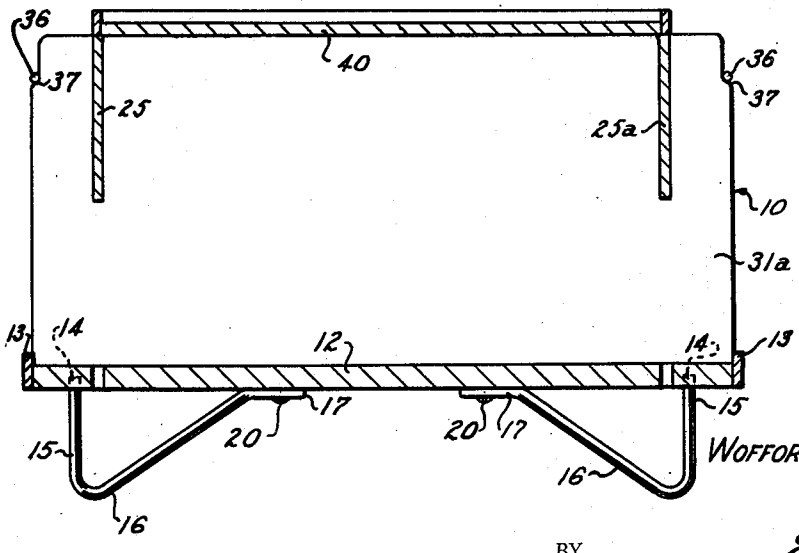


Fig-5



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Jan. 20, 1953 W. B. TURNER 2,626,059

COLLAPSIBLE DISPLAY RACK

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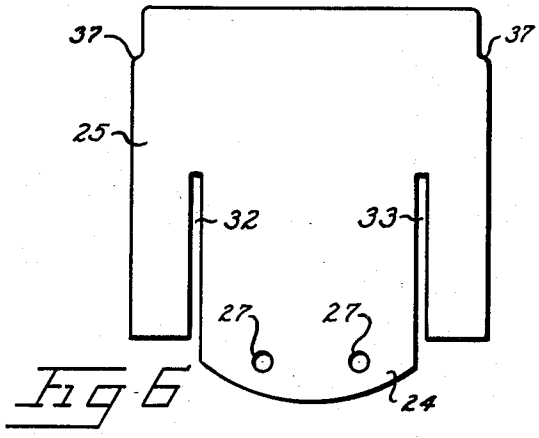


Fig 6

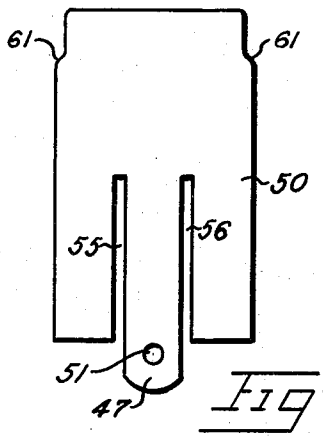


Fig-7

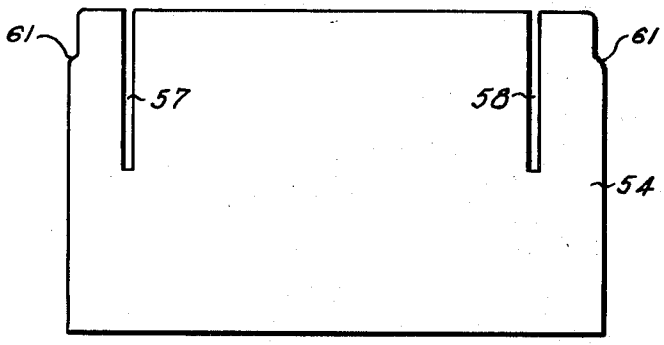


Fig-8

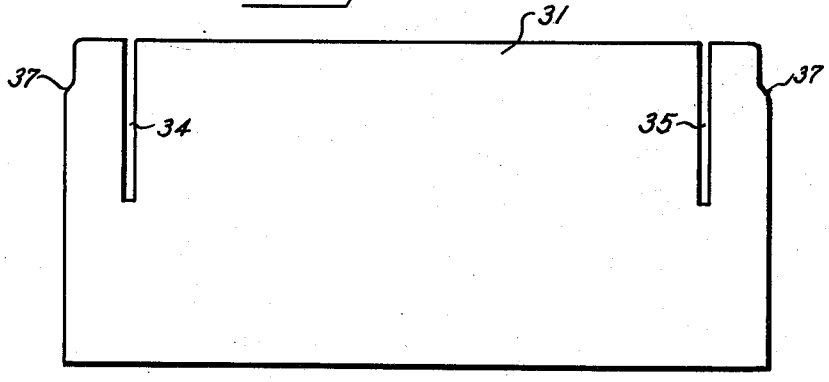


Fig-9

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Patented Jan. 20, 1953 2,626,059

UNITED STATES PATENT OFFICE

2,626,059

COLLAPSIBLE DISPLAY RACK

Wofford B. Turner, Charlotte, N. C.

Application June 23, 1950, Serial No. 169,884

1 Claim. (Cl. 211—44)

1

This invention relates to a display rack of knock-down construction and more especially to a display rack for floor covering materials such as rugs and carpets, or oil cloth, wall paper or any other type of material which may be rolled upon itself and displayed on end.

It is an object of this invention to provide a carpet rack of knock-down construction which may be easily and quickly assembled for displaying elongated articles which are substantially circular in cross-section and a rack may also be easily collapsed so as to lie flat when it is shipped or is not in use.

It is another object of this invention to provide a carpet rack or the like of the type described which may be provided with two or more platforms disposed at different elevations and having side walls and end walls which are interfitted with one another as well as with the respective platform portions of the carpet rack, the walls associated with each of the platforms being circumscribed adjacent the upper edges thereof by a suitable binder for holding the walls in interfitted relation to each other and also to support the upper end of circular elongated objects such as rolls of carpet and the like which may rest upon exposed lower portions of the platform.

It is another object of this invention to provide a display rack which is substantially pyramidal in shape and is provided with means on each of its sides for displaying objects and which has at least an upper and a lower display area so that objects may be displayed at two or more elevations and on all sides of the pyramidal rack.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds when taken in connection with the accompanying drawings in which—

Figure 1 is an isometric view looking at one end, one side and the top of the improved display rack;

Figure 2 is a top plan view at a reduced scale of the rack shown in Figure 1;

Figure 3 is a partially exploded isometric view of the rack shown in Figure 1 but looking up at the bottom thereof and also looking at the opposite side from that shown in Figure 1;

Figure 4 is an enlarged vertical sectional view taken substantially along the line 4—4 in Figure 2;

Figure 5 is an enlarged vertical sectional view taken substantially along the line 5—5 in Figure 2;

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Figure 6 is an elevation showing one of the endmost panels of the lower section of the rack shown in Figures 1, 3, 4 and 5 but being removed from the carpet rack for purposes of clarity;

Figure 7 is a view similar to Figure 6 but showing one of the endmost panels of the upper section of the rack shown in Figures 1, 3 and 4;

Figure 8 is a side elevation of one of the side panels of the upper section of the rack shown in Figures 1, 3 and 4 but being removed from the rack for purposes of clarity;

Figure 9 is elevation of one of the side panels of the lower section of the rack shown in Figures 1, 3, 4 and 5 also being removed from the rack for purposes of clarity.

Referring more specifically to the drawings, the rack or display stand is pyramidal in shape and includes a plurality of superposed body structures or sections, there being two sections shown in the drawings, which for purposes of description, will be termed a first or lower section broadly designated at 10 and a second or upper section broadly designated at 11.

The first or lower section 10 comprises a lower deck or first level platform 12 which is substantially rectangular in shape and to the outer edges of which suitable edge or ridge pieces 13 are suitably secured by any suitable means, such as nailing, gluing, and the like. These edge pieces 13 project upwardly a relatively short distance above the upper surface of the lower deck 12 to provide a ridge around the outer edge of the lower deck 12.

The lower deck 12 has a plurality of bores of cavities 14 in the lower surface thereof, there being one of these bores 14 spaced adjacent each of the corners of the lower deck 12 for reception of vertical extending portions 15 of legs 16, the legs 16 being substantially V-shaped as shown in Figures 3, 4 and 5. The legs 16 are curved upwardly and inwardly towards the center of the lower deck 12 and are flared as at 17, each of the portions 17 being slidably penetrated by a screw 20 for securing the corresponding leg 16 to the lower surface of the lower deck 12. There are many types of legs which may be employed in lieu of the legs 16, however, it is preferable that legs similar to the type described be employed since it is seen that they may be easily secured to or removed from the lower deck.

The lower deck 12 has a pair of transversely extending slots 22 and 23 therein which are spaced from opposed ends of the lower deck 12.

These slots 22 and 23 are adapted to slidably receive tongue portions or projections 24 and 24a of respective end walls or panels 25 and 25a both of which are identical and the panel 25 being shown per se in Figure 6. Each of the tongues or projections 24 and 24a of the respective panels 25 and 25a has a pair of spaced slots 27 therein which are disposed in a plane below the lower surface of the lower deck 12 when the respective tongues 24 and 24a are inserted in the respective slots 22 and 23 as shown in Figure 3. Each of the slots 27 is adapted to slidably receive a wedge 30 which bears against the lower surface of the lower deck 12 and the lower wall of the respective slot 27 to thus hold the lower edge of the corresponding panels 25 and 25a against the upper surface of the lower deck 12 adjacent opposed ends of the corresponding slots 22 and 23.

It will be observed in Figures 1 and 2 that opposed side edges of the first and second end panels 25 and 25a are disposed between the proximate surfaces of the ridge members 13. The lower section of the display stand or carpet rack also includes first and second side walls or panels 31 and 31a respectively which are also identical in structure, a detail of the side panel 31 being shown in Figure 9. The end panels 25 and 25a and the side panels 31 and 31a are notched for interfitting engagement and it will be observed in Figures 6 through 9 that each of the end panels 25 and 25a has a pair of spaced notches or slots 32 and 33 which extend upwardly from the lower edges thereof on each side of the tongue 24 while each of the side panels 31 and 31a has a pair of spaced notches or slots 34 and 35 which extend downwardly from the upper edges thereof and it is thus seen that the upper portions of the end panels 25 and 25a may be inserted in the respective notches 34 and 35 in the side panels 31 and 31a as the notches or slots 32 and 33 in the end panels 25 and 25a are fitted over the side panels 31 and 31a so as to slidably straddle the side panels 31 and 31a, the end panels 25 and 25a and the side panels 31 and 31a being interfitted in such a manner that the lower edges of the side panels 31 and 31a will rest on the upper surface of the lower deck 12 between the endmost portions of the ridge member 13 as shown in Figures 1, 2, 4 and 5.

It will thus be observed that the tongue portions 24 and 24a of the end panels 25 and 25a will extend through the slots 22 and 23 in the bottom deck 12 and the wedges 30 may be placed in the bores or openings 27 to thus hold the end panels in position. Since the end panels are fitted over the side panels this will also hold the side panels securely in position and it is not necessary to have tongues and wedges on the side panels. If desired the side panels may be provided with tongues and the slots therein reversed so the side panels will hold the end panels in position.

Since the display stand or carpet rack is preferably to be used for displaying substantially cylindrically-shaped articles such as rolls of carpeting and the like, there is provided a rail in the form of an endless tube or bar 36 which circumscribes the upper portions of the lower section 10 each of the panels 25 and 25a, 31 and 31a being suitably notched, as as 37 for reception of the rail 36. It might be stated that, although it is not essential it is preferred that the circumscribing rail 36 fit snugly around the upper portions of the outer edges of the panels 25, 25a, 31 and 31a so as to lend rigidity to the upper end of the panels with respect to each other.

It is thus seen that the outer surfaces of the end panels 25 and 25a and the side panels 31 and 31a are spaced inwardly from the outer edges of the lower deck 12 thus exposing the outer portion of the upper surface of the lower deck 12 so that cylindrically-shaped articles may be placed on end on the lower deck 12 and resting against the outer surfaces of the corresponding panels 25, 25a, 31 and 31a, the rail 36 serving to hold the upper ends of the cylindrical articles against the panels 25, 25a, 31 and 31a.

The panels 25, 25a, 31 and 31a define an area substantially rectangular in plan and this area is closed by an intermediate deck or second level platform 40 which is rabbeted as at 41 around its outer lower peripheral edge so as to rest on and fit snugly between the side walls 25, 25a, 31 and 31a. Although it is not essential, the intermediate deck 40 may be secured in position against the upper ridges of the panels 25, 25a, 31 and 31a by any suitable means such as screws 42 which slidably penetrate the end walls 25 and 25a adjacent the upper edges thereof.

The intermediate deck or second level platform 40 is constructed substantially the same as the lower deck 12 in that it is provided with a ridge member 43 suitably secured to the outer edges of the intermediate deck 40 and projecting upwardly therefrom slightly above the horizontal plane of the upper surface of the intermediate deck 40 so as to provide a ridge around the outer edges of the second level platform 40.

The intermediate deck 40 also has a pair of spaced transversely extending slots 45 and 46 therein which are adapted to be slidably penetrated by tongue portions or projections 47 and 47a of respective end walls or panels 50 and 50a are identical, the end panel 50 being shown in detail in Figure 7 as removed from the carpet or display rack. Tongues 47 and 47a of the respective end panels 50 and 50a each of the upper section 11 has a slot or bore 51 therethrough which, when the respective tongues 47 and 47a are inserted in the respective slots 45 and 46 of the intermediate deck 40, are disposed at a plane substantially bisected by the plane of the lower surface of the intermediate deck 40 and each is adapted to receive a wedge 52 which bears against the lower surface of the intermediate deck 40 and the lower wall of the corresponding slot 51 to thus secure the lower edge of the panels 50 and 50a against the upper surface of the intermediate deck 40.

The upper or second section 11 also includes first and second side walls or panels 54 and 54a which are identical, the panel 54 being shown in detail in Figure 8.

The end panels 50 and 50a and the side panel 54 and 54a are notched for interfitting engagement, each of the end panels 50 and 50a being provided with a pair of spaced notches 55 and 56 which extend upwardly from the lower edges of the panels 50 and 50a adjacent the tongues 47 and 47a, and each of the side walls 54 and 54a is provided with a pair of spaced notches or slots 57 and 58 which extend downwardly from the upper edge of the panels 54 and 54a and terminate at a substantial distance from the edges thereof.

Although the interfitting notches are only shown in panels 25, 31, 50, and 54, it is to be understood that identical notches are provided in the respective panels 25a, 31a, 50a, and 54a

and since the panels **25**, **31**, **50** and **54** are identical to the respective panels **25***a*, **31***a*, **50***a* and **54***a*, a further showing thereof is deemed unnecessary. The uppermost portion of each edge of the panels **50**, **50***a*, **54** and **54***a* is provided with a notch **61** which is identical to the notch **37** in the corresponding panels of the lower section **10** and is provided for reception of a rail **62** which is shown in Figures 1, 2 and 3 as an endless tubular member which circumscribes the upper portions of the panels **50**, **50***a*, **54** and **54***a* and fits snugly in the notches **61** provided therefore.

It is evident that the second section **11** is essentially smaller than the lower or first section **10** with the respect to the lengths of the various walls or panels associated with the respective sections **10** and **11** and the opposed edges of the walls **50**, **50***a*, **54** and **54***a* extend to the inner surfaces of the ridge **43**. It is thus seen that a plurality of cylindrically shaped articles, such as rolls of carpeting and the like, may be placed between the ridge **43** and the corresponding walls **50**, **50***a*, **54** and **54***a* of the upper section **11** substantially as is the case with respect to the lower section **10** and the upper portions of the cylindrically shaped articles may be retained against the corresponding walls by the rail **62**.

Although it is not essentially, a cover member, third or upper deck **65** may be provided which is rabbeted as at **66** at its outer lower edges so as to fit between the end walls **50** and **50***a* and the side walls **54** and **54***a* while resting on the upper edges thereof. If so desired, the upper deck **55**, may be secured between end walls **50** and **50***a* by any suitable means such as screws **67**.

A suitable ridge **70** may be secured at the outer edges of the upper deck **65** so that articles to be displayed may be placed on the upper surface of the upper deck **65** and confined thereon by the ridge member **70** surrounding the upper deck **65**.

Although the display rack is shown as being provided with two sections **10** and **11** to provide means for displaying objects at two different elevations and on all four sides of the rack, it is to be understood that this invention is not limited to a rack having two pyramidal sections but if desired the rack may have a plurality of sections each disposed at a different elevation and each section being of a smaller size than the section immediately below the same.

It is thus seen that I have provided an improved display rack for cylindrically shaped articles such as rolls of carpeting linoleum and the like and which rack may be stored or sold and delivered to a purchaser in a knocked down condition and which is so constructed that it may be readily and conveniently assembled into set up condition without the necessity of tools or nailing or bolting the various parts together. It is evident that in order to disassemble the carpet rack it is merely necessary to remove the screws **42** and **67**, if such screws are employed, then lifting the intermediate and upper platforms, such as the platforms **40** and **65**, from beteen the corresponding panels after which it is merely necessary to remove the wedges **52** and **27** from the respective tongues **47**, **47***a*, **24** and **24***a* of the respective panels in the second and first sections **11** and **10**. Then the projections or tongues **47** and **47***a* and **24** and **24***a* are removed from the slots in the decks **40** and **12** after which the side panels and end panels of

the two sections may be disassembled. If so desired the legs **16** may also be removed by removing the screws **20** since the vertical portions **15** of the legs **13** are merely slidably inserted in the cavities **14** provided therefore in the lower surface of the lower deck **12**. It is evident that the rails **36** and **52** should be removed from the respective notches **37** and **61** of the panels of their respective sections **10** and **11** before disassembling the panels.

In the drawings and specification there has been set forth a preferred embodiment of the invention and although specific terms are employed they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the claim.

I claim:

A collapsible display rack including a pair of superposed sections, the upper section being smaller in lateral and longitudinal dimensions than the lower section and each of the sections comprising a deck, a pair of spaced end walls and a pair of spaced side walls having their lower edges supported on the deck of a section, the end walls each having a pair of spaced notches extending from the lowermost edge thereof and terminating intermediate the vertical height of the end walls, the side walls each having a pair of spaced notches therein extending from the uppermost edge thereof and terminating intermediate the lower edge thereof, the notches in the end walls and the side walls having a combined length equal to the height of the walls so the end walls and the upper walls may be interfitted with respect to each other, each of said decks having transversely extending slots therein disposed in alinement with the end walls, said end walls each having a tongue on the lower end thereof penetrating said slots in the deck, each of said tongues having a slot therethrough and a wedge driven through said slots in the tongues to thus hold the lower edges of the walls in position against the upper surface of the corresponding deck so the end and side walls of the rack will be disposed in fixed relation to the deck, the end walls and side walls of each section projection outwardly to points adjacent the outer edges of the deck of a section, said end and side walls being spaced inwardly from the outer edges of said decks so as to expose portions of the upper surface of the decks adjacent the outer edges thereof for reception of articles to be displayed, and the deck of the upper section being rabbeted adjacent its side and end edges and interfitted within the confines, and an endless rail encircling the upper portions of the end walls and side walls and fitting snugly thereagainst.

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