April 18, 1939. E. R. STIVERS 2,154,538

COMBINATION SHIPPING AND DISPLAY CONTAINER

Filed Oct. 17, 1934 5 Sheets-Sheet 1

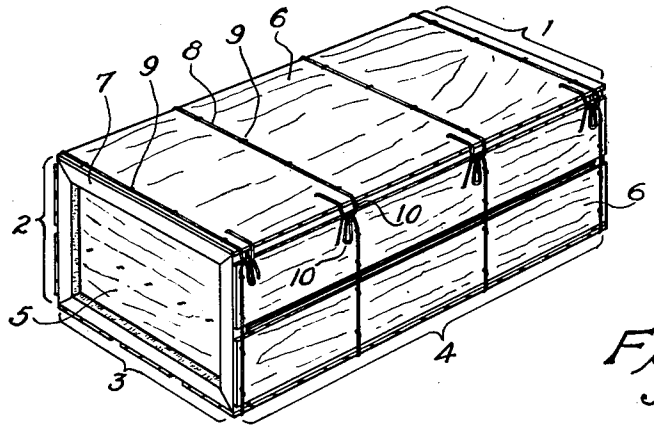


Fig. 1.

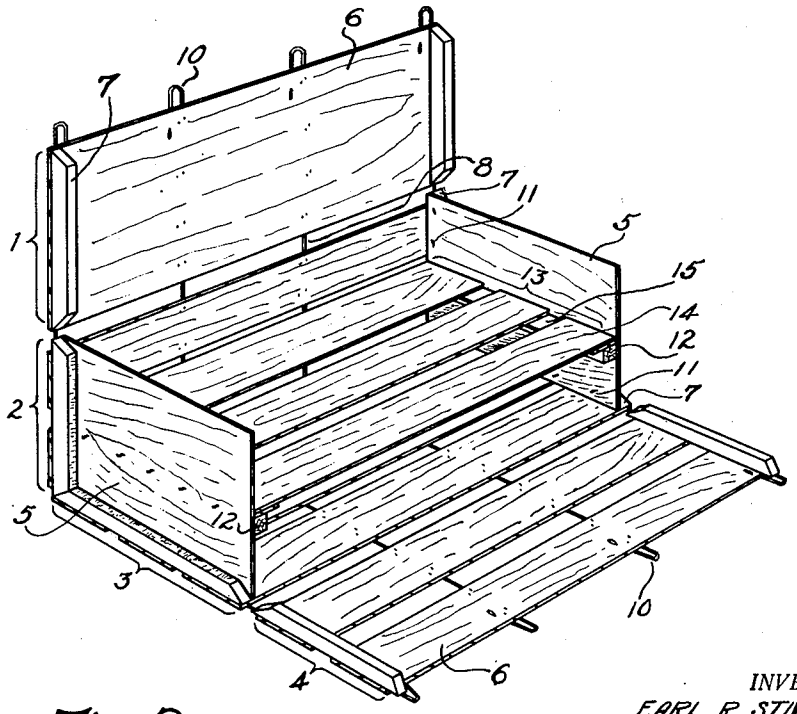


Fig. 2.

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Filed Oct. 17, 1934 5 Sheets-Sheet 2

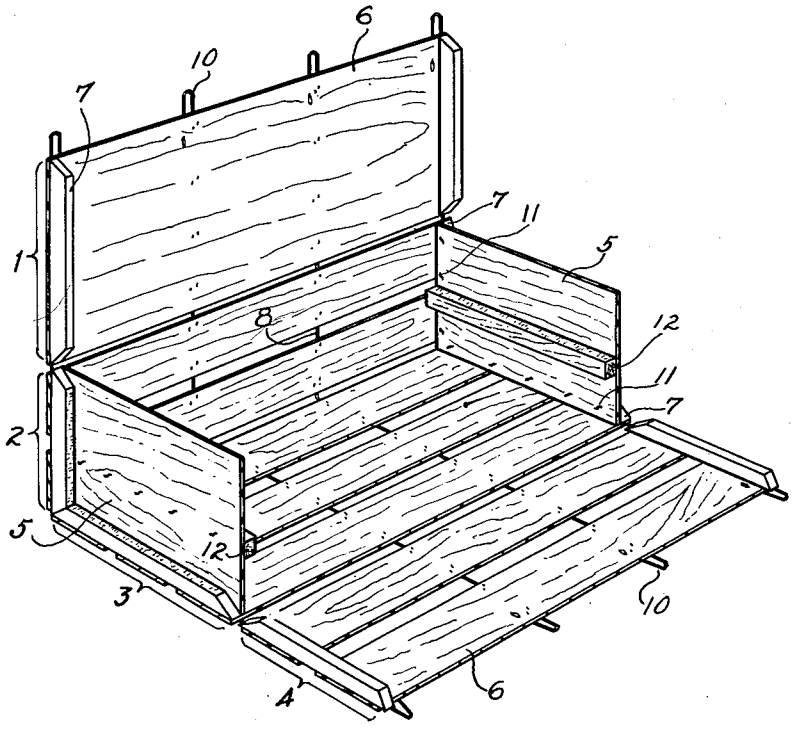


Fig. 3.

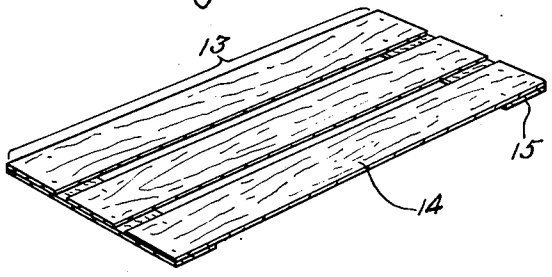


Fig. 4.

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COMBINATION SHIPPING AND DISPLAY CONTAINER

Filed Oct. 17, 1934 5 Sheets-Sheet 3

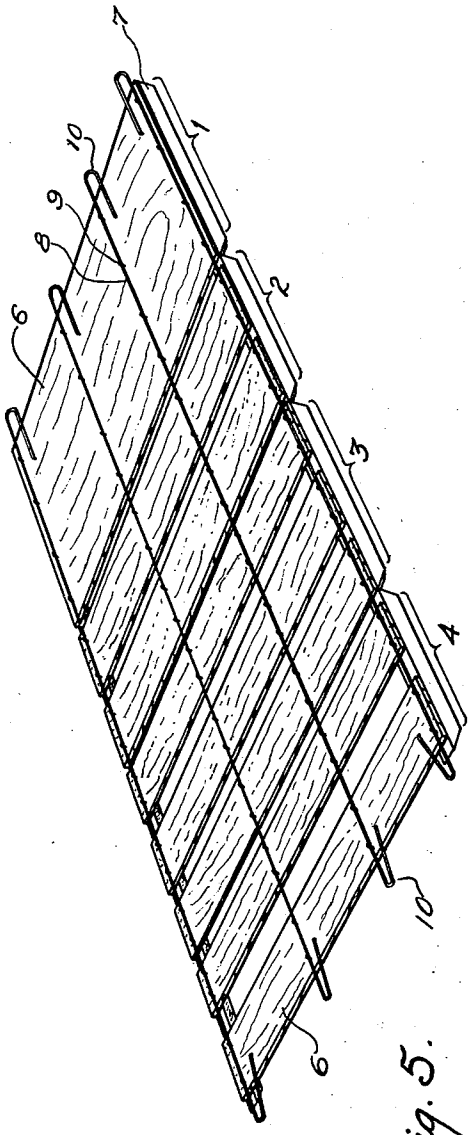


Fig. 5.

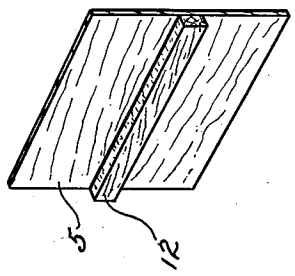


Fig. 7.

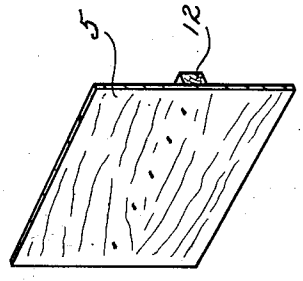


Fig. 6.

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COMBINATION SHIPPING AND DISPLAY CONTAINER

Filed Oct. 17, 1934 5 Sheets-Sheet 4

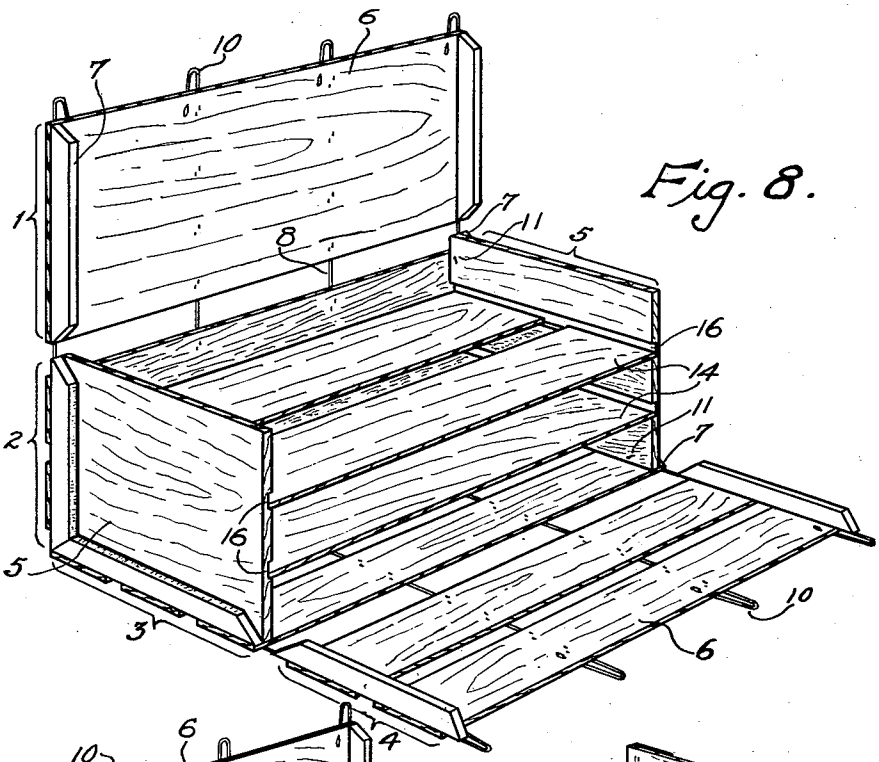


Fig. 8.

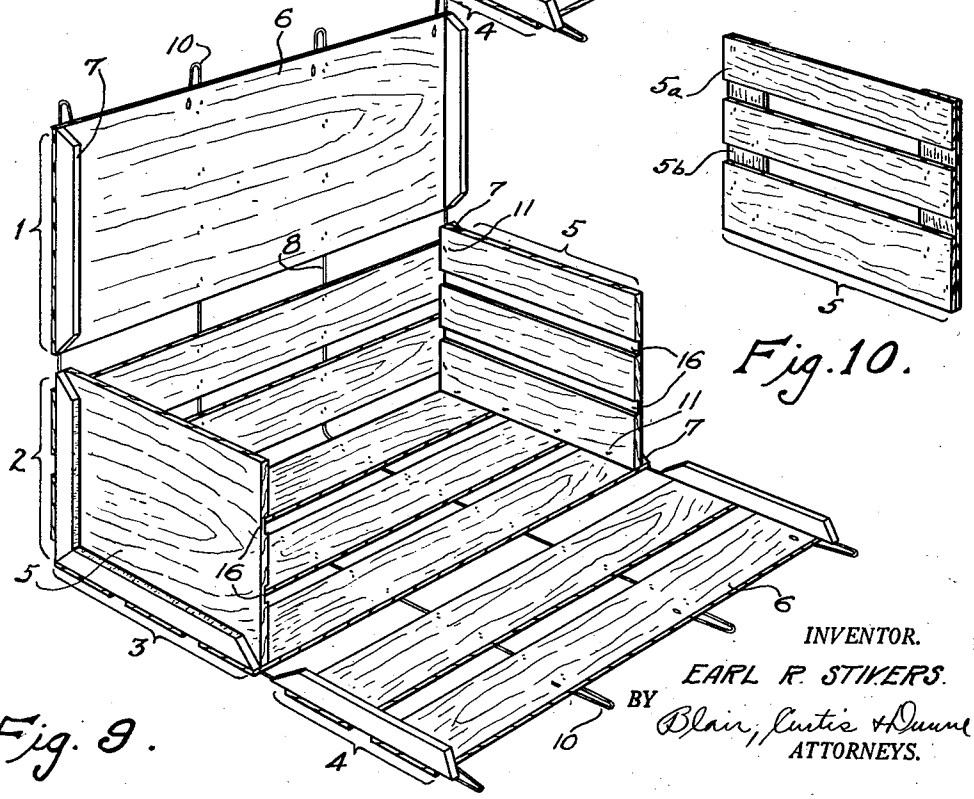


Fig. 9.

Fig. 10.

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COMBINATION SHIPPING AND DISPLAY CONTAINER

Filed Oct. 17, 1934 5 Sheets-Sheet 5

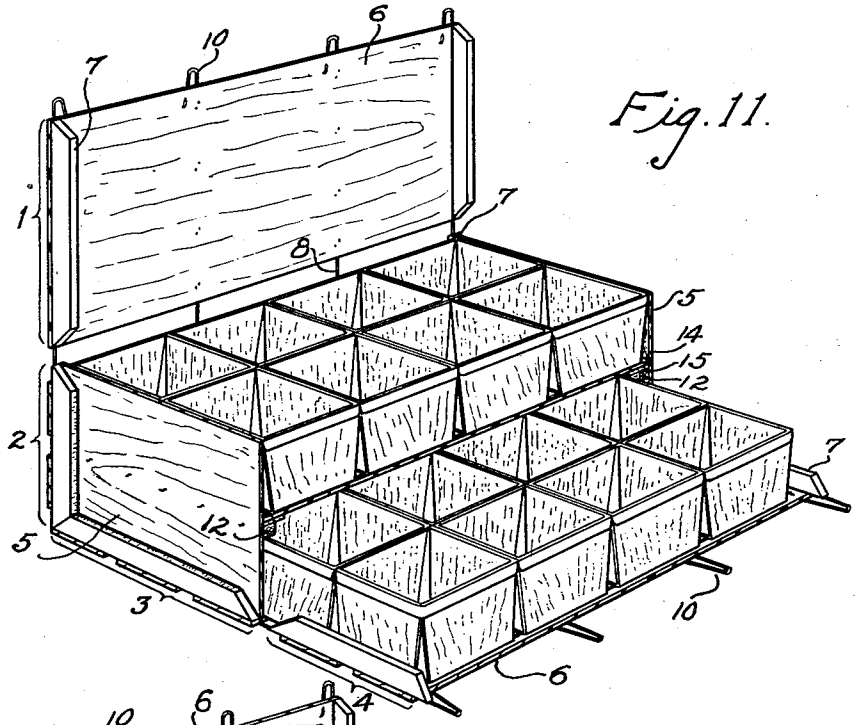


Fig. 11.

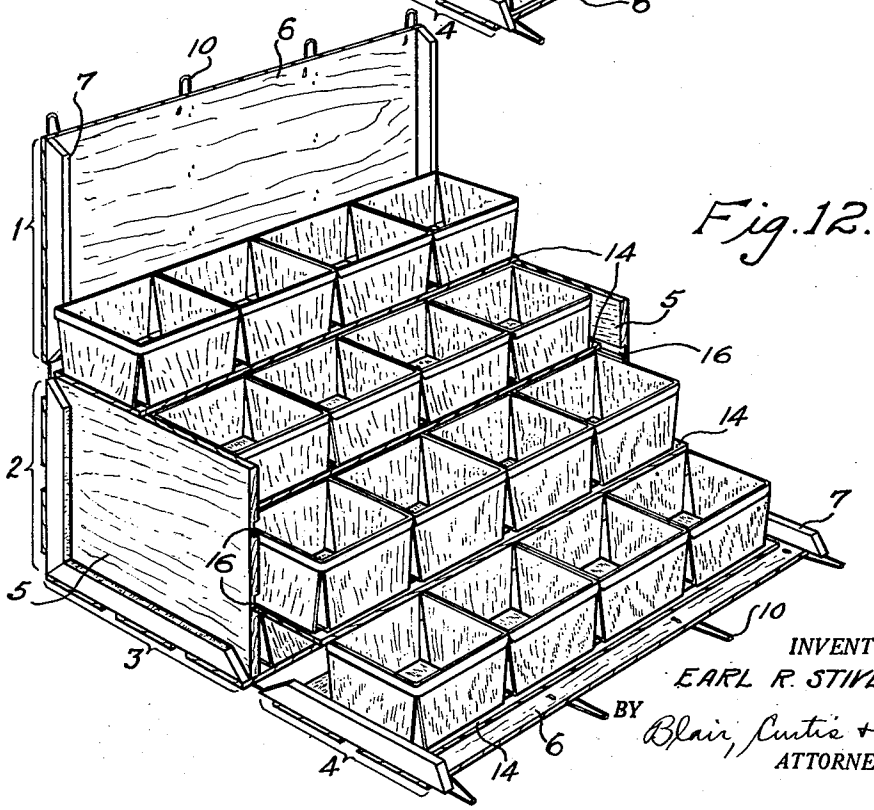


Fig. 12.

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Patented Apr. 18, 1939

2,154,538

UNITED STATES PATENT OFFICE

2,154,538

COMBINATION SHIPPING AND DISPLAY CONTAINER

Earl R. Stivers, Rockaway, N. J., assignor to Stapling Machines Co., a corporation of Delaware

Application October 17, 1934, Serial No. 748,615

4 Claims. (Cl. 217—36)

This invention relates to shipping and display containers and particularly to wirebound shipping and display containers.

It is an object of the invention to provide a combination shipping and display container for fruits, vegetables and other merchandise susceptible of display in stores.

It is a further object to provide a container of the type referred to which is of light weight and at the same time strong and durable in its construction.

It is a further object of the invention to provide a container of the type referred to which may be readily assembled from knocked-down condition into container form without the use of nails, staples or other similar fastening means.

It is a further object of the invention to provide a container of the type referred to which may be partially disassembled to display the contents without injuring or breaking any of the parts.

One illustrative embodiment of the invention is disclosed in the accompanying drawings, in which:—

Figure 1 is a perspective view of a berry crate or container embodying the invention.

Fig. 2 is a perspective view of the same container with its lid raised and front side lowered to display the contents of the container.

Fig. 3 is a similar view with the center horizontal partition removed.

Fig. 4 is a perspective view of one form of center horizontal partition.

Fig. 5 is a perspective view of the container blank which when folded constitutes the top, rear, bottom and front sides of the container shown in Fig. 1.

Figs. 6 and 7 are perspective views of the two end sections of the container shown in Fig. 1.

Fig. 8 is a perspective view of a three-layer container with lid raised and front side lowered, and showing a modified end construction and a modified form of horizontal partition.

Fig. 9 is similar to Fig. 8 with the horizontal partitions removed.

Fig. 10 is a perspective view of another modified form of end section which may be employed.

Fig. 11 is a perspective view showing the manner in which the two-layer container of Fig. 2 may be used for display purposes.

Fig. 12 is a perspective view showing the manner in which the three-layer container of Fig. 8 may be used for display purposes.

The illustrative container is designed particularly for the shipment of berries in small open-top baskets or cartons usually of pint or quart sized capacity. In the shipment of berries in these small baskets or cartons, two or more layers of such baskets or cartons are usually placed in a shipping container between horizontal partitions which separate the layers of baskets or cartons and protect the berries in one layer from being crushed by the baskets or cartons in the layer above.

Heretofore when a container containing two or more layers of small baskets or cartons of fruit arrived at the retail store for display and sale the container was opened by removing the lid. Such removal of the lid would leave exposed the top layer of baskets or cartons, and to that extent prior containers could be used as display containers. However, when so used the lower layers of baskets or cartons would be concealed by the sides of the container. If the storekeeper desired to display all of the baskets or cartons in the container he would have to remove all of the baskets and cartons and display them on some shelf, table or other support provided in his store.

The present invention is intended to provide a shipping container which may also be used to display more than one layer of baskets or cartons.

Referring to Fig. 1, the container comprises a top section 1, a rear section 2, a bottom section 3, a front section 4, and end sections 5. The top, rear, bottom and front sections each consist of a sheet or sheets of side material 6 (preferably of thin rotary cut veneer or resawed lumber) and end cleats 7. The several sections are connected together by flexible binders (preferably wires) 8 which are stapled to the sections by staples 9. The staples 9 which are driven over the binders at each end of the container pass through the side material 6 and into or through the cleats 7, and thus secure the side material 6 and the cleats 7 together. The staples 9 which are driven over the intermediate binders pass through the side material 6 and are clinched on the under side of the side material.

The ends of the binders which extend respectively beyond the edges of the top and front sections are provided with loops or bights 10 which may be readily passed one through the other and hooked to close the container, as shown in Fig. 1.

Referring to Fig. 3, end sections 5 (also preferably of rotary cut veneer or resawed lumber) are located inside of the cleats 7 and are stapled to the cleats 7 of the rear and bottom sections 2 and 3 by staples 11 which are driven through

the end section 5 and into the cleats 7 of said rear and bottom sections 2 and 3. It will be noted that the end sections 5 are not stapled to or in any way connected with the top section 1 or the front section 4, thus leaving the top section 1 free to be raised to the position shown in Fig. 3, and leaving the front section 4 free to be lowered into the position shown in Fig. 3.

End sections 5 may be provided with an interior batten or cleat 12 to support a horizontal partition indicated generally by the numeral 13 in Fig. 4. As shown in Fig. 2, the horizontal partition rests upon the cleats 12 of the end sections 5.

In the illustrative container shown in Fig. 2, only one horizontal partition 13 is shown, so that the illustrative container will carry only two layers of small baskets or cartons, one layer resting upon the bottom section 3, and the other layer resting upon the horizontal partition 13. It will be understood, however, that additional horizontal partitions 13 may be provided as shown in Fig. 8 to carry additional layers of baskets or cartons.

The horizontal partitions 13 may consist of one or more sheets of material 14, preferably of rotary cut veneer or resawed lumber. If more than one sheet 14 is employed and a unitary partition is desired, end strips 15 may be stapled or otherwise secured to the sheets 14, as shown in Fig. 2. For certain purposes two separate sheets 14 are employed for a horizontal partition, as shown in Fig. 8.

Referring to Figs. 8 and 9, a modified end section 5 is shown, the modification consisting of providing a groove 16 to receive and support the horizontal partition 13.

Another form of end section is shown in Fig. 10, consisting of spaced horizontal slats 5a and vertical battens 5b secured to the slats to maintain their spaced relationship. The spaces between slats receive the ends of the horizontal partitions which then rest upon the slat beneath the partition.

Referring to Figs. 5, 6 and 7, the container reaches the user in knocked-down condition, i. e., in the form of a flat blank, as shown in Fig. 5, and separate end pieces, as shown in Figs. 6 and 7. Upon receipt of these three pieces the user bends the rear and bottom sections at right angles to each other into the position shown in Fig. 3. He then staples the end sections 5 to the cleats 7 of the rear and bottom sections, as shown in Fig. 3. He then places his lower layer of baskets or cartons filled with berries on the bottom section 3. He then places a horizontal partition 13 on the cleats 12 (or in the grooves 16 or on the slats 5a as the case may be) of the end sections 5, and then places a second layer of baskets or cartons of berries on the horizontal partition 13. The front section 4 is then raised to close the front of the box, the top section 1 is lowered to close the top of the container, and the bights 10 on the ends of the binders are hooked together to close the container, as shown in Fig. 1.

When the container arives at the retail store where the berries are to be displayed and sold, the bights 10 are disengaged, the top section 1 is raised to the position shown in Fig. 2, the front section 4 is lowered to the position shown in Fig. 2, and the lower layer of baskets or cartons is moved out from beneath the horizontal partition 13 and placed upon the inner surface (then the upper surface) of the front section 4, thus exposing for display both layers of baskets or cartons, as shown in Fig. 11.

Referring to Fig. 12, if a three-layer container with two section horizontal partitions is used, the contents may be exposed for display in four stepped tiers, the two section horizontal partitions permitting half a layer of cartons to be positioned on top of the end sections, as shown.

In addition to its display advantages, the construction facilitates the loading and unloading of the container and the insertion of the horizontal partitions and permits the use of full sized horizontal partitions, i. e., partitions wide enough to contact with the inner sides of the front and rear sections and long enough to contact with the end sections, and thus prevent substantial shifting. With the top section raised and the front section lowered, the packer has ready access to the container through the top and front side, and full sized horizontal partitions may be slid into position from the front of the container. In prior constructions horizontal partitions have been inserted through the top of the container or through openings provided in the ends of the container, and in either practice great difficulty has been encountered in inserting full sized partitions.

The use of full sized partitions (which prevents substantial shifting) increases the protection of the contents of the container by reducing chafing which ordinarily results from a shifting of the contents of the container.

The use of full sized partitions also adds support to the box as a whole and permits the use of thinner material in the sides and ends.

It will be understood that the invention is not to be limited to the specific embodiment shown for purposes of illustration, as the inventive features may be variously embodied.

It will also be understood that all of the features of the invention need not be used conjointly as they may be used to advantage in various combinations as defined in the sub-joined claims.

I claim:

1. A combination shipping and display container comprising, in combination, front, top, rear and bottom sections, each consisting of side material and end cleats, flexible binders encircling said sections and having a bight formed on each of the ends of each binder so that the ends of each binder may be releasably connected adjacent a top corner edge of the container, end sections secured to cleats of the rear and bottom sections and free of attachment to the top and front sections, and a horizontal partition slidably supported by battens secured to the end sections, whereby when the binder ends are disconnected, the top section may be raised and the front section lowered, and a portion of the contents of the container moved out onto the front section for display.

2. A combination shipping and display container comprising, in combination, front, top, rear and bottom sections, each consisting of side material and end cleats, flexible binders encircling said sections and having a bight formed on each of the ends of each binder so that the ends of each binder may be releasably connected adjacent a top corner edge of the container, end sections secured to cleats of the rear and bottom sections and free of attachment to the top and front sections, and a horizontal partition slidably supported in grooves formed in the end sections, whereby when the binder ends are disconnected, the top section may be raised and the

front section lowered, and a portion of the contents of the container moved out onto the front section for display.

3. A combination shipping and display container comprising, in combination, front, top, rear and bottom sections, each consisting of side material and end cleats, flexible binders encircling said sections and having a bight formed on each of the ends of each binder so that the ends of each binder may be releasably connected adjacent a top corner edge of the container, end sections secured to cleats of the rear and bottom sections and free of attachment to the top and front sections, and a horizontal partition supported by the end sections, whereby when the binder ends are disconnected, the top section may be raised and the front section lowered, and a portion of the contents of the container moved out onto the front section for display.

4. A combination shipping and display container comprising, in combination, front, top, rear and bottom sections, each consisting of side material and end cleats, flexible binders encircling said sections and having a bight formed on each of the ends of each binder so that the ends of each binder may be releasably connected adjacent a top corner edge of the container, end sections secured to cleats of the rear and bottom sections and free of attachment to the top and front sections, and a plurality of horizontal sections supported by the end sections, whereby when the binder ends are disconnected, the top section may be raised and the front section lowered, and a portion of the contents of the container moved out onto the front section for display.

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