Feb. 29, 1944. E. G. HELLYAR 2,342,668

SHIPPING CONTAINER

Filed Nov. 8, 1940

Fig. 1.

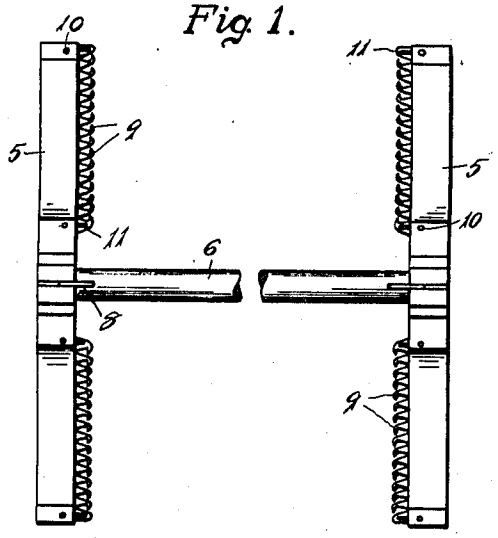


Fig. 2.

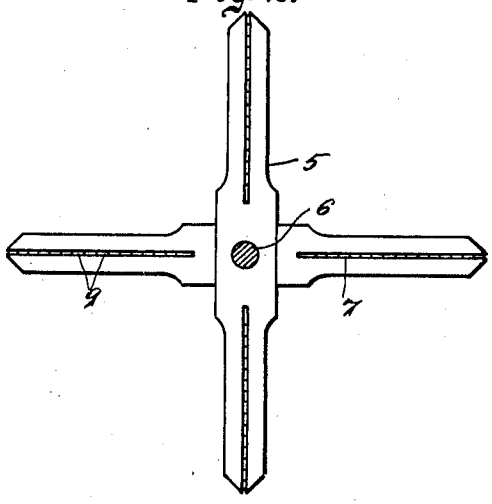


Fig. 3.

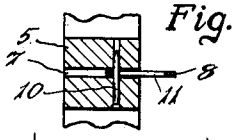


Fig. 4.

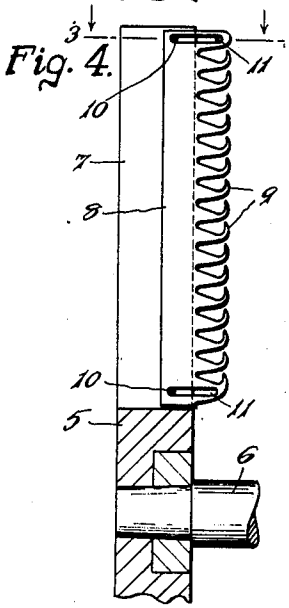


Fig. 5.

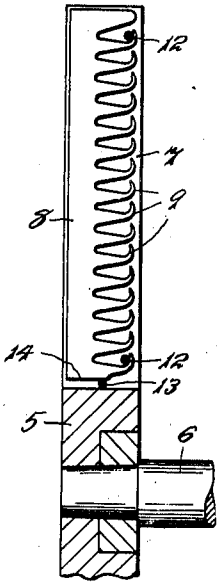


Fig. 8.

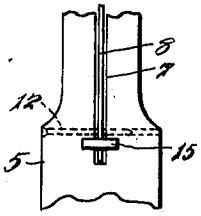


Fig. 7.

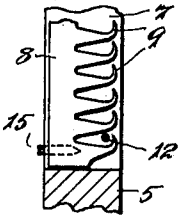


Fig. 6.

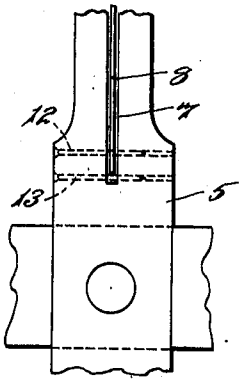
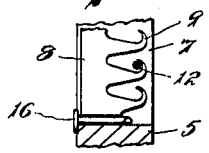


Fig. 9.



INVENTOR.
EDWIN G. HELLYAR.
BY Louis V. Lucia
ATTORNEY.

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UNITED STATES PATENT OFFICE

2,342,668

SHIPPING CONTAINER

Edwin G. Hellyar, Norwichtown, Conn.

Application November 8, 1940, Serial No. 364,909

10 Claims. (Cl. 206—51)

This invention relates to shipping containers and more particularly to containers for velvet cloth material such as shown and described in the co-pending application of Louis V. Lucia and Eric W. Horndahl, Serial No. 359,572, filed October 3, 1940.

Such containers preferably consist of a pair of end members having a plurality of hook plates mounted therein and being spaced by a bar so that the cloth material may be secured to the hooks on the said plates and supported in said container with the different layers thereof in spaced relation to prevent damage to the pile of the material.

The said containers are intended to be used primarily as shipping containers, wherein it is usually expected that, after the cloth material on a container has been used by the purchaser of said material, he will return the container to the cloth manufacturer. A considerable number of said containers, however, are usually damaged by the purchaser of the material, or in transit while being returned to the manufacturer and also, in some cases, in the handling thereof by the manufacturer before they are assembled and the cloth is attached thereto.

It is highly desirable, therefore, to so mount the hooks in the end members that they may be retracted therein to prevent damage to the hooks and encourage the purchasers of the cloth material to return the containers to the manufacturer and thereby provide a further saving in the use of such containers.

The object of this invention, therefore, is to provide a container, such as described in the above mentioned co-pending application, having hook plates which are so secured to the end members that they may be contained entirely within the same when the said end members are stacked for storage before they are assembled to the spacing bar and just previously to mounting the cloth thereon.

A further object of the invention is to provide novel means for retractably securing said plates to said arms.

Further objects and advantages of this invention will be more clearly understood from the following description and the accompanying drawing in which:

Fig. 1 is a front view of a container embodying my invention.

Fig. 2 is a side view of one of the end members.

Fig. 3 is a fragmentary sectional view on line 3—3 of Fig. 4.

Fig. 4 is a front view in central vertical section of a portion of one end of said container showing one form of my invention.

Fig. 5 is a similar view illustrating a modified form of my invention.

Fig. 6 is an end view of the central portion of the member illustrated in Fig. 5.

Fig. 7 is a fragmentary view, in central vertical section, illustrating a further modified form of my invention.

Fig. 8 is an end view of the same.

Fig. 9 is a fragmentary view, in central vertical section, illustrating a still further modified form of my invention.

As illustrated in the drawing, a container embodying the present invention may comprise cross shaped end members 5—5 which are secured together in spaced relation by means of the spacing bar 6; all as described in the said co-pending application.

The present invention contemplates the use of slots 7 in the arms of the end members within which are movably mounted the hook plates 8 on which the cloth supporting hooks 9 are formed.

The said plates may be mounted to said arms by means of pins 10 which are inserted crosswise in the arms and which extend across the slots 7 through elongated apertures 11 in the said plates.

The said elongated apertures and pins co-operate to secure said plates to the arms so that they may be retained in the position wherein the hooks project inwardly from the end members, as illustrated in Fig. 4, or retracted within the cross arms and contained entirely within the slots, as illustrated in Fig. 5.

In the modified form illustrated in Fig. 5, the said plates may be movably secured within the said slots by means of the pins 12—12 which extend across the slots 7 and engage the corresponding hooks in the plate. In this form, a retaining pin 13 also extends across the slot and engages the edge 14 of the plate so as to retain the hooks into engagement with the pins 12 while permitting movement of said plates so that the hooks may be projected from the end member in the same position as illustrated in Fig. 4.

When it is desired to detach a plate from the end member, the pin 13 may be removed and thus permit the plate to be moved downwardly in the slot and detached by passing the hooks past the pins 12—12.

In the form illustrated in Figs. 7 and 8, retaining means in the form of a staple 15 may be used to prevent the plate 14 from being disengaged from the pins 12 when they are retracted within the slot 7.

In the form illustrated in Fig. 9, a pin, or nail, 16 may be used in place of the pin 13, to retain the hooks 9 in engagement with the cross pins 12 and permit interchangeability of the hook plates by simply removing said pin to allow the hooks to be disengaged from the pins 12. In this form, the said nail 16 is of a diameter larger than the width of the slot 7 and is driven into said slot from the side of the end member.

It will be understood from the above description that I have provided a shipping container

wherein the material supporting hooks thereon can be retracted within the end members so that the said end members may be stacked, one upon the other and conveniently handled, without causing damage to the hooks which are necessarily sharp and very susceptible to being impaired before the end members are assembled in a container and the cloth material is attached to said hooks.

Furthermore, my invention provides for easily replacing the hook plates, should they become damaged, by simply removing a pin, detaching the damaged plate, and replacing the same with a new one. This is of particular advantage in cases where the containers are returned to the cloth manufacturer after the cloth has been removed therefrom by the customer, since it has been found, by long experience, that the hooks on the end members very commonly are damaged either in the handling by the customer or during the shipment of the container to the cloth manufacturer.

I claim:

1. A container of the character described, for cloth material or the like, comprising an end member having a slot therein, a plate mounted in said slot, a plurality of hooks on said plate, and means normally securing said plate to said end member and permitting the same to be retracted into said slot.

2. A container of the character described comprising an end member having a slot, a plate disposed within said slot, a plurality of hooks in said plate, means for securing said plate to said end member including a pin extending cross-wise through said slot and engageable by one of said hooks and permitting movement of said plate to a position wherein the said hooks project exteriorly of said end member, and means for preventing detachment of said plate from said end member by disengagement between said hooks and fastening members.

3. A container of the character described comprising an end member having a slot therein, a plate movably contained within said slot, a plurality of hooks on said plate, a pin extending across said slot and disposed within one of said hooks for securing said plate to said end member for permitting movement thereof to a position wherein the said hooks project exteriorly from said member, or to a different position wherein the said hooks are retracted within said slot, and means engageable by said plate for retaining said hooks and pin in relative operative position.

4. A container of the character described comprising an end member having a slot therein, a plate movably disposed within said slot, a plurality of hooks on said plate, fastening means comprising a pin extending cross-wise through said slot and within one of said hooks to permit said plate to be moved to positions wherein said hooks project exteriorly of said end member, or are retracted within said slot, and means extending across said slot to prevent detachment of said plate from said end member.

5. A container of the character described comprising an end member having a slot therein, a plate including a plurality of hooks and disposed within said slot, means anchoring said plate to said end member and normally permitting the same to be moved to positions wherein said hooks will project exteriorly of said end member or are retracted within said slot, and means extending across said slot and overlying an edge of said plate to prevent detachment thereof from said end member.

6. A container of the character described comprising an end member having a slot therein, a plate including a plurality of hooks and disposed within said slot, means anchoring said plate to said end member and normally permitting movement thereof from a position wherein said hooks are disposed exteriorly at one side of said end member to a position wherein they are retracted within said slot, and means at the opposite side of said end member extending across said slot for preventing detachment of said plate from said end member.

7. In a cloth container of the character described, a pair of end members connected by a centrally positioned bar; said end members each having a slot therein, and a plate including a plurality of hooks and loosely mounted in said slot to normally permit movement of said hooks to positions wherein they may either extend from said end member or be contained within said slot.

8. A container of the character described comprising an end member, a plate having a plurality of hooks and loosely mounted in said end member, and means securing said plate to said end member and normally permitting said plate to be retracted to a position within said member wherein the said hooks are non-engageable exteriorly thereof.

9. A container, of the character described, comprising an end member having a slot therein, a plate loosely mounted in said slot and having a plurality of hooks, and fastening means including a pin and extending crosswise through said slot and plate and normally retractably securing said plate to said end member.

10. In a shipping container for pile fabrics and the like, in combination with two cross-shaped end members, a spacing for engaging the central portions of said end members to maintain the end members in spaced relationship to each other, plates equal in number to the arms of the cross-shaped end members and hooks upon said plates situated one over the other for supporting said pile fabrics; slots formed in the arms of said end members, each of said slots extending along the entire arm of an end member and parallel to the arm from the outer end thereof to a location close to the central portion of an end member, the walls of said slots being parallel to said spacing bar, said plates being situated in said slots and being movable therein by gravity from a retracted position to an operative position and vice versa, said plates being so dimensioned that said hooks are situated within said slots in said retracted position of the plates, and means carried by said arms and extending across said slots for maintaining said plates in said retracted and operative positions to prevent said plates from falling out of said slots.

EDWIN G. HELLYAR.