United States Patent [19]

Bobb

[11] **3,750,872**

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[54] **CHAIR PACK**

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[21] Appl. No.: **157,014**

Related U.S. Application Data

[62] Division of Ser. No. 886,531, Dec. 19, 1969, Pat. No. 3,642,127.

[52] **U.S. Cl.** ..... **206/46 FN,** 206/46 FR, 206/65 S, 229/DIG. 12

[51] **Int. Cl.** **B65d 85/00**

[58] **Field of Search** ..... 206/46 FR, 46 FN, 206/46 M, 46 H, 65 K, 65 S, 80 A, 45.14, 45.19; 229/DIG. 12

[56] **References Cited**

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3,385,424	5/1968	Thompson et al.	206/45.14
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[57] **ABSTRACT**

A chair pack is provided for the shipping of two chairs within one carton. Each individual chair is fastened by a heat-shrinkable film to a piece of rigid corrugated fiberboard. The fiberboard is then fastened to the end of a carton to hold the fiberboard and chair in place. The fastening of a chair at each end of the carton with the proper orientation of the chair backs provides a chair pack with two chairs therein.

1 Claim, 3 Drawing Figures

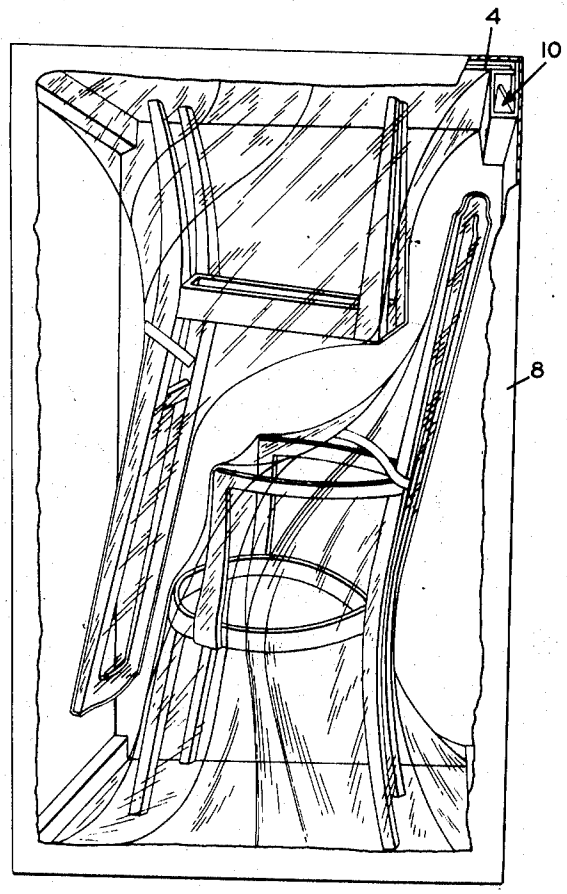


Fig. 1

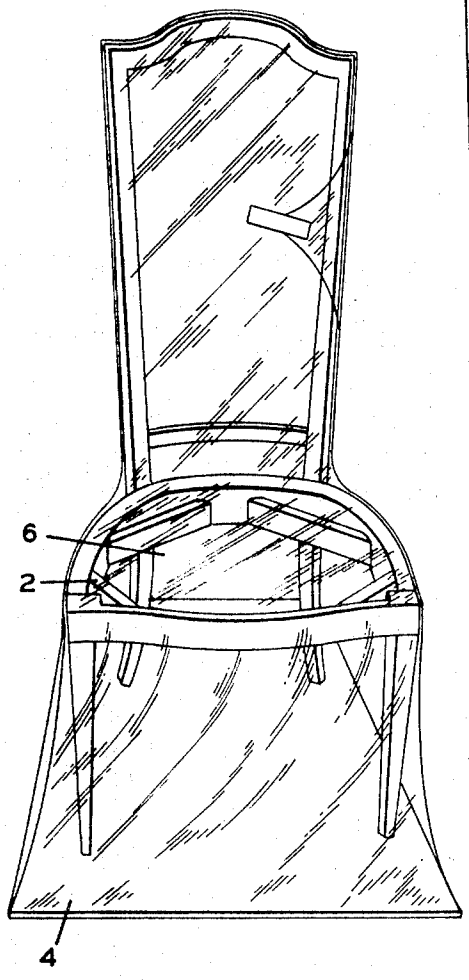
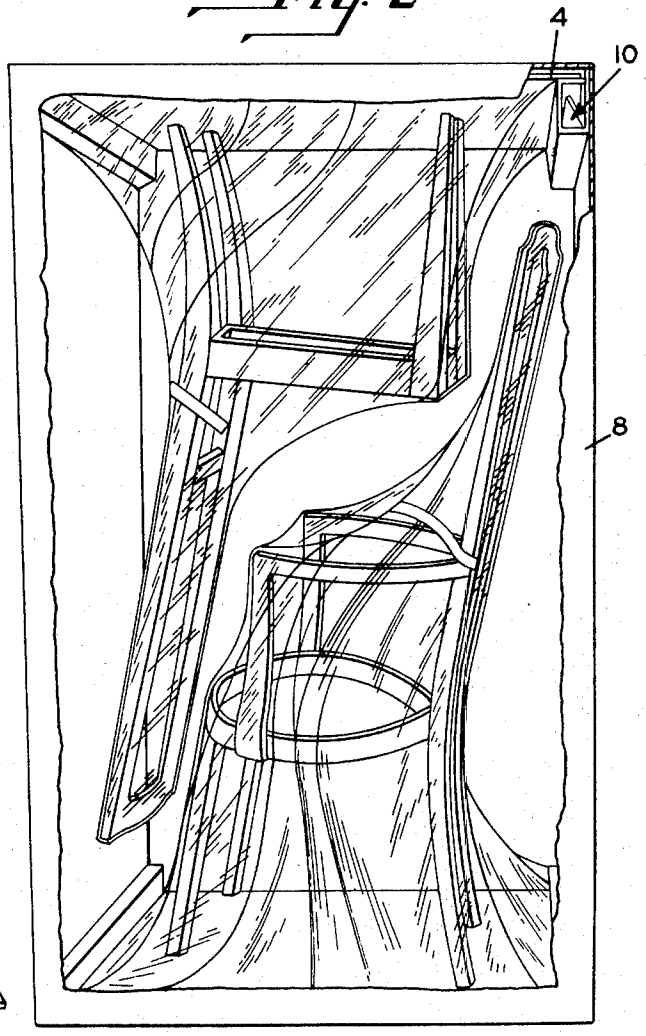


Fig. 2



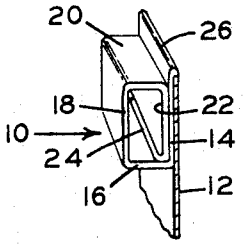


Fig. 3

CHAIR PACK

CROSS REFERENCE TO RELATED APPLICATION

This is a division of application Ser. No. 886,531, filed Dec. 19, 1969, now U.S. Pat. No. 3,642,127.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to a packing envelope for furniture, and more particularly to a packing envelope for two chairs.

2. Description of the Prior Art

Chairs have been prepared a number of ways for shipping. U.S. Pat. No. 1,866,963 discloses a number of ways in which a chair may be protected for shipping. FIG. 1 of the patent shows an individual chair wrapped for shipping wherein the wooden elements of the chair are protected by batting or corrugated fiberboard. FIG. 2 of the patent shows two chairs fastened together with one chair being provided with the aforesaid described protection. FIG. 10 of the patent discloses a box-type protection for the chair to be shipped.

U.S. Pat. No. 2,212,310 discloses a technique for fastening two chairs together and protecting them with corrugated fiberboard. Finally, it should be noted that individual boxes have been used for the purpose of shipping chairs. An individual chair is placed within an individual box and appropriate packing material is used to prevent the chair from shifting within the box.

U.S. Pat. No. 2,168,651 discloses that in the packing art it is old to take a thin, transparent, heat-shrinkable material, "Pliofilm", and use this material to fasten the item to be sold to a backing material. It should be noted that this particular packing technique has received widespread use in the packaging industry where any number of different articles are fastened to a backing by a heat-shrinkable film.

SUMMARY OF THE INVENTION

The invention relates to a package which is utilized to carry and protect one or two chairs within a single pack. A shrinkable polyethylene bag encloses the individual chair to be packed, as well as a corrugated fiber board supporting panel upon which the chair rests. The shrinking of the polyethylene bag by heat around the chair not only protects the chair, but fastens it to the fiberboard supporting panel. Two chairs are packed in the same manner so that both are on individual fiberboard supporting panels. The two chairs may then be packaged in a single carton with each chair being completely suspended and separated from the other chair by means of suitable supports. The fiberboard supporting panels are placed at each end of the carton and are supported relative to these ends by the use of fiberboard rails. The corrugated fiberboard rails are formed by folding over a portion of the box and stapling it in place. A pair of rails at each end of the carton serves to provide the support for the fiberboard panels carrying the individual chairs. The chairs are positioned within the carton so that they are nested together, without contact, and may be safely carried in a single carton.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a view of a chair with its covering and corrugated fiberboard support panel;

FIG. 2 is a cut-away view of a carton with two chairs; and

FIG. 3 is an enlarged view of a rail construction.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, there is shown a chair 2 which is positioned upon a corrugated fiberboard support panel 4. A heat-shrinkable plastic bag or sheet is placed over the chair and support panel. This plastic bag is made of a material similar to that described in U. S. Pat. No. 2,168,651 wherein heat will cause the material to shrink and draw tightly around the material enclosed therein. After the plastic material has been shrunk to the chair 2 and support panel 4, there is formed a plastic envelope 6 which protects the chair and further fastens the chair to the support panel 4.

As seen in FIG. 2, two chairs prepared in the above-described manner are placed within a carton 8. The chairs are nested so that they take up a minimum aount of room. The nesting is accomplished by placing one chair upright and the other chair upside down with the two chair fronts facing each other. The chairs are positioned within the cartons so that they do not contact each other. The fastening of the chairs within the carton is accomplished by fastening each chair to an end of the carton. Appropriate support structures are provided at each end of the carton for the purpose of holding the support panels of the individual chairs. By rigidly holding the support panels relative to the ends of the cartons, the tw o chairs will be held in their relative positions spaced from each other and safely carried within the carton.

Looking at FIG. 2, it will be seen that the fiberboard panel for the upper chair is supported on a rail structure 10 which is positioned near the end of the carton. The support panel rests upon the rail structure 10 and is fastened thereto by staples or held thereto by the lid of the box. A similar arrangement is provided at the other end of the carton for the purpose of supporting the second chair. It is obvious that this carton could carry only one chair or any other article which it is desired to pack within the carton.

Referring to FIG. 3, there will be seen an enlarged view of the support structure which is positioned at each end of the carton 8. The carton has four flap elements at each end. Two opposite flap elements are folded to form the support rail structure 10 while the remaining two opposed flap elements form the end of the carton. It will be seen that the flap element on one side of the carton is folded down against the outside, side element 12 of the carton to form a portion 14 which is adjacent to side 12. The flap element is then folded into a box shape having sides 16, 18, 20 and 22. Finally, the extreme edge of the flap element is folded as a diagonal brace member 24 within the previously formed box structure. This arrangement provides a rather substantial structure which forms a rail along one side of the carton. Staples passing through sides 12, 14 and 22 are used to hold the folded cardboard flap in the above-described rail configuration. There is one rail on each side of two opposing sides of the box leaving a dual rail support structure. The rail need not be a folded-over carton flap, but could be a separate fiberboard structure, wood rail or other like structures which will provide a rest surface for the support panel 4. It will be seen that there is a slight spacing between

side **20** and the upper edge **26** of the carton. Resting on edge **20** in this recess is the support panel **4** for the chair.

The above-described structure therefore provides a packing carton with the capability of carrying two chairs which have been fastened to a support panel by a heat-shrinkable material which accomplishes the fastening of the chair to the support panel and a protection for the chair.

What is claimed is:

1. An article pack comprising an article and a packing carton for transporting the article, said article being fastened to a support panel by a heat-shrunk material, said panel being approximately the width of at least one cross-dimension of an end of the carton, the article with its support panel being retained within the carton at one end thereof with the article being suspended within the carton, two opposite sides of the said one end of the carton containing a rail structure formed by infolding integral flaps of the carton to define support surfaces substantially parallel to the other end of the carton, said support panel being supported and retained on the said surfaces of the opposed rail structures whereby the article will be protected from shifting and damage during transportation.

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