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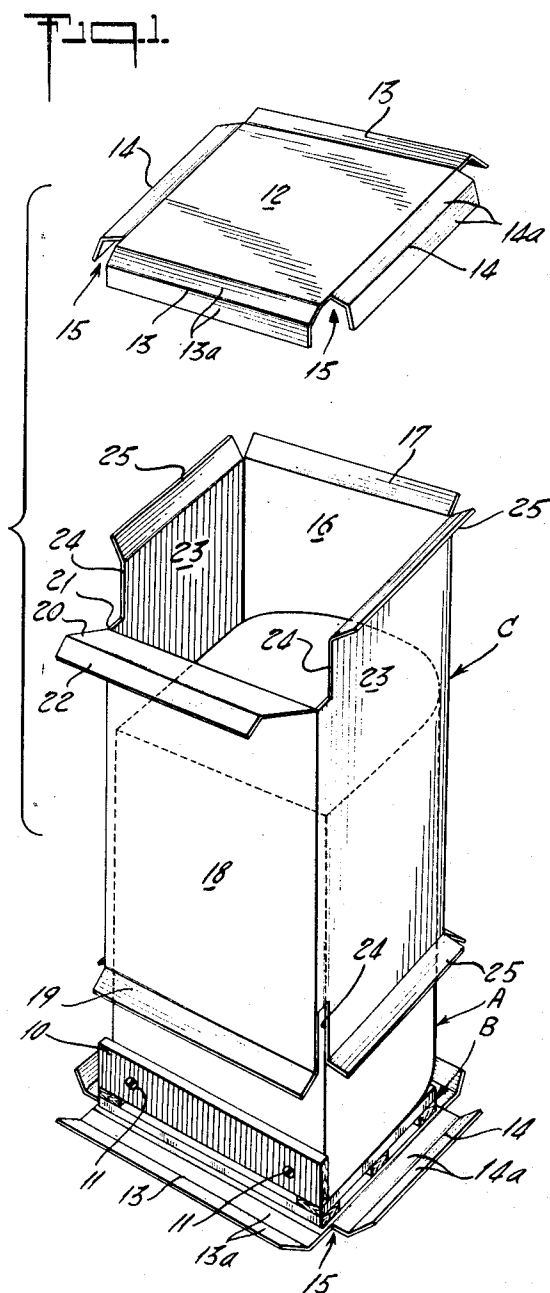
M. BAUMANN ET AL

2,665,002

SHIPPING PACKAGE

Filed June 1, 1950

2 Sheets-Sheet 1



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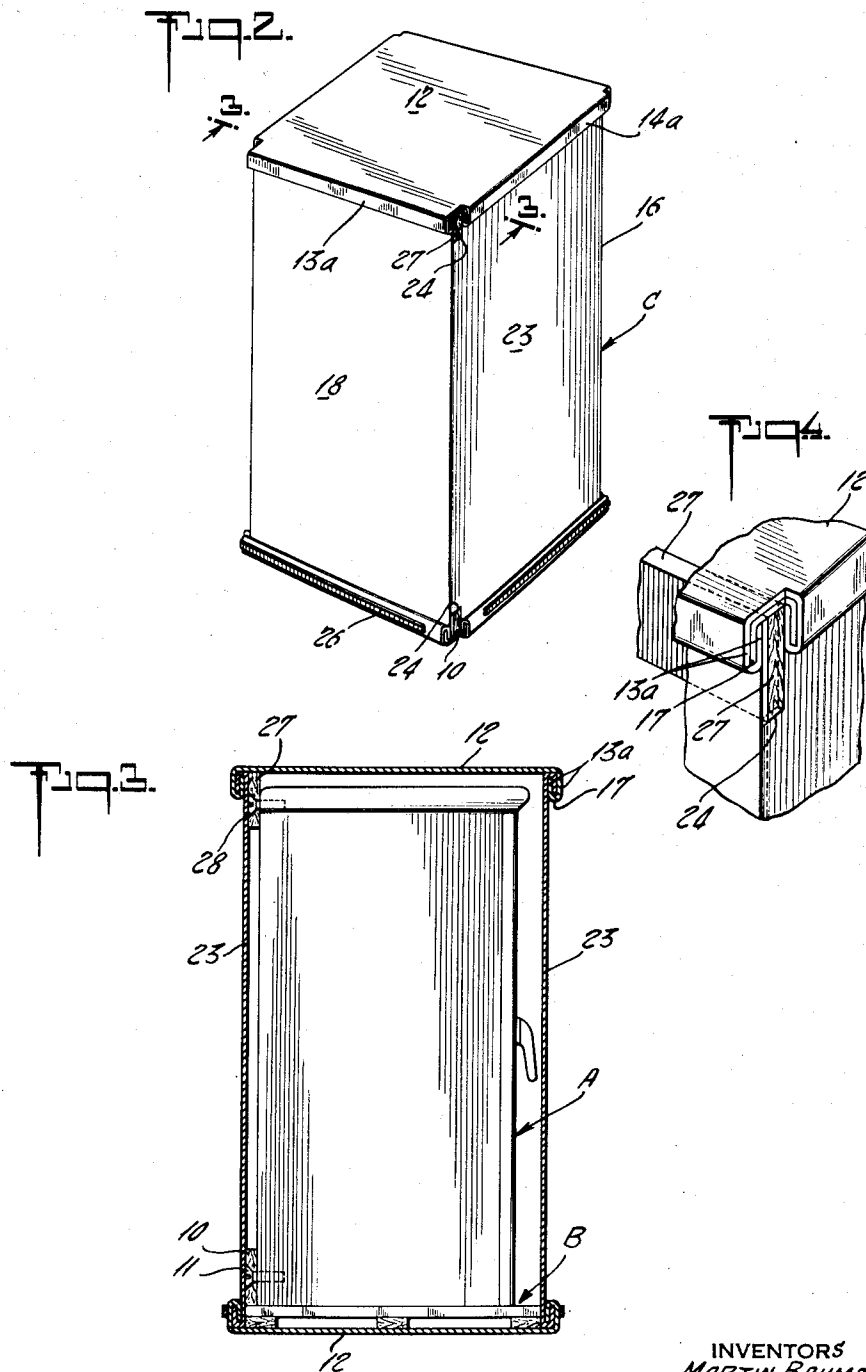
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2,665,002

SHIPPING PACKAGE

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1 Claim. (Cl. 206—46)

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This invention relates to new and useful improvements in shipping packages and particularly seeks to provide a novel unitary package for the shipment of refrigerators or similar bulky cabinets.

An object of this invention is to provide a shipping carton particularly useful in connection with the transportation of refrigerators or other types of cabinets and which may be readily assembled about a cabinet and its mounting skid.

Another object of this invention is to provide a shipping carton which forms a stable unit with the enclosed article being shipped so that there can be no slipping of said article within the carton while being moved.

Another object of this invention is to provide a shipping container formed from paper board or the like and having a plurality of side walls and top and bottom end closures to encase a skid-mounted cabinet, there being a plurality of wood cleats bolted to the back of and extending beyond the edges of said cabinet and fitting snugly into notches provided in two opposed side walls, to effectively restrain the cabinet from movement relative to the outer container.

Another object of this invention is to provide a device of the character stated, which is fabricated entirely of corrugated board or the like and maintained in its assembled condition through the use of metallic straps or wire.

Another object of this invention is to provide a package of the character described which can be shipped in flat or knocked down form to save valuable space prior to its use and can then be readily and easily assembled as the need arises.

Another object of this invention is to provide a packaging container of the character stated which is simple in design, rugged in construction and economical to manufacture.

With these and other objects in view, the nature of which will be more apparent, the invention will be more fully understood by reference to the drawings, the accompanying detailed description and the appended claim.

In the drawings,

Fig. 1 is an expanded perspective view of a shipping package constructed in accordance with this invention;

Fig. 2 is a perspective view of an assembled package but with one girth strap yet to be applied;

Fig. 3 is a vertical section taken on the line 3—3 of Fig. 2; and

Fig. 4 is an enlarged fragmentary view of a top corner.

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By reference to the drawings in detail it will be seen that the invention as illustrated comprises a shipping package in which a skid-mounted refrigerator or other bulky cabinet is enclosed. This invention is an improvement on the Beach Patent 2,474,968, issued on July 5, 1949.

In preparing a cabinet A or other object for shipment in accordance with this invention a mounting skid B is first placed under the cabinet and rigidly secured thereto. Then a cleat 10, made of wood or other material, is bolted at 11, 11 to the rear and bottom of the cabinet A, said cleat 10 being slightly longer than the width of the cabinet and extending beyond the edge of the cabinet on both sides.

A bottom closure member formed from corrugated or other paper board is first placed in position on the shipping floor and the cabinet together with the mounting skid B is positioned thereon.

The closure members as illustrated in Fig. 1 may be formed from a single blank and used as a top or bottom closure. The closure comprises a central panel 12, a two-panel locking flap 13a, 13a reverse folded about score line 13 at two opposite edges, and a two-panel locking flap 14a, 14a reverse folded about score line 14 at the other two opposite edges with each of the latter flaps being shorter than the associated central panel to provide a small notch 15 at each of two opposed corners. The notches 15 provide clearance for placement of the cleat 10, as will be hereinafter more fully described.

A sleeve generally indicated at C and serving as the body portion of the carton is preferably formed of corrugated board with the corrugations running vertically from a single four-panel blank or from two blanks, generally depending on the size of the carton, a decreasing size favoring a four-panel blank. The sleeve is generally rectangular in cross-section and has internal dimensions substantially identical with the external dimensions of skid B on which the cabinet A rests. The sleeve C includes a front wall 16 provided at its top and bottom with a pair of locking flaps 17, 17, a rear wall 18 provided with a bottom locking flap 19, and an access panel 20 at the top foldable along score line 21 and being approximately the size of a cleat to be employed later at the top rear of the cabinet in the same manner as cleat 10 at the bottom rear. The access panel 20 is adapted to fold outwardly and downwardly to allow working room and includes a locking flap 22 to correspond with the other locking flaps at the top of the sleeve C. The sleeve also includes

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a pair of side walls 23, 23 each of which is provided with a notch 24 at each rear corner, said notches being sized so as to receive the ends of the cleats and the top notches being adjacent to and of the same depth as the access panel 28. Both side walls 23, 23 are provided with top and bottom locking flaps 25, 25 which are shorter than the width of the respective side walls 23, 23 due to the formation of the notches 24.

After the sleeve has been formed from the blank it is lowered over the cabinet until the outwardly folded bottom locking flaps 17, 19, 25 come in contact with the two-panel locking flaps 13a and 14a of the bottom closure, and the bottom cleat 10 is received snugly into the bottom notches whereby to prevent movement between the cabinet and the bottom of the container. The two-panel locking flaps 13a and 14a of the bottom closure are then reverse folded to include the associated bottom sleeve locking flaps 17, 19 and 25, and the inner related flaps are then folded against the corresponding associated walls 16, 18, 23, 23 and maintained in their interlocking relationship as by means of a girth strap 26.

The access panel 20 is folded outwardly to allow bolting to the cabinet of a top cleat 27 at 28, 28, said cleat corresponding in size and shape to the bottom cleat 10. The cleat should fit snugly into top notches 24, 24 when the access panel 20 is refolded into the plane of the rear wall 18 to insure stability of the cabinet in the same manner as the bottom cleat 10 described hereinbefore. The closure is then placed on the top and the two-panel locking flaps 13a and 14a engaged around the top sleeve locking flaps 17, 22, 25 in the same manner as the bottom closure hereinbefore described, and then secured in their interlocking relationship as by means of another girth strap 26.

If additional strength is desired at one or both ends a two-piece closure may be used, each piece thereof comprising a generally rectangular blank having locking flaps at two opposite ends only. The two members are placed in superposed relationship with the corrugations (if corrugated board is used) and locking flaps of one piece running at right angles to the other. One of the closure members must have slightly shortened flaps to provide a notch formation similar to that shown at 15 of Fig. 1 of the single-member closure. Thereafter the double-member closure unit may be manipulated as the single closure hereinbefore described.

It will also be appreciated that padding may be used for cushioning the cabinet against jolting and to assist in maintaining said cabinet relatively immovable in said carton.

Thus it will be seen that the herein disclosed invention provides a new and useful package,

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particularly adapted for the shipping of relatively large refrigerators or cabinets of a similar nature, which is fabricated from corrugated or other paper board, which includes rigidly secured end closures and which provides a novel means for bracing and holding said cabinet relatively immovable with respect to the carton.

It is, of course, to be understood that various details of arrangements and proportions of parts may be modified within the scope of the appended claim.

We claim:

A shipping package formed from paper board and comprising a cabinet-mounting skid, a cabinet mounted on said skid, a cleat secured to the back of said cabinet adjacent the bottom thereof and having its ends extending beyond the sides thereof, a second cleat secured to the back of said cabinet adjacent the top thereof and having its ends extending beyond the sides thereof, and a carton surrounding said skid, cabinet and cleats, said carton comprising a body portion of generally rectangular cross section, including front and rear wall panels and a pair of side wall panels, all of said wall panels being provided at their tops and bottoms with relatively narrow outwardly folded locking flaps, said side wall panels being provided at their upper and lower rear corners with notches receiving and retaining the projecting ends of said cleats in relatively immovable position, said rear wall panel being provided adjacent its upper edge with a relatively narrow flap portion coextensive in depth with the said notches in the upper rear corners of said side walls whereby to permit introduction of an upper cleat during assembly of said carton for shipping usage, top and bottom end closures including two-panel locking flaps around all four sides reverse folded to provide an interlocking relationship with the flaps of said wall panels, and means for securing the flaps of said end closures in said interlocking relationship with the flaps of said wall panels.

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