June 20, 1961 C. R. WALDROP 2,989,225

SHIPPING CARTON

Filed June 8, 1959 2 Sheets-Sheet 1

Fig. 1

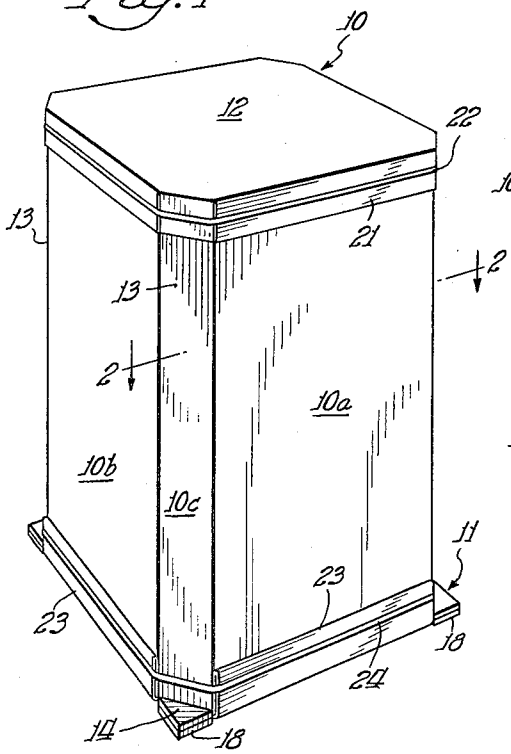

Fig. 2

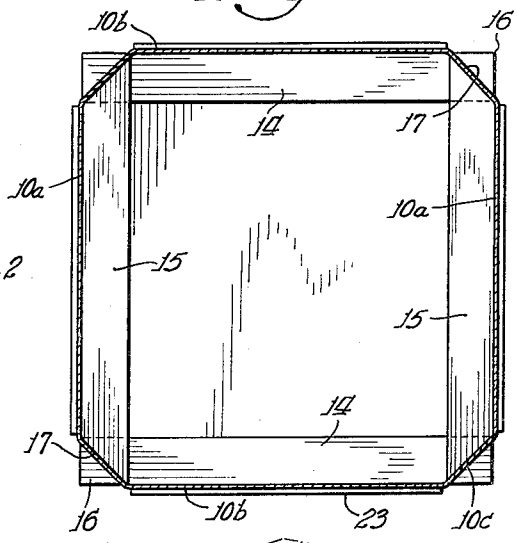

Fig. 4

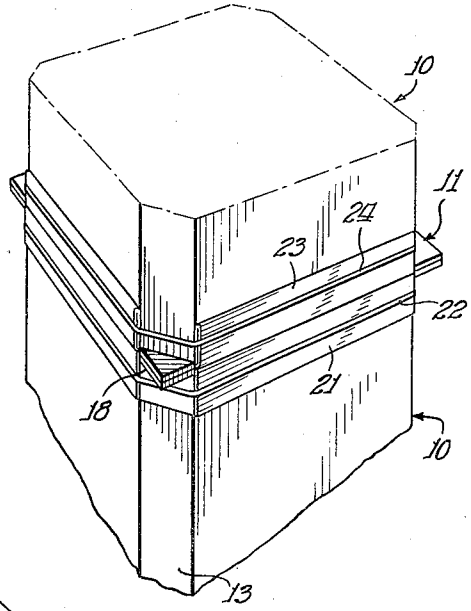

Fig. 3

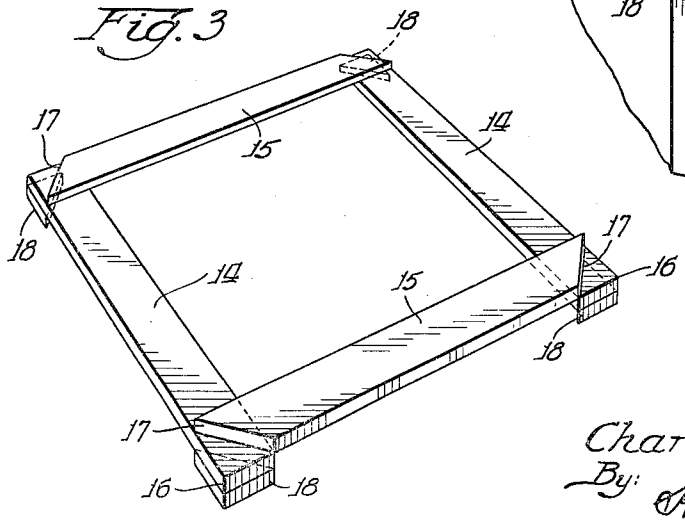

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Fig. 5

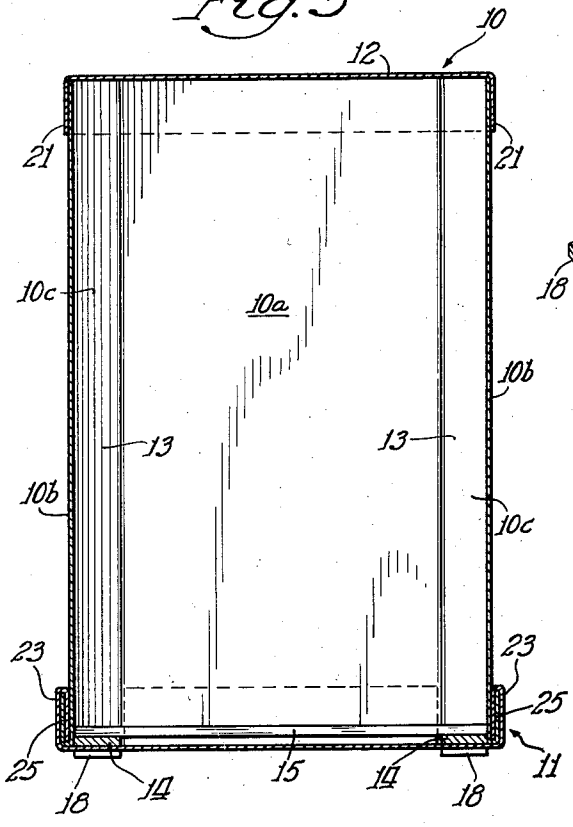
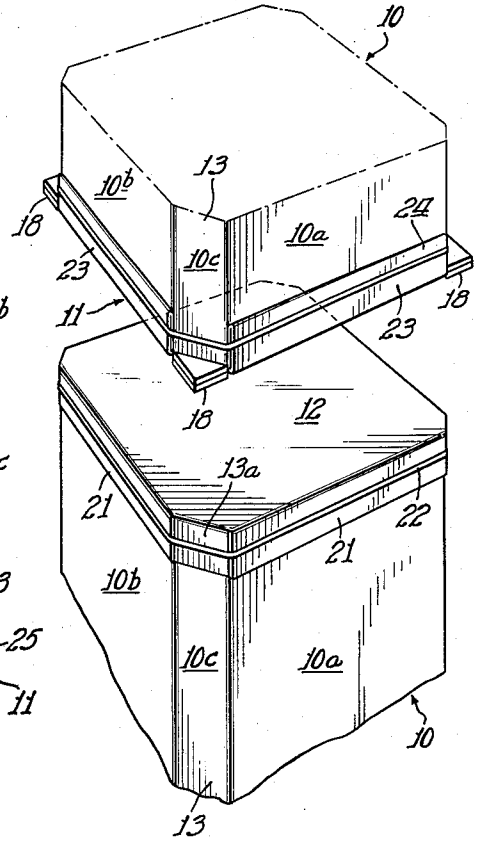


Fig. 6



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2,989,225

SHIPPING CARTON

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5 Claims. (Cl. 229—23)

The present invention relates to shipping cartons for household appliances or the like.

In the shipping and storage of household appliances, such as domestic washing machines and driers, the machines are placed in cartons and the cartons are stacked one upon the other, it being quite common to stack the cartons five high. The cartons are ordinarily made of heavy corrugated paper stock, are of square of rectangular shape, and are provided with a wooden base or support structure. The base or support may be attached to the bottom of the machine during the assembly of the machine and the carton attached thereto, or the base may be made an integral part of the carton.

An object of the present invention is to provide a shipping carton of the general type described above, but one which has certain structural and functional features not present in the ordinary, conventional carton.

A more particular object of the invention is to provide a sqaure or rectangular carton with beveled corners to give a carton which, in effect, is of octagon shape. In conjunction with this object, it is still a further object of the invention to construct the base or bottom of the carton in a manner so that the base will fit securely over the top of another carton so that during the stacking and storing operation, there is provided a solid, sturdy stack of machine-filled cartons.

Still further objects and advantages will appear to one skilled in the carton art from the following description of the carton illustrated with reference to the accompanying drawings, wherein:

FIG. 1 is a perspective view of a shipping carton of the present invention;

FIG. 2 is a section view taken on the line 2—2 of FIG. 1;

FIG. 3 is a perspective view of the base of the carton;

FIG. 4 is a fragmentary perspective view showing how the cartons are stacked for storage or shipment;

FIG. 5 is a vertical sectional view of the carton; and

FIG. 6 is a perspective view showing the cartons in spaced relation prior to stacking the cartons as shown in FIG. 4.

Referring to the drawings, there is disclosed a carton **10** with the body thereof made of heavy corrugated paper or other suitable material having a base or bottom **11** and a heavy corrugated paper top or lid **12** enveloping and closing the top end of the carton. The body of the carton **10** has beveled corners **13** and the lid **12** has beveled corners **13***a* engaging the top ends of the beveled corners **13** of the carton body. More particularly, the beveled corners of the body of the carton in effect form an octagonal-shape container with the body of the carton having two spaced parallel walls **10***a*, and two spaced parallel walls **10***b* at right angles to the walls **10***a*. The adjacent ends of the side walls **10***a* and **10***b* are connected by other side walls **10***c* disposed at a 90° angle to the walls **10***a* and **10***b* and connected thereto to form the corners **13** of the container. The lid has similar walls with the corners **13***a* engaging the walls and corners of the body of the carton.

The base or bottom **11** of the carton is made of wood, or other sturdy material, and comprises elongate supporting members consisting of two spaced parallel boards **14** having attached thereto two spaced parallel boards **15**, the boards **14** being disposed at right angles to the boards **15**. The boards may be secured together in any suitable manner. Each of the boards **14** have ninety degree corners **16** and each of the boards **15** are cut on an incline to provide a beveled surface **17** which corresponds to and engages the inner surfaces of the beveled corners **13** of the carton. Each board **14** projects from the bottom of the carton and has a triangular-shaped block **18** attached to, and depend from, each corner **16** of the boards **14**. The blocks **18** are positioned on the boards **14** so that they are substantially in line with the beveled corners **13**. The triangular blocks **18** serve two purposes, (1) to space the bottom of the carton from the floor and (2) the blocks fit over the beveled corners **13** of the lid **12** of the lower carton with the inner surfaces of the blocks adapted to engage the beveled corners **13***a* of the lid of the lower carton when the cartons are stacked to provide a sturdy stack of cartons, as shown in FIG. 4. With this interlocking construction, there is no possibility of the stacked cartons sliding relative to one another.

It has also been found that the provision of the beveled corners **13** on a square or rectangular corrugated paper carton gives a container having greater strength and rigidity than is possesed by the usual four-sided carton.

The top or lid **12** of the carton is also made of heavy corrugated paper and has a depending lip **21** for sliding over the top edges of the carton. A steel strap **22** is provided for securing the top or lid **12** to the upper edges of the container **10**. As shown in FIGS. 5 and 6, the corrugated paper sheet forming the bottom **11** of the carton has its corners removed to permit clearance for the ends of the boards **14**, and the side edges of the sheet are folded upwardly and inwardly to form flaps or lips **23** lying along the outer surface of the upwardly reversely turned edge flaps **25** of the walls **10***a* and **10***b* of the body of the carton and inserted within the channels formed by the flaps **25**. A steel strap **24** is provided encircling the lips **23** and securely fastening the body of the carton **10** to the base **11**. It is to be understood that the straps **22** and **24** are usually applied after the machine has been secured in the container.

I claim:

1. A carton for storing and shipping appliances and the like comprising a container having beveled corners, a correspondingly shaped lid for said container, and a base, said base having triangular shaped projections depending therefrom, said projections having inner pairs of oppositely facing surfaces corresponding to the beveled corners of said polygonal-shaped lid whereby when said carton is stacked upon a second carton of like construction, the projections of the carton will fit over the lid of the second carton and engage the beveled corners of the lid of said second carton.

2. A carton for storing and shipping appliances and the like comprising a polygonal-shaped container having beveled corners, a correspondingly shaped lid for said container, and a base, said base having projections extending outwardly of the beveled corners of said containers and provided with downwardly extending portions having inner surfaces corresponding to the beveled corners of said polygonal-shaped lid whereby when said carton is stacked upon a second carton of like construction, said base will engage the polygonal-shaped lid of said second carton with the inner surfaces of said downwardly extending portions of said base projections of the carton engaging the beveled corners of the lid of the second carton.

3. A pair of cartons for storing and shipping appliances and the like, and stacked in vertical alignment, each carton comprising a container having a first set of spaced parallel side walls, a second set of spaced parallel side walls disposed at right angles to the side walls of said first set, and a third set of connecting side walls disposed

at an angle of 90 degrees to said side walls of said first and second set and merging therewith to define beveled corners of said container, and a lid for said container and having side walls conforming to and engaging said side walls of said container and including beveled corners; a base for said container including a bottom wall for said container having side walls conforming to and engaging the side walls of said first and second sets of said container, and elongate supporting members within said base and disposed in spaced parallel pairs with the members of one pair being disposed within said container and at right angles to the members of the other pair, the members of said one pair having bevelled ends engaging the inner surfaces of the beveled corners of said container and the members of said other pair being disposed beneath and projecting outwardly of the beveled corners of said base, the base of the upper carton having depending portions with inner surfaces conforming to and engaging the beveled corners of the lid of the lower carton to position the upper carton in superposed stacked and vertically aligned relation to said lower carton.

4. A pair of cartons for storing and shipping appliances and the like, and stacked in vertical alignment, each carton comprising a container having a first set of spaced parallel side walls, a second set of spaced parallel side walls disposed at right angles to the side walls of said first set, and a third set of connecting side walls disposed at an angle of 90 degrees to said side walls of said first and second set and merging therewith to define beveled corners of said container, and a lid for said container and having side walls conforming to and engaging said side walls of said container and including beveled corners; a base for said container including a bottom wall for said container having side walls conforming to and engaging the side walls of said first and second sets of said container, and elongate supporting members within said base and disposed in spaced parallel pairs with the members of one pair being disposed at right angles to the members of the other pair, the members of said one pair having beveled ends engaging the inner surfaces of the beveled corners of said container and the members of said other pair being disposed beneath and projecting outwardly of the beveled corners of said base, and having depending triangular shaped blocks to provide inner surfaces conforming to and engaging the

beveled corners of the lid of the lower portion to position the upper carton in superposed stacked and vertically aligned relation to said lower carton.

5. A pair of cartons for storing and shipping appliances and the like, and stacked in vertical alignment, each carton comprising a container having a first set of spaced parallel side walls, a second set of spaced parallel side walls disposed at right angles to the side walls of said first set, and a third set of connecting side walls disposed at an angle of 90 degrees to said side walls of said first and second set and merging therewith to define beveled corners of said container, the first and second sets of spaced parallel side walls having their bottom edges extending outwardly and upwardly; a lid for said container having side walls conforming to and engaging said side walls of said container and including beveled corners; a base for said container including a bottom wall for said container having side walls conforming to the side walls of said first and second sets of said container and projecting outwardly and upwardly of said bottom wall and being reversely bent to engage the outer faces of the upwardly extending bottom edges of the side walls of said first and second sets and being reversely bent to be positioned between said side walls of said first and second sets and the upwardly projecting bottom edges of the side walls of said first and second set, and elongate supporting members within said base and disposed in spaced parallel pairs with the member of one pair being disposed within said container and at right angles to the members of the other pair, the members of said one pair having beveled ends engaging the inner surfaces of the beveled corners of said container and the members of said other pair being disposed beneath and projecting outwardly of the beveled corners of said base, the base of the upper carton having depending portions with inner surfaces thereof conforming to and engaging the beveled corners of the lid of the lower carton to position the upper carton in superposed stacked and vertical aligned relation to said lower carton.

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