June 5, 1956 W. W. BEACH 2,749,012

FURNITURE SADDLE SUPPORT

Filed March 18, 1953 2 Sheets-Sheet 1

Fig. 1

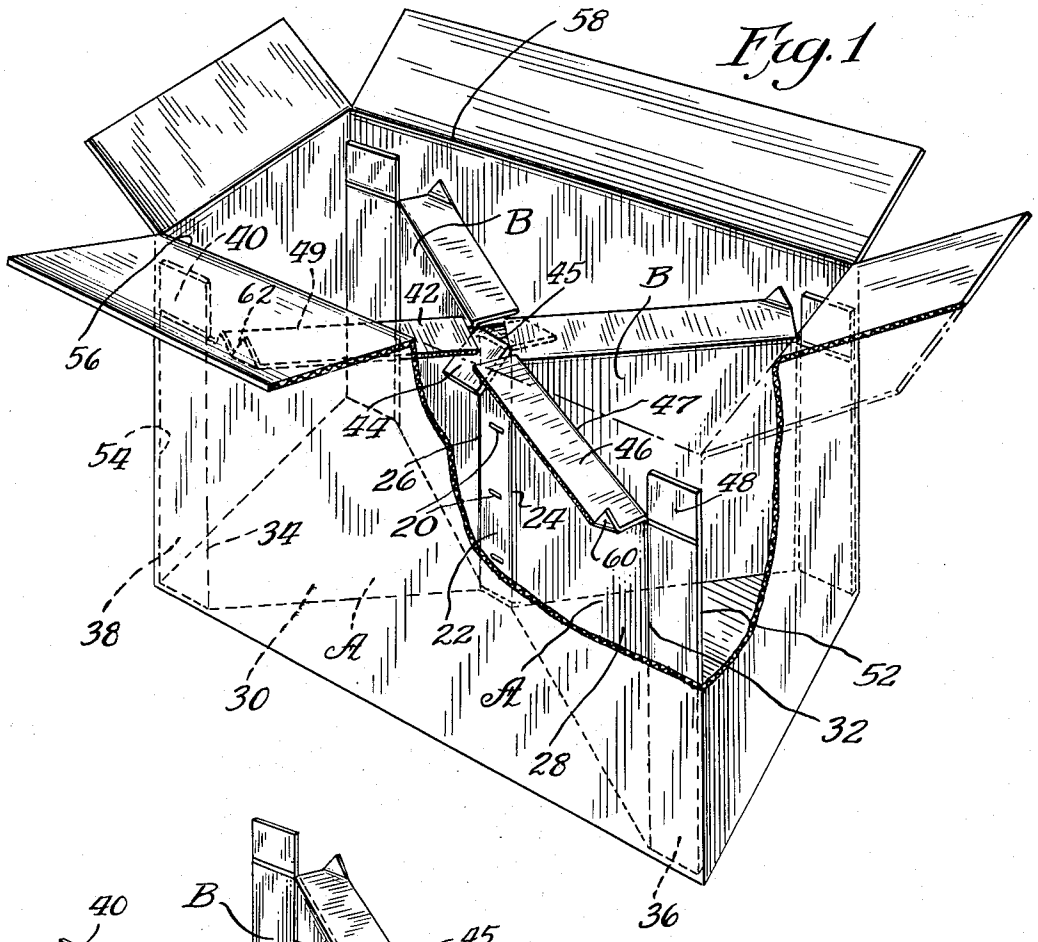
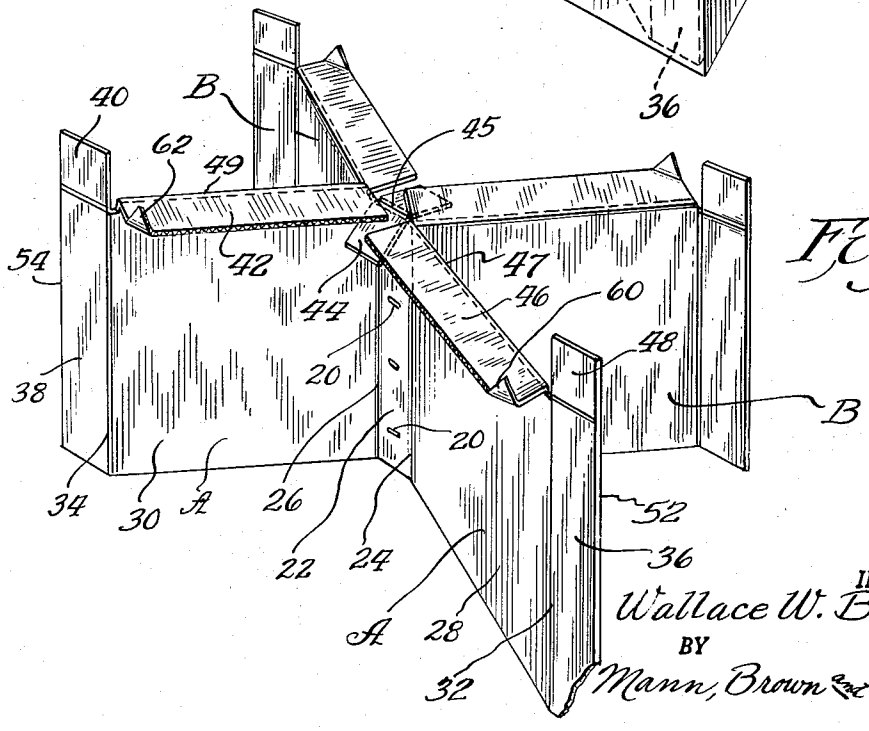


Fig. 2.



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Filed March 18, 1953 2 Sheets-Sheet 2

Fig. 3.

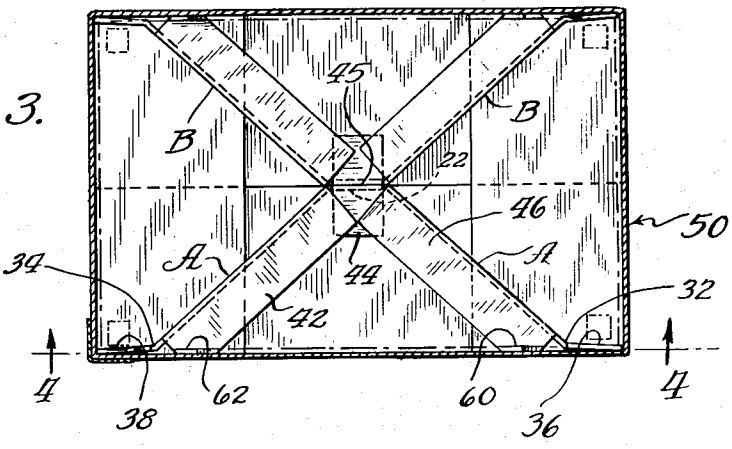


Fig. 4.

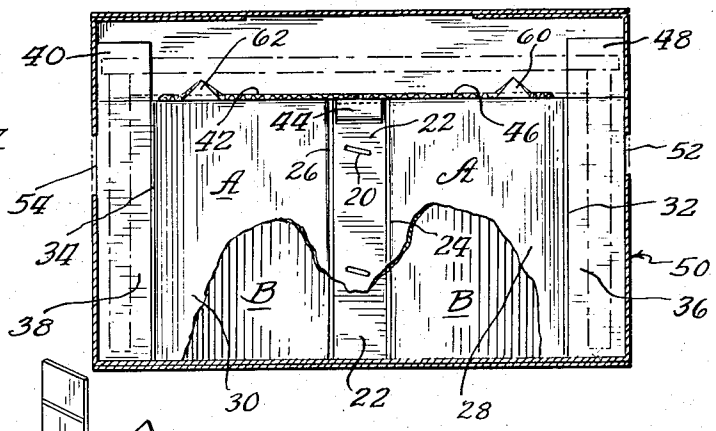
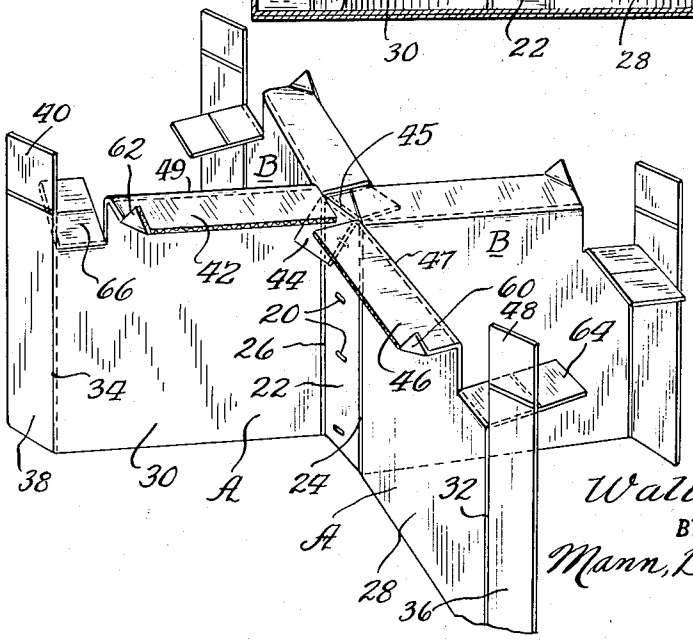


Fig. 5.



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United States Patent Office 2,749,012 Patented June 5, 1956

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FURNITURE SADDLE SUPPORT

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Application March 18, 1953, Serial No. 343,149

4 Claims. (Cl. 229—14)

My invention relates to saddle supports for furniture, which supports are usually inserted in containers in which the furniture is shipped.

It is the general practice in the furniture manufacturing industry to ship assembled furniture articles in various types of containers such as wooden cartons or corrugated board cartons. Because of the relative expense involved, the furniture industry is turning to a greater use of corrugated board containers. Many difficulties have been presented in the use of such containers, one of the principal difficulties arising in shipping furniture articles such as tables having long legs. In order to prevent damage to or breakage of the legs in transit, it is necessary to support the flat board portion of such a furniture article in a position such that the legs are spaced above the bottom of the container. By so doing, any damage to the bottom of the container, such as bashed in corners or bottom edges, will not result in breaking the legs or damage thereto. Supporting a long legged article of furniture in a container by means other than the legs also reduces the possibility of damage to the furniture article because during shipment, the weight of the furniture article is not carried by the legs.

Since shipping containers are usually destroyed after they have been used in shipping an article of furniture, such containers and the supports therefor must be relatively inexpensive. The furniture saddle supports must also be sufficiently strong and durable to support the article of furniture and yet be capable of being readily and inexpensively fabricated and assembled.

One of the objects of my invention is to provide a saddle support for use in corrugated board or other shipping containers, which support is designed to suspend furniture articles having long legs in a container in a position such that the legs are spaced from the bottom of the container.

Another object of my invention is to provide a furniture saddle support in which an article of furniture may be supported over a greater area of the article than that presented by the bottom of its legs.

A still further object of my invention is to provide a furniture saddle support which, in addition to suspending the article of furniture in a container, is useful in providing additional corner and side support for the container in which it is used.

A still further object of my invention is to provide a furniture saddle support which is relatively easily manufactured in quantity, may be assembled with a minimum of operations and which is inexpensive.

These and other objects of my invention will become apparent from the following description and from the drawings in which:

Figure 1 is a perspective view of a corrugated board container having a portion broken away to show more clearly the furniture saddle support in position therein;

Figure 2 is a perspective view of the saddle support in folded position when in use in a container;

Figure 3 is a top plan view of the saddle support supporting a table shown in dotted lines;

Figure 4 is a cross section taken along the lines 4—4 of Figure 3;

Figure 5 is a modification of my invention showing a saddle support generally similar to that shown in Figures 1 through 4 but substantially adapted for use with tables having a flanged or skirted portion depending from the flat table surface.

The furniture saddle support of my invention consists of two pieces of corrugated board A and B which are identical in size and shape and may be cut and scored in quantity production. The pieces A and B may be of any height and in unfolded upright position are two to three inches longer than the length of the legs of the furniture article with which they are to be used. As the pieces A and B come from the cutting and scoring machines, they appear as straight pieces of corrugated board with smaller pieces cut therefrom and with score lines on the face thereof adapted to facilitate the folding of the various sections and panels as will be more fully hereinafter described. For convenience in describing the pieces A and B, the sides of these pieces facing the sides of the container when placed therein will be referred to as the front sides and the opposite sides as the back sides.

In order to assemble the furniture supports for shipment to furniture manufacturers to be retained by them until they are used, it is necessary merely to place together back to back two of these cut and scored corrugated boards and to secure them together substantially midway of their length by means of staples 20 or other suitable fastening means.

Since the pieces A and B are identical in size, shape and scoring in both original and subsequently folded form, it will be necessary to describe only piece A. This piece consists of a central panel member 22 bounded by score lines 24 and 26, and side panel members 28 and 30 bounded respectively by scoring lines 24—32 and 26—34. Integral with the side panels are end panel members 36 and 38 spaced from panels 28 and 30 by scored lines 32 and 34. A series of flaps 40, 42, 44, 46 and 48 are integral with and positioned above panel members 38, 30, 26, 28 and 36 respectively.

When the furniture manufacturer wishes to place a furniture saddle support in a container such as a corrugated board container 50, the panels 28 and 30 may be folded along the score lines 24 and 26 toward the direction of the front side of these panel members and away from piece B. Panel members 36 and 38 are then folded generally rearwardly along score lines 32 and 34 to a plane generally parallel with the unfolded piece B and generally parallel to one side of the shipping container in which it is to be inserted. Piece B is then folded in like manner, presenting a generally X-shape of the furniture saddle support.

The length of the pieces A and B with respect to the container in which they are to be used is such that when folded, the distance between the outer edges 52 and 54 of panels 36 and 38 is equal to the length of the inside of the container 50. The general X-shape presented by the folded pieces spaces panel members 36 and 38 away from the corresponding panels on piece B a distance equal to the internal distance between the sides 56 and 58 (see Fig. 1) of the container 50. The size relationship between the saddle support with the panel members 28 and 30 and the extensions 36 and 38 and the container in which the saddle support is to be used is such that the extensions 36 and 38 and the corresponding panels of piece B are slightly crowded into the corners of the container firmly positioning the saddle support within the container.

The panels 36 and 38 extend in the container in a plane substantially parallel to the sides of the container and space the panels 28 and 30 away from the corners of the container, leaving substantially the whole of the

corner available to accommodate the legs of the article of furniture to be shipped in the container. With this construction it is possible to use a container only slightly larger than the peripheral dimensions of the table or other article of furniture to be shipped therein. The small space between the furniture article and the container may be used for padding.

After the panels have thus been inserted in the container, flaps **44** above panel **22** are bent along score lines **45** toward the front side at substantially right angles to panels **22**. Flaps **42** and **46** above panels **30** and **28** are then bent along score lines **47** and **49** toward the front side at substantially right angles to the panel members. The width of these flaps is such that when folded the flaps cannot be completely accommodated within the container without bending the outer corners **60** and **62**. As the flaps **42** and **46** are folded, the outer edges **60** and **62** contact the sides of the container and continued folding pressure against these flaps results in the bending upwardly of the corners **60** and **62** which results in a wedging of these flaps into position. The contact of the flat sides of the bent portions **60** and **62** with the sides of the container prevents these flaps from returning to their normal upright position.

It will be seen that pieces A and B when folded as indicated serve to bolster both the end walls and side walls and aid in preventing inward collapse of these walls. The panel members **36** and **38** of piece A and the corresponding panels of piece B serve to strengthen the corners. The furniture saddle support being firmly positioned within the container in a general X-shape resists collapse of the container by turning or twisting stresses.

As heretofore indicated, the pieces A and B in unfolded position are of a height two to three inches greater than the length of the legs of the article to be supported. When the flaps **42**, **44** and **46** of piece A and the corresponding flaps of piece B are folded at right angles to the panels beneath these flaps, they present a relatively wide area for supporting the underside or flat board portion of an article such as a table. These flaps may be made of a width of approximately one inch and the legs of the table will then be supported from one to two inches above the bottom of the container.

It is to be particularly noted that in the construction illustrated, the ordinary stress and strains to be applied against the furniture saddle support when in use will be against the edge sections of the corrugated board, which edge sections present much greater resistance to bending than the side portions of such a corrugated board.

The construction of Figure 5 is generally similar to that disclosed in Figures 1 through 4 except that in addition, this furniture saddle support is provided with additional flaps **64** and **66** in panel members **28** and **30**. The flaps **64** and **66** may be of such a length as to be folded down to accommodate a skirted or flanged portion depending from the flat surface of a table.

From an inspection of these structures, it is apparent that I have provided a furniture saddle support which is designed to occupy a minimum of furniture space within a container. I have also provided a furniture saddle support which, in addition to being strong and durable to support a table or like article of furniture with the legs spaced from the bottom of the container, is constructed in such a way as to give added strength to the sides and corners of the container in which it is to be used. I have also provided a furniture saddle support which is relatively easy to manufacture in quantity, may be readily stored in flat condition for use when needed and is inexpensive to produce. I have also provided a furniture saddle support which may be manufactured in quantity in various sizes depending upon the container in which it is to be used and the furniture article which is to be supported.

In the structure chosen for illustration herein, the general X-shape of the support is formed of two pieces, each having a general V-shape with the legs of each V section extending away from each other. It is, of course, obvious that each leg of the general X arrangement may be made of a separate piece with all four pieces secured together at the center. It is also obvious that the general X shape may be accomplished by having two straight pieces cross each other, being held together at the center by cooperating slots in each piece. These and other modifications may be readily apparent and I do not wish to be limited to the specific structures set forth but wish to avail myself of all modifications coming within the scope of the appended claims.

I claim:

1. For use in packaging an article of furniture of the type having a plurality of corner legs depending from a main frame, the combination with a four-sided container of a saddle support, comprising upstanding panel members arranged generally in X-shape, flaps integral with said panel members adapted to be folded at substantially right angles thereto, extensions at each end of and integral with said panel members, said extensions extending into each of the corners of said container to bolster the same and being positioned in a plane parallel to opposed sides of said container to space said panel members from the corners of said container, said panels and said flaps providing a relatively wide support area for said main frame to support said main frame at a position removed from the legs thereof.

2. For use in packaging an article of furniture of the type having a plurality of corner legs depending from a main frame, the combination with a four-sided container of a saddle support, comprising upstanding panel members arranged generally in X-shape, flaps integral with said panel members adapted to be folded at substantially right angles thereto, said flaps being of a width to bear against two opposed sides of said container, extensions at each end of and integral with said panel members, said extensions extending into each of the corners of said container to bolster the same and being positioned in a plane parallel to said opposed sides of said container to space said panel members from the corners of said container, said panels and said flaps providing a relatively wide support area for said main frame to support said main frame at a position removed from the legs thereof, said panels with said flaps in folded position being of a height with respect to the articles of furniture to support said articles of furniture with the legs spaced from the bottom of the container.

3. For use in packaging an article of furniture of the type having a plurality of corner legs depending from a main frame, the combination with a four-sided container of a saddle support, comprising upstanding panel members arranged generally in X-shape, extensions at each end of and integral with said panel members, said extensions extending into the corners of said container in a plane parallel to opposed sides of said container to bolster the corners of said container and to space the panel members away from said corners, and flaps integral with said panel members and folded to extend in a plane perpendicular to the plane of said panel members and the said sides of said container, said flaps having portions deformed into facial contact with the sides of said container to retain said flaps in folded position, said flaps and said deformed portions acting to bolster the sides of said container, and said panel members with said flaps in folded position being adapted to provide a relatively wide support area for said main frame to support said main frame at a position removed from the legs thereof.

4. For use in packaging an article of furniture of the type having a plurality of legs and an adjacent flanged portion depending from a main frame, the combination with a four-sided container of a saddle support, comprising upstanding panel members arranged generally in

X-shape, flaps positioned above and integral with said panel members adapted to be folded at substantially right angles thereto, additional flaps formed on said panels adapted to be folded at right angles thereto, said panels and said first flaps providing a relatively wide support area in said main frame to support said main frame at a position removed from said legs and said additional flaps adapted to receive therein said flanged portion depending from said main frame.

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