March 30, 1954 G. G. BERGH ET AL 2,673,657

SHIPMENT AND DISPLAY BOX AND IMPROVED CORNER THEREFOR

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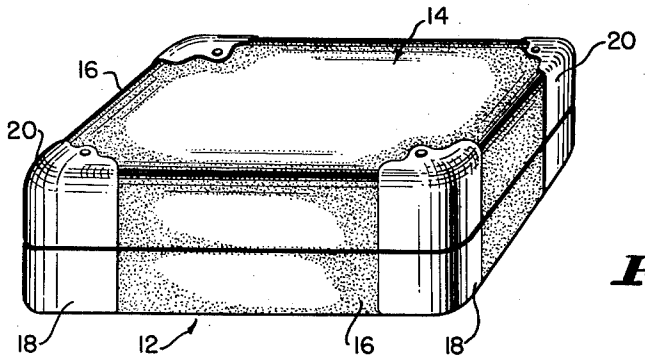


Fig. 1

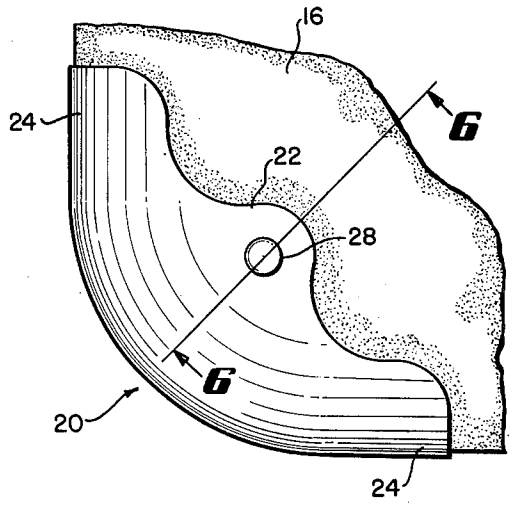


Fig. 2

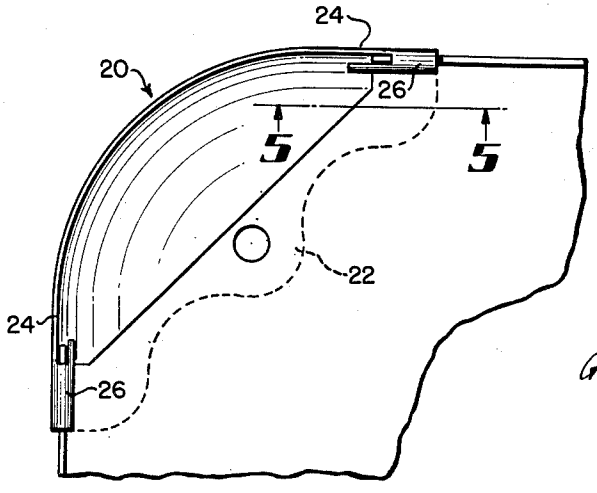


Fig. 3

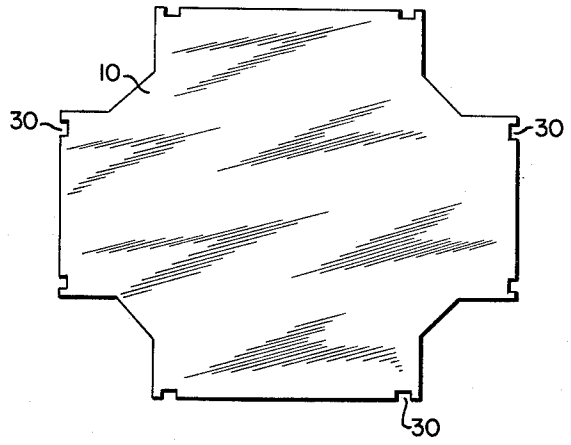
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SHIPMENT AND DISPLAY BOX AND IMPROVED CORNER THEREFOR

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Fig. 4



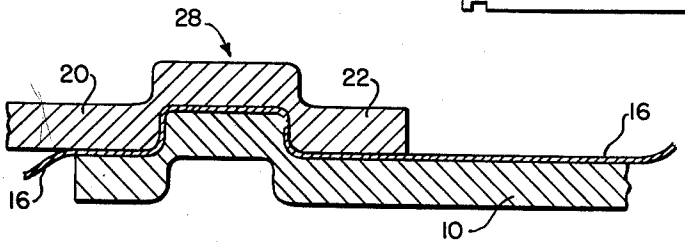
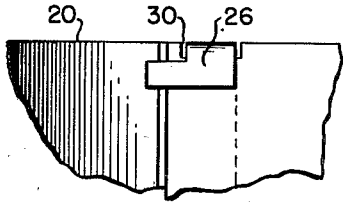


Fig. 6

Fig. 5



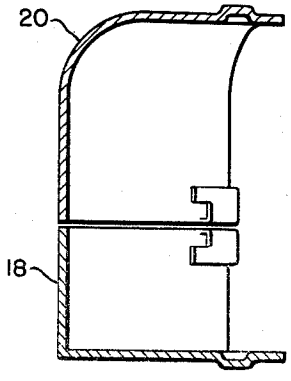


Fig. 7

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SHIPMENT AND DISPLAY BOX AND IMPROVED CORNER THEREFOR

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3 Claims. (Cl. 220—4)

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This invention relates to boxes and more particularly to jewelry shipment and display boxes. In one aspect this invention consists in an improved corner construction for jewelry shipment and display boxes.

The provision of attractive boxes having adequate strength and durability and being relatively inexpensive has long been a major problem in the medium to low-price jewelry industry. One of the principal causes of expense in the construction of jewelry shipment and display boxes has been in the wrapping of such boxes with an attractive fabric covering. Where the boxes have been formed in rounded contours for the purpose of giving them a graceful molded appearance, it has been exceedingly difficult to die stamp the metal which forms such boxes to provide a smooth outer contour having a rounded surface. It has been equally difficult to wrap such boxes with a fabric without encountering wrinkling, creasing, etc. which spoils the appearance of the box. In the past, rounded corner boxes have been wrapped with pliable leather or thermal plastic materials which could be molded or formed over the rounded box contour and give an essentially smooth outer surface. However, such coverings have been relatively expensive and therefore not well suited for the low-priced jewelry industry.

The difficulties encountered in forming boxes with attractive rounded corners and in wrapping such boxes have driven the industry to the use of boxes having square corners. Square boxes may be formed more easily initially and also it is easier to wrap such boxes without encountering any high degree of wrinkling or creasing. However even wrapping a square box has a considerable disadvantage in that at each end the wrapping material overlaps and causes a slight ridge to appear and somewhat mar the smoothness of the outer surface. Furthermore, there invariably remains an exposed edge of the wrapping fabric which may eventually work loose and present a frayed appearance.

Other disadvantages of conventional boxes are that their opposed halves tend to telescope into one another if the side walls of the top and bottom are not in perfect registration. In order to counteract this, raised inserts have been placed in the lower part of boxes and also metal trim strips extending the whole way around the box have been employed. Both these methods of preventing telescoping are expensive both as to material and as to cost of installation. And lastly, conventional square boxes require corner

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reinforcements if they are intended for any extended use, but such reinforcements generally are expensive and are attached either by spot welding or by inwardly bent projections which penetrate the side wall of the box. Spot welding cannot be performed after the decorative cover has been placed on the box, and penetrating projections are unsightly.

Therefore, it is an object of our invention to provide a box particularly adapted for elimination of difficulties normally encountered in wrapping.

It is a further object of our invention to provide a box corner which cooperates with the main body of the box to adapt the box for rapid and convenient wrapping, for reinforcement of the box, for prevention of telescoping between one section of the box and another, and for contributing to an improved general appearance of the box itself.

It is a further object of our invention to provide a box corner construction which at one and the same time renders the box more adaptable for wrapping with a decorative cover, which reinforces the corner of the box, and which is readily adaptable to accommodate many different forms of corner contour.

In the accomplishment of these and other objects of our invention, we construct a jewelry display box out of light-weight sheet metal. The box is formed out of two complementarily shaped half-box elements which are hinged together in the conventional manner and provided with a conventional snap spring for holding the box both opened and closed. Both halves of the box are wrapped with a decorative cover after which corner reinforcing elements are fastened to the corners of both halves of the box.

It is a feature of our invention that the corner reinforcements serve both to hold the decorative cover in place and by adding extra thickness to the walls of the box, they also serve to prevent telescoping between halves of the box.

It is a feature of our invention that the corner reinforcing elements are held in place by a simple arrangement including a die-punched mock rivet on top and by bent-over retaining ears or tabs to each side at the base. Thus no additional elements such as screws, rivets, etc. need be installed, and furthermore the necessity for welding, etc, is obviated.

Further objects and features of our invention will best be understood and appreciated from the following detailed description of a preferred embodiment thereof selected for purposes of illus-

tration and shown in the accompanying drawings, in which:

Fig. 1 is a view in perspective of a jewelry shipment and display box having decorative corner reinforcements in accordance with our invention;

Fig. 2 is a top plan view of one of the decorative corner reinforcing elements;

Fig. 3 is a bottom plan view of the corner reinforcement shown in Fig. 2;

Fig. 4 is a sheet metal portion stamped to form a flat blank of one of the halves of the box of our invention;

Fig. 5 is a view in side elevation along the lines 5—5 of Fig. 3;

Fig. 6 is a sectional view in side elevation along the lines 6—6 of Fig. 2; and

Fig. 7 is a sectional view of two reinforcing elements showing different contours thereof.

The preferred embodiment of the jewelry shipment and display box herein shown includes a sheet metal box formed with a co-extensive top and bottom portions fabricated substantially from blanks 10 indicated in Fig. 4. As may be seen in Fig. 1, the bottom half of the blank indicated generally at 12 is provided with right angle corners between the side walls and the bottom; whereas the box top indicated at 14 is provided with rounded corners between the box top wall and the side walls thereof. After forming the blanks 10 appropriately to provide a box bottom 12 and a box top 14 these two elements are covered by a decorative wrapping 16. It will be noted that the corner edges of the wrapping 16 will overlap and crease only in the area adjacent to the four corners of the box itself at the point where the adjacent side walls meet. After the cover has been applied to the box, corner reinforcements 18 are secured to the corners of the bottom of the box and corner reinforcements 20 are similarly secured to the box top. It will be seen therefore that the corner reinforcements 18 and 20 serve not only to strengthen the box corners, and give it a "treasure chest" appearance, but also they serve to anchor the decorative box covering. After the corner reinforcements have been secured in place, the box bottom and the box top are hinged together in the conventional manner and provided with a suitable decorative lining.

The only difference between corner reinforcements 18 and 20 is that the reinforcements 18 form a right-angle with the bottom of the box, whereas reinforcements 20 form a gradually rounded contour entirely around the radius of the corner formed by the box top wall and the adjacent box side walls. For this reason only corner reinforcements 20 will be described in detail.

In the preferred construction herein shown corner reinforcements 20 are formed from a portion of sheet brass and are provided with an inwardly extending horizontal flange element 22 and vertically extending side walls 24. Corner reinforcements 20 are secured to the corner of the box by means of retaining ears 26 at the base of each side wall 24 acting in cooperation with a die-punched, mock rivet 28 located centrally in the horizontal flange 22. With reference to Fig. 5 it will be seen that the retaining ears 26 are located in the notches 30 of the box side walls, and with reference to Fig. 6 it will be seen that the mock rivet 28 serves to prevent any outward lateral motion of the corner reinforcement 20. It will be further noted that any upward movement of the horizontal flange 22 of the reinforcement is prevented by the retaining ears 26 and thus the reinforcing elements 20 are held securely in place. Fig. 5 as shown is intended merely to demonstrate the operation of the ears 26 and the fabric cover 16 has been omitted therefrom. It will be understood, however, that the ears 26 further serve to anchor the fabric cover 16.

From the construction described therefore, it is evident that no great care need be taken in preventing wrinkling or creasing of the fabric on the rounded corner edges adjacent to the corners where the side walls meet simply because the corner reinforcements 20 completely mask the decorative cover 16 in that area. Furthermore with reference to Fig. 3 it will be seen that the retaining ears 26 provide a triple thickness of metal which serves to prevent telescoping of the two halves of the box into each other.

Boxes formed in this manner are extremely durable and inasmuch as wrapping may be accomplished without the necessity for using leather or expensive thermoplastic materials, these boxes may be manufactured at an exceptionally low cost, thereby rendering them suitable for use in the relatively low-cost jewelry industry. These features are combined with an enhancement of the general physical appearance of the box.

Certain minor variations of this preferred embodiment of our invention will be evident to those skilled in the art, and therefore it is not intended to confine the invention to the precise form herein shown but rather to limit it in terms of the appended claims.

Having thus disclosed and described a preferred embodiment of our invention, what we claim as new and desire to secure by Letters Patent is:

1. In a display box comprising vertical box side walls and a horizontal box wall, said walls forming a corner, said walls further being wrapped with a decorative outer covering, a corner reinforcing and decorative cover anchoring element having in combination, a portion of sheet metal forming a horizontal corner flange, two vertical corner side walls integral with said corner flange, and a retaining ear at the base of each said corner side wall; and said reinforcing and anchoring element being secured to said box corner with said corner side walls overlying said decorative cover and said box side walls adjacent said corner, with each said retaining ear overlapping the marginal edge of each said vertical box side wall adjacent said corner, and with said horizontal corner flange overlying said horizontal box wall, and a mock rivet providing a mating indentation partially penetrating the juxtaposed horizontal box wall, and horizontal corner flange, whereby said corner element is held securely to the adjacent box walls by the retaining ears which prevent vertical motion and the mock rivet which prevents horizontal motion such that the corner element may be further employed to anchor a decorative covering between itself and the said walls.

2. A display box including converging side walls, a horizontal wall integral with said side walls and forming therewith to form a corner, said side walls being notched in their margins adjacent said corner, a decorative outer covering for said box, a corner reinforcing and decorative outer cover anchoring element comprising a portion of sheet metal forming a horizontal corner flange, two vertical corner side walls integral with

said corner flange, and a retaining ear at the base of each said corner side wall; and said reinforcing and anchoring element being secured to said box corner with said corner side walls overlying said decorative cover and said box side walls adjacent said corner, with each said retaining ear overlapping the marginal edge of each said vertical box side wall and lying in the notch therein adjacent said corner, and with said horizontal corner flange overlying said horizontal box wall; and a die-punched, mock rivet providing a mating indentation partially penetrating the juxtaposed horizontal box wall, and horizontal corner flange, whereby said corner element is held securely to the adjacent box walls by the retaining ears which prevent vertical motion and the mock rivet which prevents horizontal motion such that the corner element may be further employed to anchor a decorative covering between itself and the said walls.

3. The display box defined in claim 2 further characterized by said retaining ears and said mock rivet lying in a vertical plane passing diagonally through said corner.

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ROBERT G. BERGH.

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