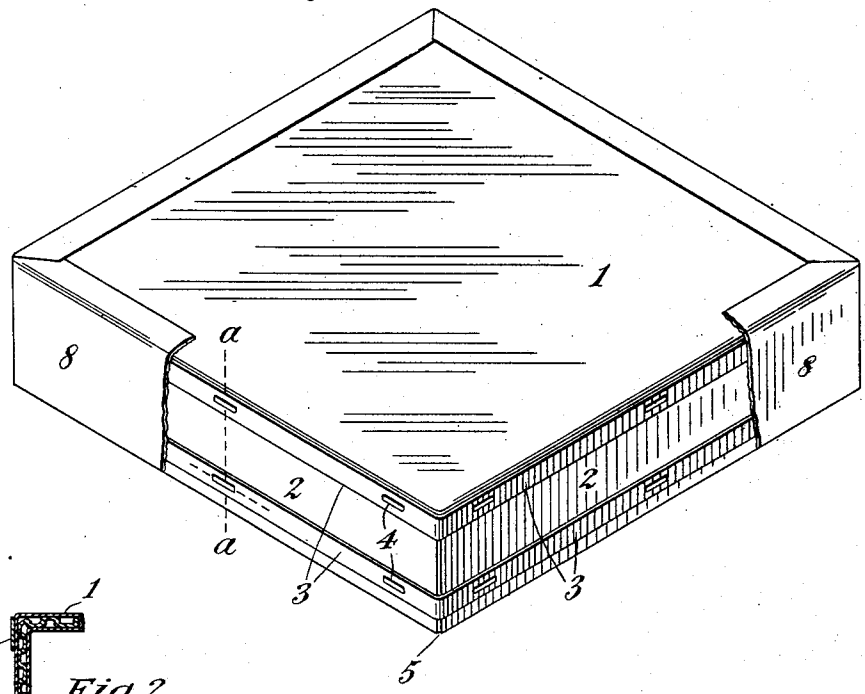
H. ROTH.

MANUFACTURE OF BOX COVERS.

APPLICATION FILED MAY 14, 1915.

1,172,560. **Patented Feb. 22, 1916.**

Fig. 1



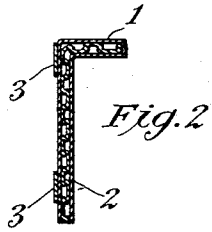


Fig. 2

Fig. 3

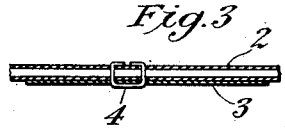
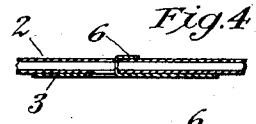


Fig. 4



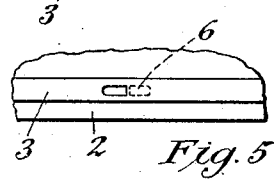
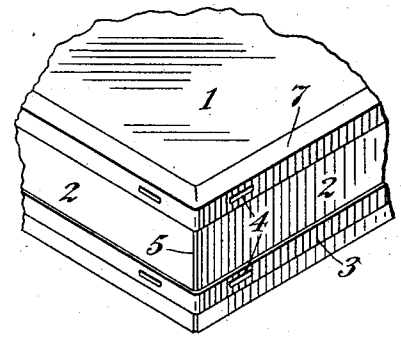


Fig. 5

Fig. 6



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UNITED STATES PATENT OFFICE.

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MANUFACTURE OF BOX-COVERS.

1,172,560. Specification of Letters Patent. Patented Feb. 22, 1916.

Application filed May 14, 1915. Serial No. 27,978.

To all whom it may concern:

Be it known that I, HARRY ROTH, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in the Manufacture of Box-Covers, of which the following is a specification.

My invention relates particularly to improvements in covers for boxes of the type commonly known as "two-piece" or "three-piece" cases which are generally made of paper-board or similar material and consist either of two cover sections fitting one into the other, or of a rectangular body shell capable of being "knocked-down" and provided, when set up, with a cover fitting over each of its ends. Such cases are ordinarily used for shipping various articles of merchandise. It has been found in practice, that owing to the rough handling to which the cases are subjected in transit, the flaps and corners of the covers thereof are often pulled out of shape, thereby weakening or tearing said parts and diminishing or destroying the utility of the case.

One of the objects of my invention is to provide a cover having its side flaps and corners strengthened by means of reinforcing bands which are applied so as to effectually prevent tearing-out of the corners or breaking of the flaps while allowing sufficient flexibility to permit of the boxes being readily assembled by fitting the covers over each other or over an intermediate body shell as desired.

Another object of my invention is to secure the parts of the corner joints together by means of bands of a strong pliable material which bands extend around the side flaps of the cover and are suitably fastened thereto so as to form corners that are practically unbreakable and will hold their shape.

In the accompanying drawings illustrating my invention Figure 1 is a perspective view of a box cover constructed according to my invention and having part of the trimming or ornamental covering broken away to show the reinforcing bands. Fig. 2 is a vertical section on the line *a*—*a* of Fig. 1. Fig. 3 is a detail longitudinal sectional view through one of the staples fastening the band to the flap. Fig. 4 is a detail sectional view of a modification showing the band provided with an integral tang for attaching it to the flap. Fig. 5 is a plan view of the same, and, Fig. 6 is a perspective view of one corner of a box cover showing a modification in which one of the reinforcing bands is bent in angular form to fit over the edge of the cover.

Referring to the drawings, 1 indicates the cover which is made of plain or corrugated paper-board or other suitable material and of any desired shape or form.

In manufacturing the covers I employ blanks similar to those now used in constructing box-covers of a like character and are well known to those skilled in the art of paper-board box making. Such blanks have integral ears or extensions which are formed by cutting out the corner portions of the blank and which constitute, when bent perpendicular to the plane of the body of the blank, the side walls or flaps 2 of the cover. After the box-cover has been bent into shape, I bind the side flaps 2 together with bands or strips 3 of metal ribbon or other suitable strong and pliable material. The bands are passed snugly around the flaps, preferably on the outside, and are secured thereto by wire stitching or staples 4 set therein at intervals along their length. One of the bands is preferably located close to the bent edges of the cover, as shown in Fig. 1, to serve as a guard to prevent said edges from being crushed or cut when the box is tightly tied with cord.

Any suitable mechanism may be employed for applying the bands and fastening them to the box, and such mechanism will preferably be arranged to apply all of the bands at one operation. If desired, however, the bands may be applied singly either by hand or otherwise, and the staples set therein with an ordinary stapling machine.

The adjoining edges of the side walls or flaps 2 forming the corners 5 of the cover are tied together solely by means of the metal bands 3 which pass around the flaps and are fastened thereto at several points, thereby increasing the strength of the flaps and producing a simple and strong corner structure.

In the modifications shown in Figs. 4 and 5, the bands are perforated, by means of a suitable punch, to produce integral tangs 6 which serve to fasten the bands to the flaps.

If desired the top edges of the cover may be

further reinforced, as shown in Fig. 6, by bending the upper band 7 in angular form to fit snugly over said edges.

The cover is trimmed in the usual manner with an ornamental covering or edging 8, made of craft paper, cloth or other suitable material, which covering conceals the reinforcing bands and gives the structure a neat and finished appearance. The machine which is employed to apply and fasten the bands may also be arranged to apply the covering thereon.

Various modifications in the form and construction of the box-cover herein illustrated and described may be made without departing from the scope of my invention, and I do not therefore limit myself to the precise structure set forth except in so far as I am limited by the claims.

What I claim is:

1. A paper-board box cover having a plurality of narrow bands of pliable metallic ribbon encompassing the side walls and corner joints thereof, each band being integral and continuous and being fastened to the walls whereby to reinforce said walls and to stay the corners, and a trimming sheet applied to the side walls and covering the metallic bands substantially as described.

2. A paper-board box cover having a plurality of narrow bands of pliable metallic ribbon encompassing the side walls and corner joints thereof, each band being integral and continuous and being secured to the walls at intervals by means of integral fastening tangs, whereby to reinforce said walls and to stay the corners, and a trimming sheet applied to the side walls and covering the metallic bands substantially as described.

3. A box cover comprising a paper blank bent to form the top and side walls of the cover, a plurality of metallic reinforcing bands encompassing the side walls and corner joints, each of said bands being integral and continuous and being fastened to the walls at intervals, one of said bands being disposed adjacent to the top edge of the cover.

4. A box cover comprising a paper blank bent to form the top and side walls of the cover, a plurality of metallic reinforcing bands encompassing the side walls and corner joints, each of said bands being integral and continuous and being fastened to the walls at intervals, one of said bands being disposed along and overlapping the top edge of the cover.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

HARRY ROTH.

Witnesses:
LESTER F. DITTENHOEFER,
GRACE M. RIVIERE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."