

June 1, 1937.

S. P. BELSINGER

2,082,677

SHIPPING CONTAINER

Filed May 27, 1935

3 Sheets-Sheet 1

Fig. 1.

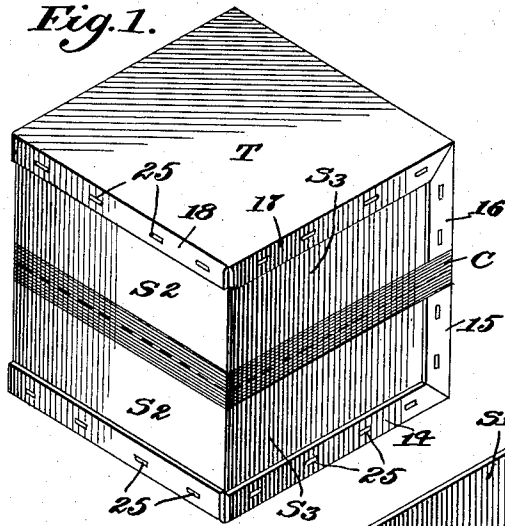


Fig. 2.

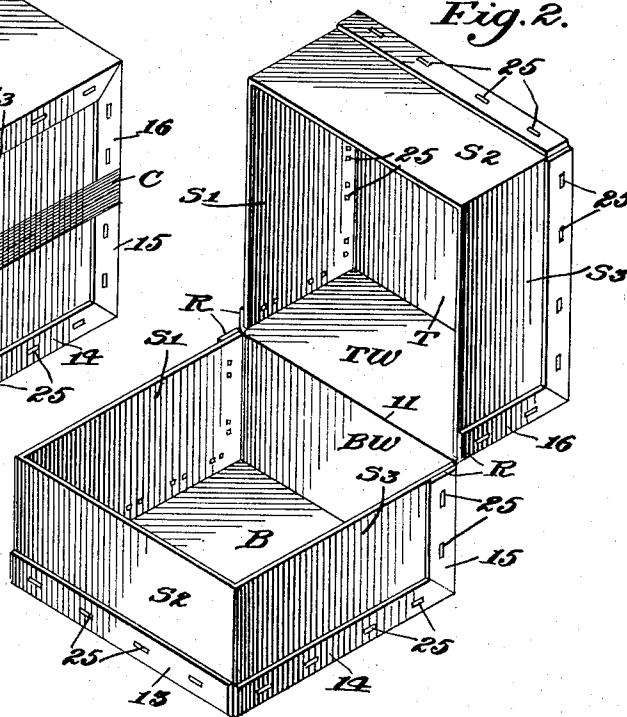


Fig. 3.

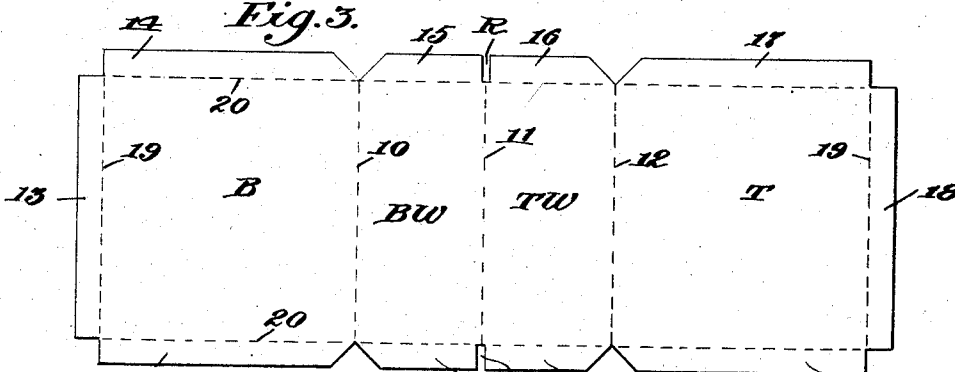
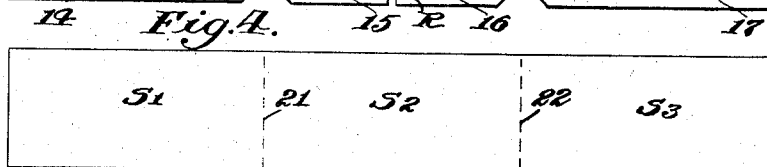


Fig. 4.



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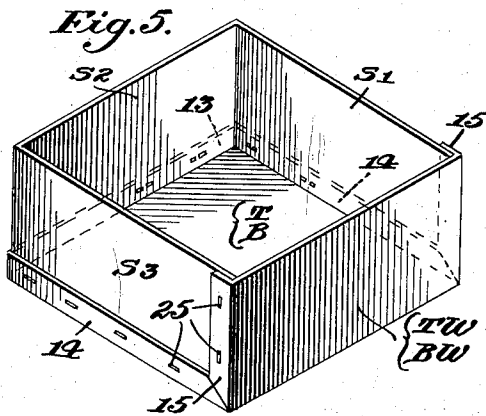
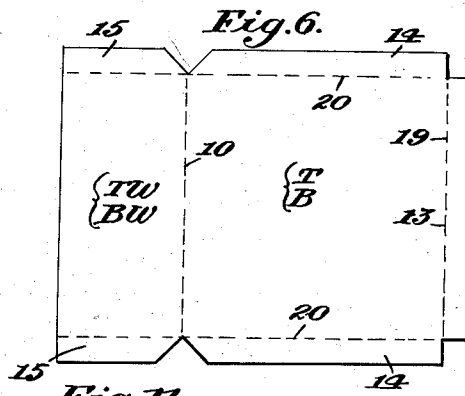
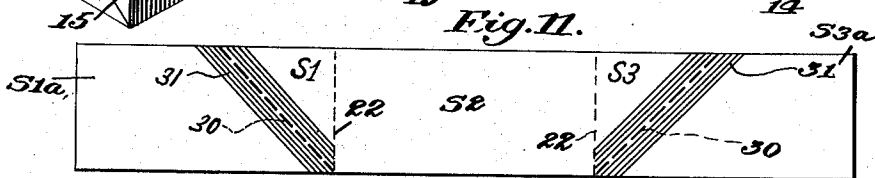
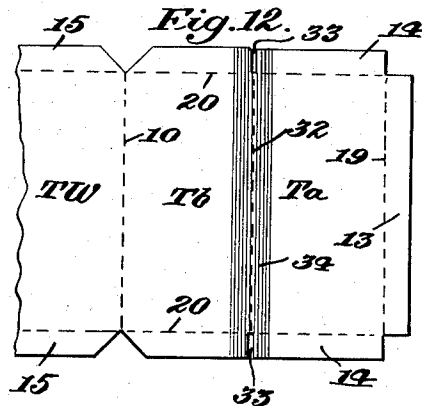
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SHIPPING CONTAINER

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3 Sheets-Sheet 2



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SHIPPING CONTAINER

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Fig. 7.

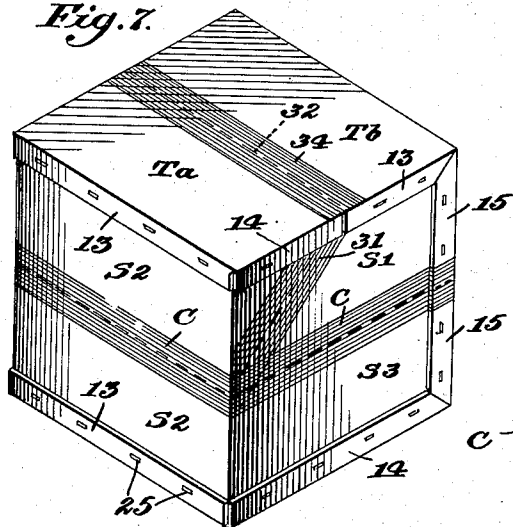


Fig. 8.

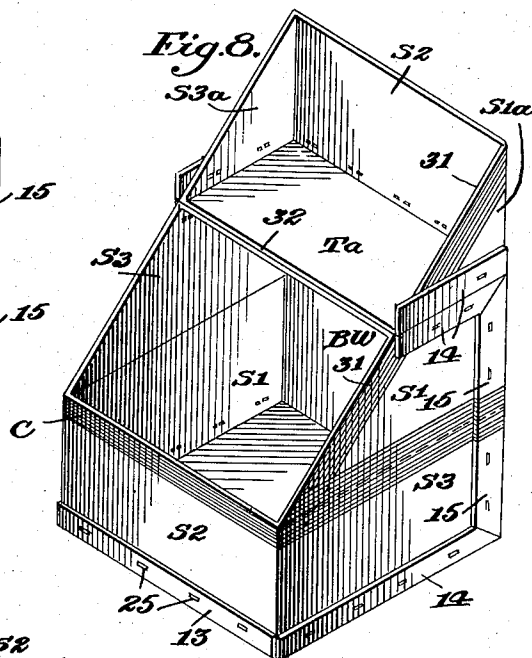


Fig. 10.

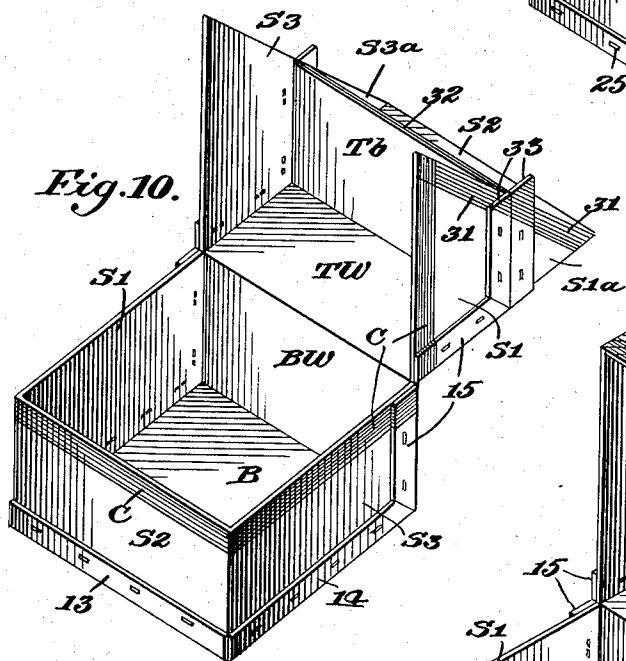
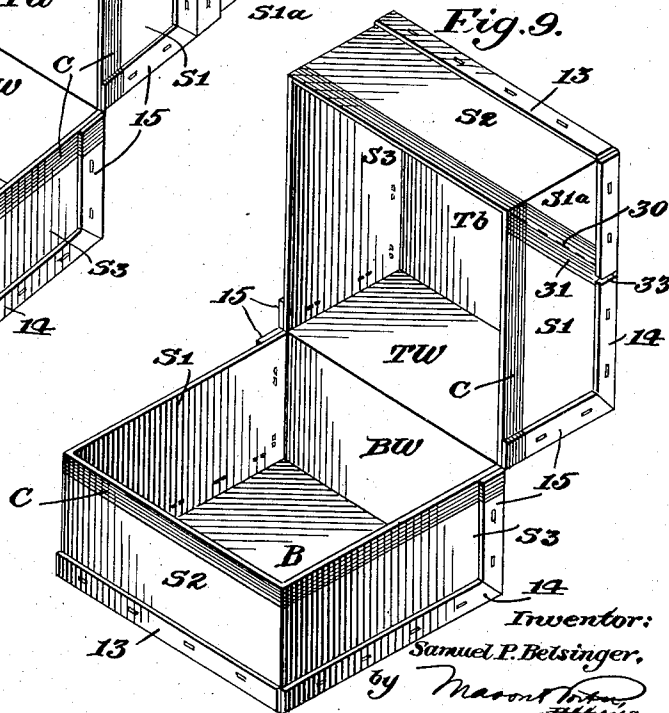


Fig. 9.



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UNITED STATES PATENT OFFICE

2,082,677

SHIPPING CONTAINER

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Application May 27, 1935, Serial No. 23,763

7 Claims. (Cl. 229—23)

This invention relates to a shipping container and is more particularly concerned with the design and arrangement of the parts thereof so that the container comprises two portions which may be initially joined together and which may be preformed ready to receive the contents, the final closure being accomplished at the junction of the two portions by reason of the predetermined abutting relationship accomplished at the joining edges of the two portions.

One of the features of the present invention resides in the construction of such containers from blanks of substantially rectangular form and permitting the construction of the container without any substantial losses of material from the sheets of stock employed.

Another feature of the invention consists in constructing a container from three blanks, of which one blank constitutes parts of the two portions of the container as well as providing a hinge-like joint between these portions, the other two blanks being employed for completing each of the two portions.

A further feature of the present invention consists in constructing a container of which at least one portion is constituted of a simple rectangular blank providing three walls of the portion, along with a further blank or portion thereof providing a bottom and the fourth side wall, the two blanks being joined together by overlapping flanges which are stitched to the overlapped walls.

Another feature of the present invention is the provision of a container comprising a blank which is folded and joined to provide at least portions of the two walls of the container, together with a hingelike connection between the two portions, and including also means for providing a further hinge so that the container may be employed for display purposes.

With these and other objects in view, as will appear in the course of the following specification and claims, illustrative forms of practicing the invention are shown on the accompanying drawings, in which:

Figure 1 is a perspective view of a first form of construction in the closed and sealed condition.

Figure 2 is a corresponding perspective view, with the parts open.

Figure 3 is a view showing the completed blank from which several of the walls of the container portions of Figs. 1 and 2 are constructed.

Figure 4 is a view showing one of the blanks for completing a container portion.

Figure 5 is a perspective view corresponding to

Fig. 2, but showing an isolated portion according to a second form of construction.

Figure 6 is a view corresponding to Fig. 3, showing the corresponding blank for the isolated portion.

Figure 7 is a perspective view of a third form of construction in the closed and sealed condition.

Figure 8 is a perspective view showing part of the top portion opened for display purposes.

Figure 9 is a perspective view showing the upper portion swung back as a whole, corresponding to the showing of Fig. 2.

Figure 10 is a perspective view showing a complete opening of the container by the utilization of both hinge portions thereof.

Figure 11 is a view showing a blank utilizable for constructing the containers of Figs. 7 to 10.

Figure 12 is a view of a part of a cooperating blank for constructing the containers of Figs. 7 to 10.

In these drawings, in the form of construction according to Figs. 1 to 4, the blank of Fig. 3 is formed and provides a bottom wall B, a bottom rear wall BW, a top rear wall TW and a top wall T, which are integrally joined but are separated from one another by the scored folding lines 10, 11 and 12. Each of these walls is provided with flanges 13, 14, 15, 16, 17 and 18 which are likewise integral but are defined in part by the score lines 19 and 20. It will be noted that the score lines 20 extend from end to end of the blank. The hinge score line 11 ends at two slits or notches R extending for the widths of the flanges.

The blank as shown in Fig. 4 comprises the three walls S1, S2 and S3 which together provide an integral rectilinear blank having the parts set off by the score lines 21 and 22.

In constructing a container according to Figs. 1 and 2, one of the blanks of Fig. 3 and two of the blanks of Fig. 4 are utilized. The flanges are bent to right angle positions with respect to the corresponding adjacent walls, and the blanks of Fig. 4 are bent to U-shape and inserted within the flanges. The parts are then stiffly and rigidly joined together as by stitching with the staples 25. It will be noted that the overlapping flanges and side walls are easily accessible at the exterior and interior for the placing and clinching of these staples. The score line 11 operates as a hinge between the two container portions thus formed. The container is loaded with the desired lading and the top portion is then swung down onto the lower portion. Since the blanks according to Fig. 4 are identical, the meeting edges of the two portions are of identical size and shape and abut

against one another when the container is closed. A sealing strip C is then glued over the abutting edges and serves to prevent them from shifting, and in association with the hinge at the score line 11 for preventing relative shifting and separating of the two portions of the container. It will be noted that the finished container has smooth upper and lower surfaces so that the containers may be easily slid one over another during shipment and storage, that they have their top and bottom seams closed by stitching, and that they are joined intermediate the top and bottom by the cementing strip C which thus readily reveals any attempt at tampering thereat.

According to the form of construction shown in Figs. 4, 5 and 6, the blank of Fig. 6 has a large area T or B, which may provide either the bottom or top wall of the container, and the rear wall TW or BW corresponding to the wall TW or BW of Fig. 3. This form of construction is likewise provided with the flaps 13, 14 and 15 which respectively correspond in design and purpose to the flaps 13 or 18, 14 or 17 and 15 or 16 of Fig. 3. These flaps and the wall portions are integral but are separated by the score lines 10, 19 and 20 as before. The assembly of the container portions is much the same as in the case of Figs. 1 and 2. A blank according to Fig. 4 is folded to U-shape and is joined with a suitably folded blank of Fig. 6, the overlapping flanges and walls being stitched together by staples 25 as before. Two such container portions are employed, the lading being placed in one as in a tray, and then the other portion is inverted over it so that the meeting edges are in abutting relationship. A cementing strip C is then positioned. The finished container in appearance resembles that of Fig. 1, except that the integral hinge joint at the score line 11 is not present.

In the form of construction according to Figs. 7 to 12, the blanks generally are the same as in Figs. 3, 4 and 6. That is, the container may be assembled from a single blank of the type of Fig. 3, or from two blanks of the type of Fig. 6, in the manner pointed out above. Certain specific changes, however, are made in these blanks for this form of construction. As shown in Fig. 11, the end panels or portions for providing the wall structures S1 and S3 are formed with lines 30 for determining a parting of the upper section of the container. While this may be accomplished in many ways, it is preferred to cut through the blanks of Fig. 11 at the lines 30 and then to rejoin the sections by cemented strips 31. In such an illustrative form, the blanks thus comprise the central panel S2 with the integrally joined portions of panels S1 and S3, while the severed panel portions S1a and S3a are reconnected by the strips 31. It will be noted that the illustrated form shows each line 30 as extending from a point of the blank defined by an end of a line 22, to a point at substantially half the panel length along the other edge.

In this form of the invention, also, the portion of the blank which is employed for providing the top wall is slightly modified from the showing of the right-hand portions of Figs. 3 and 6. According to this modification, a scoring or severing line 32 is provided at substantially half the length of the portion of the scoring lines 20 between the scoring lines 10 and 19 (Fig. 12), this line 32 illustratively terminating at its ends at slots or gashes 33 which extend for the width of the flanges 14. These gashes preferably extend at right angles to the scoring lines 20 in

order to avoid corners having acute angles, as these are subject to curling up in use. If the line 32 is a cut, a joining strip 34 is always employed, and it is often advantageous to employ this strip when the line 32 is a scoring line between the integral portions Ta and Tb of the top.

The manner of assembly of this container, its packing and its closing is analogous to those employed for the aforesaid forms of construction.

When the container is closed (Fig. 7), it resembles in appearance the container of Fig. 1, except for the illustrated provision of the strips 34 and 31. Thus, it may be opened and closed in a similar manner so that the position of Fig. 9 corresponds to the position of the parts of the container in Fig. 2.

It is also possible to utilize the portions of the blanks comprising the half Ta of the top, the panel portions S1a and S3a, and the front wall section S2 individually, so that a display shelf with lateral and back guard is provided (Fig. 8). For this purpose, the side wall panels S1 and S3 of the top section are cut through along the line 30 and the sealing strip C is cut along the line of the abutting edges of the front wall sections S2 and then folded back to provide the shelf. Furthermore, it is possible to accomplish a complete opening of the container, after such cutting and use for display purposes (as for disassembly to remove the rear packages in such a container if stuck) by completing the cuts through the portions of the sealing strip C which have been holding the walls S1, S3 against shifting, and then swinging the entire top section upward and to the rear (Fig. 10).

While the invention has been illustrated in conjunction with specific forms of embodiments, it will be understood that it is not limited thereto but may be employed in many ways within the scope of the appended claims.

I claim:

1. A container comprising upper and lower portions having identical size and shape at the open ends; each portion including a first structure providing a first smooth unobstructed wall portion, a wall portion formed integral with said first wall portion, and flanges integral with said wall portions; each portion also including a second structure providing three walls with said flanges overlapping said three walls, and means fixedly connecting said flanges to the walls overlapped thereby; said portions presenting their free edges in abutting relation, and means engaging and secured to both said portions adjacent said abutting edges for holding the portions against relative shifting and separation.

2. A container comprising upper and lower portions with a common wall providing a hinge joint connecting the portions, said portions having identical size and shape at the open ends; said container including an integral structure providing two smooth unobstructed walls for the top and bottom, a wall portion formed integrally with said two walls and joining the same and providing said common wall, and integral flanges on said walls and wall portions; each said portion also including a structure providing three walls for the portion, said flanges overlapping the said three walls and secured thereto; and means engaging and secured to both said portions adjacent said abutting edges for holding the portions against relative shifting and separation.

3. A container comprising upper and lower portions having identical size and shape at the open ends with at least three of the side walls of one

portion presenting free edges abutting the free edges of the corresponding side walls of the other portion; each portion including three side walls formed integrally from a substantially rectangular blank, and also including a further wall portion formed integrally with an end wall and with flanges which overlap and are secured to said three side walls, the blank which provides said wall portion, end wall, and flaps being substantially rectangular.

4. A container comprising upper and lower portions having identical size and shape at the open ends with three of the side walls of each portion presenting free edges abutting the free edges of the corresponding side walls of the other portion; each portion having a closing wall fixedly secured to the side walls thereof, each portion having said three walls integrally joined at the vertical corners, and the portions being hingedly connected at the junction of the fourth walls of each portion by the integral formation of said fourth walls, the integral structure providing said fourth walls being fixedly connected to the structures providing said three walls in each portion, and a sealing strip engaging and secured to both said portions adjacent said abutting edges for holding the portions against relative shifting and separation.

5. A container comprising upper and lower portions having identical size and shape at the open ends with three of the side walls of each portion presenting free edges abutting the free edges of the corresponding side walls of the other portion; said portions including walls formed from an integral blank providing at least the top and bottom parts and fourth walls for both said sections so that the integral connection at the junction of said fourth walls provides a hinge for relative rocking of said portions, said portion also including other walls secured to said top and bottom parts and fourth walls, the side walls of the top portion being formed for severance along upwardly and backwardly inclined lines so that the front part of the top portion may be swung up and back to provide a display shelf having rear and lateral upstanding retaining walls.

6. A container comprising upper and lower portions having identical size and shape at the open ends with three of the side walls of each portion presenting free edges abutting the free edges of the corresponding side walls of the other portion; each portion having a closing wall, and flanges, said flanges each being connected integrally with one wall and bearing against another wall, and stitching joining each of said flanges with the corresponding said other wall; each portion having said three walls joined at the vertical corners, and the portions being hingedly connected at the junction of the fourth walls of each portion by the integral formation of said fourth walls, and a sealing strip cemented to both said portions adjacent said abutting edges for holding the portions against relative shifting and separation.

7. A container comprising upper and lower portions having identical size and shape at the open ends; each portion including a first structure providing a first smooth unobstructed wall portion, a wall portion formed integral with said first wall portion, and flanges integral with said wall portions; each portion also including a second structure providing three walls with said flanges overlapping said three walls, and means fixedly connecting said flanges to the walls overlapped thereby; said portions presenting their free edges in abutting relation, and means engaging and secured to both said portions adjacent said abutting edges for holding the portions against relative shifting and separation, and the upper portion having the said second structure thereof formed with diagonal divisions at opposite side walls, said divisions extending from the open end substantially to said first smooth unobstructed wall portion thereof, said upper portion also including securing and sealing means overlapping said divisions for normally holding said structure together as a unit, so that the front part of the upper portion may be severed at the securing means thereof and swung up and back to provide a display shelf having rear and laterally upstanding retaining walls.

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