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P. ZALKIND

2,128,341

CONTAINER

Original Filed Sept. 3, 1932

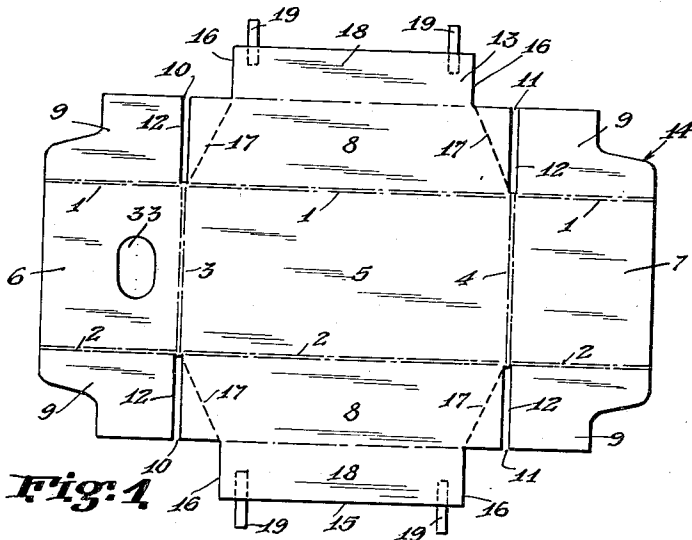


Fig. 1

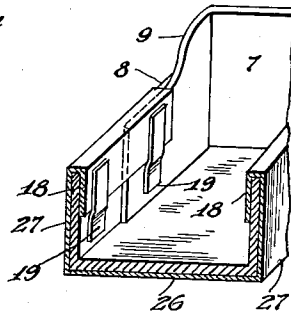


Fig. 7

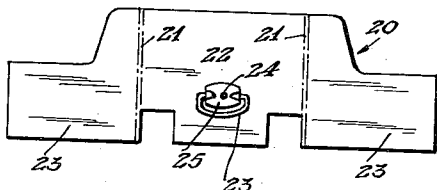


Fig. 2

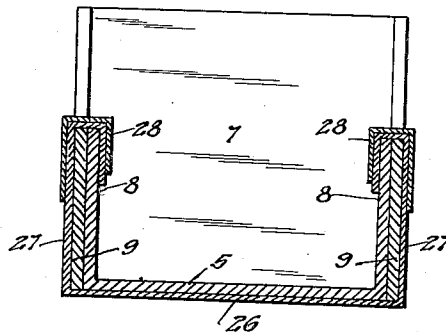


Fig. 6

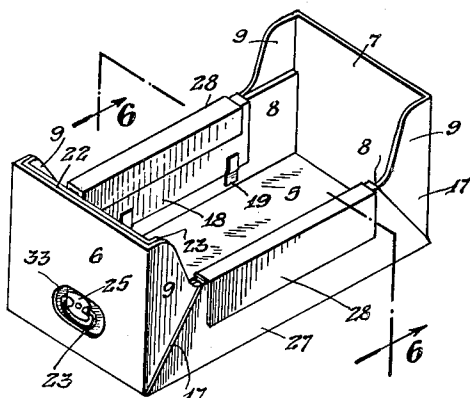


Fig. 3

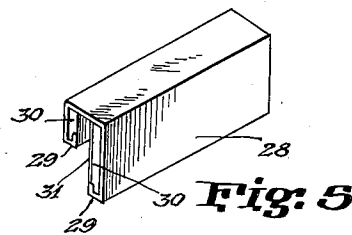


Fig. 5

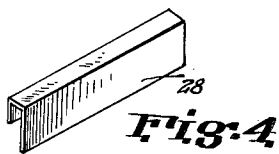


Fig. 4

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2,128,341

CONTAINER

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Original application September 3, 1932, Serial No. 631,682. Divided and this application October 10, 1933, Serial No. 692,937. Renewed July 21, 1937

16 Claims. (Cl. 229—34)

My invention in this application which is a division of application Serial No. 631,682, filed September 3, 1932, relates to containers and casings therefor and more specifically relates to drawers adapted to be pushed into and pulled from a casing made of suitable sheet material.

In general my invention embodies a container and casing combination made of sheet material such as cardboard or paper box board, corrugated board, fibre board, and/or any other material adaptable or adapted to be stamped and bent upon creased, scored, or otherwise formed on predetermined lines for the purposes hereinafter described after the same has been suitably cut, creased, stamped or blanked out in outline form.

Drawers of the type described above, must be sufficiently rugged to withstand the strains to which they are subjected in being pushed into and pulled from a casing. To justify their construction from sheet material of the type described above, they must be of low cost and be adapted for shipment in a collapsed state.

Accordingly, objects of my invention are: to provide means for making inexpensive and yet rugged containers of sheet material; to make novel containers adapted for shipment in a "knocked-down" condition and arranged to be simply and easily assembled and erected by the user; and to make containers which in "knocked-down" condition or collapsed condition lie substantially flat, so as to occupy a minimum of space for shipping and storage.

In order to readily push and pull a drawer into and from a casing, it must obviously be provided with a handle. I have discovered a special mounting of the handle which not only insures a secure support therefor, but also does not interfere with the packing of the collapsed containers for shipment.

Accordingly, then, further objects of my invention are: to provide novel handle constructions for collapsible containers which do not interfere with the collapsing of the containers into a substantially flat unit; to provide a handle mounted in a novel depression formed in the front wall.

In pushing and pulling the drawer from its casing, it is subjected to shearing strains along the vertical edges of the front wall. I have discovered that by transferring these strains to the side walls, they can be distributed over a larger area and are therefore less likely to be destructive of the container.

Accordingly still further objects of my invention are to provide; a container having a novel bracket extending from the end wall to the side walls for

securing them to each other; side walls secured to end walls by clips, adhesive, etc.

Other objects of my invention are to provide in my novel collapsible container; reinforcing blanks for aiding in holding the end and side walls to each other; novel edge reinforcing members.

There are other objects of my invention which together with the foregoing will appear in the detailed description of the drawing which is to follow in which:

Figure 1 is a blank or development made from a sheet of material and adapted to be formed into a container or file drawer, and an auxiliary outside bottom and side wall piece upon which said blank is superimposed, for securing the sides and tongues of the drawer together.

Figure 2 illustrates a form of an insert adapted to carry a handle and be used in connection with a drawer, the blank of which is shown in Figure 1.

Figure 3 is a perspective view of a drawer formed from the blank and auxiliary piece like those shown in Figure 1, on which stiffening channels are either adhesively or otherwise secured to the side walls, tongues and auxiliary outside sheet as a means of uniting same.

Figure 4 is a perspective view of one of the channels shown in Figure 3.

Figure 5 is a perspective view similar to that shown in Figure 4, in which a pad, lining or 30 filler, having an adhesive surface is mounted in the channel to adhesively join the same to the upper edge of the wall when it is moistened and placed in position thereon.

Figure 6 is an enlarged cross sectional elevation along the plane 6—6 of Figure 3.

Figure 7 is a fragmentary perspective of a drawer formed from a blank and auxiliary piece like those shown in Figure 1.

Referring now to the drawing described above, and particularly to Figure 1 thereof, wherein I illustrate a blank from which a container of the class described may be constructed from a sheet of suitable material, it will be understood that the material is first cut, scored, stamped or blanked out in any suitable manner, the scoring being indicated at lines 1, 2, 3 and 4. The blanking and creasing operations form the material into areas or sections which for want of better names, I shall describe as bottom, front wall 6, rear wall 7, side walls 8 and tongues 9, because these parts of the blank are adapted to form such parts of a drawer or container when properly set up and secured in the manner to be hereinafter described.

The tongues 9 of the blank are separated from

the side walls 8 by notches or slots 10 and 11 of any width or shape suitable to permit the bottom edges 12 thereof to be positioned in the plane of the bottom 5 when the blank is folded to form a finished container. The front wall 6 is provided with a hole 33 of sufficient size and shape that a handle mounted on a separate pad on the inner face of the front wall, in a manner to be described, will be accessible from the front of the drawer.

I provide also what I shall describe as an outside auxiliary bottom and side wall piece 13. The piece 13 is shown lying under the blank which I shall indicate generally by the numeral 14, and has an outline indicated by the lines 15, 16, 17 and the creases 3 and 4 of the blank 9. In a word, the auxiliary bottom and side wall piece 13 is adapted to fold around the drawer. As shown in the drawing, each of the flaps 18 on the auxiliary member 13 may be provided with the adhesive strips 19.

Figure 2 shows the manner in which a handle may be supported on separate piece and used in the construction of a drawer of the class described. In this figure is shown a blank 20 formed and constructed from a sheet of suitable material. It will be understood that the material is first cut, scored, stamped or blanked out in any suitable manner, the scoring being indicated at lines 21. The blanking and creasing operations form the material into areas which I shall describe as front wall 22 and tongues 23.

The front wall 22 of the handle piece is substantially the same size as the front wall of the casing 6, and is adapted to be mounted within the casing in face to face relationship with the front wall 6 of the casing. The handle 25 is mounted on the front wall 22 of the handle piece 20 by any suitable means such as the handle plate 24. The handle plate 25 and the handle 23 are so positioned on wall 22, that when wall 22 is placed in its proper relationship to the wall 6 of the casing, the plate 25 and the handle 23 will lie within the hole 33 provided for that purpose in the front face 6 of the casing. Both the handle plate 24 and the handle 23 are preferably of such thickness that they will lie within the thickness of the material of front wall 6, when the handle is lying against and in a plane substantially parallel to the handle piece.

I prefer that the handle piece 20 be shipped attached to the main blank 14, and it may be so attached by any suitable means, the front face of the front wall 22 of the handle piece being secured to the rear face of the front wall 6 of the blank 14. In this position, the score lines 1 and 2 of the main blank. Also, the tongues 23 of the handle piece lie superimposed upon the tongues 9 of the front wall of the main blank. The handle 23 and handle plate 25 thus lie within the hole 33.

In assembling the casing, the front wall member 6 and the rear wall member 7, with their adjoining tongues 9 are bent perpendicular to the bottom member 5 along the score lines 3 and 4 respectively. The handle piece 20 is raised at right angles to the bottom member 5 along with the front wall 6. The side wall members 8 are then folded up on the score lines 1 and 2 until the side wall panels are perpendicular to the bottom panel 5. The tongues 9 on the front and back wall and the tongues 23 on the handle piece are then folded back against their respective side wall members.

As shown in Figure 7, the piece 13 is adapted to be wrapped around the bottom and sides of the drawer and secured by means of adhesive strips 19 to the inside of the drawer wall and afford an auxiliary bottom 26 and auxiliary sides 27.

In Figure 3, I illustrate a drawer similar to that shown in Figure 7, in which channel strips 28, made of metal or other suitable material and formed to have a U-shaped cross section, see Figure 4, are pressed over the auxiliary piece above described, to hold the piece snugly in contact with the sides 8 and the tongues 9 of the drawer shown, and of the tongues 23 of the handle piece; and to consolidate the laminations formed by the wall 8, tongue 9, and auxiliary piece 13.

In Figure 5, I have shown a modified form of channel strip 28, in which the edges of the strips are turned inwardly as shown at 29, to clamp a piece of paper or cardboard pad or filler 30 extending longitudinally thereof and having adhesive 31 applied to the surface thereof, which when moistened will stick the channel strip to the side wall in the position shown.

From the above description, it will be seen that a drawer like that shown, made from the blank shown in Figure 1, comprises a front wall 6, adapted to be subjected to transverse strains in being pushed into and out of a suitable container and that said wall is supported by and secured to side walls 8 of the drawer by tongues 9 adapted to be suitably fastened to the side walls to transmit said strains to the said walls in the form of tensile strains when the drawer is pulled open; and compressing strains when said drawer is pushed closed.

Although I have herein illustrated a particular application of my invention, it will be understood by those skilled in the art, that it may take other forms, and I do not intend to be limited thereby except as set forth in the appended claims.

I claim:

1. In a container having side walls; an end wall; tongues extending from said end wall; auxiliary side walls, said auxiliary side walls having extensions overlapping said tongues; and clips engaging the flange formed by the edges of the side wall and auxiliary side walls with the tongue and securing said side walls and tongues to each other.
2. In a collapsible container; an end wall; side walls; tongues extending from said end wall and engaging said side wall; and an auxiliary outside bottom and side wall piece upon which the blank of the container is superimposed, said auxiliary piece having an extension for securing the sides and tongues of the drawer together.
3. A support for a handle for a collapsible container having a front wall; side walls; a perforation in said front wall; said support comprising a blank; a handle secured thereto in position to cooperate with said perforation when said blank is placed against said front wall; and tongues extending from said blank and adapted to be secured to said side walls.
4. A support for a handle for a collapsible container having a front wall; side walls; a perforation in said front wall; said support comprising a blank; a handle on said blank in position to cooperate with said perforation when said blank is placed against said front wall; and tongues extending from said blank and adapted to be secured to said side walls.
5. In a collapsible container; end walls; a member mounted in face-to-face relation with one of said end walls; tongues extending from

said member; a handle secured to said member and accessible through one of said end walls through openings therein, said tongues being secured to said side walls; side wall edge reinforcements extending along the upper edge of said side walls; and means engaged by said reinforcements for securing said side and end walls in assembled position.

6. In a collapsible container having a perforated end wall and side walls; a member; tongues extending from said member; a handle secured to said member, said member being mountable in face-to-face relation with said end wall with the handle accessible from the front of said end wall through said perforations and said tongues being securable to said side walls.

7. In a collapsible container; end walls; a member mounted in face-to-face relation with one of said end walls; a handle secured to said member and accessible through one of said end walls through openings therein; metallic channel-shaped side wall edge reinforcements extending along the upper edge of said side walls; and tongues extending from said end walls and engaged by said channel-shaped reinforcements for holding said end and side walls in upright assembled relation.

8. In a collapsible container, an end wall, side wall; tongues extending from said end wall and engaging said side wall; an auxiliary outside bottom and side wall piece upon which the blank of the container is superimposed, said auxiliary piece having an extension for securing the sides and the tongues of the container together; and means for securing said extension of said auxiliary piece in a predetermined position relative to said side wall.

9. In a collapsible container, an end wall, side wall; tongues extending from said end wall and engaging said side wall; an auxiliary outside bottom and side wall piece upon which the blank of the container is superimposed, said auxiliary piece having an extension for securing the sides and the tongues of the container together; and means for securing said extension of said auxiliary piece in a predetermined position relative to said side wall said means comprising adhesive strips affixed to both said auxiliary piece and said side wall.

10. In a collapsible container, an end wall, side wall; tongues extending from said end wall and engaging said side wall; an auxiliary outside bottom and side wall piece upon which the blank of the container is superimposed, said auxiliary piece having an extension for securing the sides and the tongues of the container together; and means for securing said extension of said

auxiliary piece in a predetermined position relative to said side wall said means comprising a channel at the top of the side wall enclosing a portion of said side wall and of said auxiliary piece.

11. In a collapsible container, an end wall, side wall; tongues extending from said end wall and engaging said side wall; an auxiliary outside bottom and side wall piece upon which the blank of the container is superimposed, said auxiliary piece having an extension for securing the sides and the tongues of the container together; and means for securing said extension of said auxiliary piece in a predetermined position relative to said side wall said means comprising a channel enclosing the folded over portion of said auxiliary piece, said channel being provided with a filler having an adhesive surface.

12. A support for a handle for a collapsible container having a front wall; side walls; a perforation in said front wall; said support comprising a blank; a handle secured thereto in position to cooperate with said perforation when said blank is placed against said front wall; said support having tongues adapted to be secured to said side walls; and being adapted to be shipped attached to the main blank of the container and to be erected therewith.

13. In a collapsible container; an end wall; side walls; tongues extending from said end wall and adapted to lie in face to face relation with said side walls; an auxiliary bottom and side wall piece upon which the blank of the container is superimposed, said auxiliary piece being an extension for securing the side and the tongues of the drawer together.

14. In a collapsible container comprising walls and tongues, a U shaped member binding such walls and tongues together to hold the container in formed position; the legs of said U shaped member being turned in and holding in position a filler with adhesive surface.

15. A U shaped member having legs; the end of a leg turned in and holding in a position a filler with adhesive surface; the said U shaped member being mounted over an edge formed by a plurality of substantially flat members and binding such members together at such edge.

16. A U shaped member having legs; the end of a leg turned in and holding in position a filler with adhesive surface; the said U shaped member being mounted over an edge associated with substantially flat surfaces; the said adhesive surface binding the leg of the U shaped member to such substantially flat surface and holding the U shaped member in position against said edge.

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