Nov. 1, 1938. P. ZALKIND 2,135,021

HANDLE FOR DRAWERS

Original Filed Sept. 3, 1932

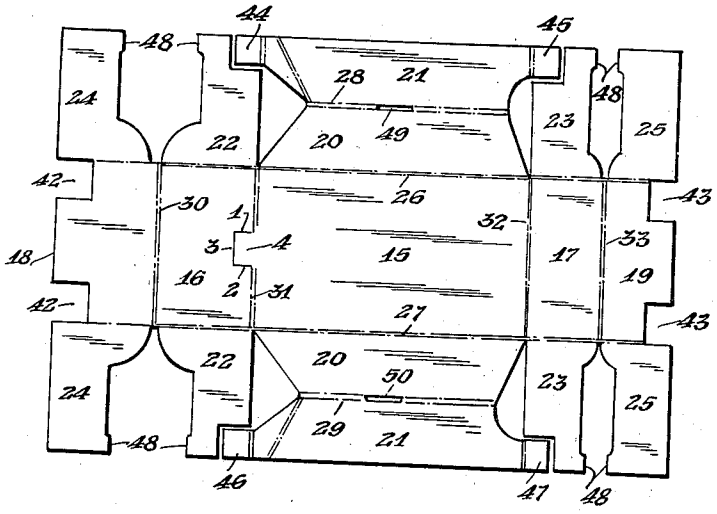


Fig: 1

Fig: 2

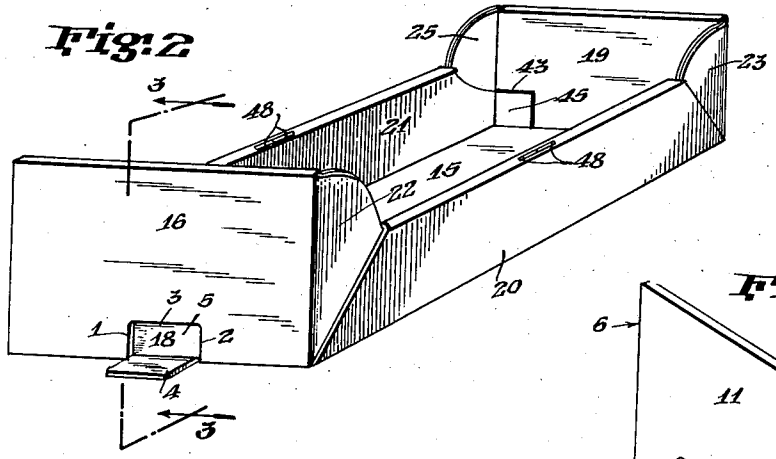


Fig: 4

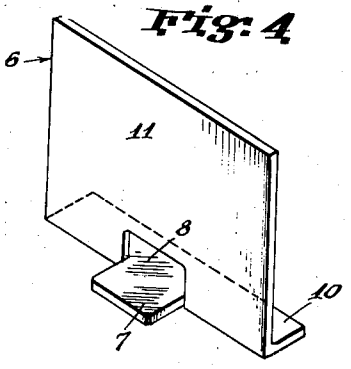


Fig: 3

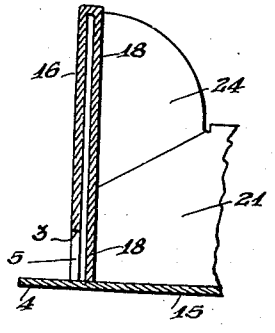
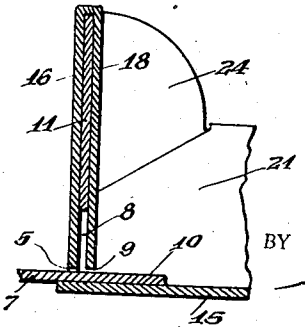


Fig: 5



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HANDLE FOR DRAWERS

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Original application October 10, 1933, Serial No. 692,937, which in turn is a division of Serial No. 631,682, September 3, 1932. Divided and this application December 3, 1935, Serial No. 52,731

3 Claims. (Cl. 229—52)

My invention 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.

My invention is a division of S. N. 692,937 filed October 10, 1933, which in turn is a division of S. N. 631,682 filed September 3, 1932.

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 and 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 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" 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 formation for 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, further objects of my invention are to provide a handle secured to an integral extension of the front wall bent on a scored line to lie behind the front wall; and a handle mounted on a separate reinforced sheet of material adapted to be placed in face to face relation with the front wall of a collapsible container made of sheet material suitably scored to be assembled into the form of the container.

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 means in a casing for transferring the shear along the vertical edges of the container to the side walls; bracket arrangements for connecting the front and side walls; and tongues integral with the front wall and suitably secured to the side walls, as by extending the tongues between an outer and inner integral side wall.

Other objects of my invention will be apparent from the following description taken together with the drawing in which

Figure 1 shows a blank or development made from a sheet of material adapted to be formed into a container or file drawer in which the front, back, and side walls are formed of a plurality of thicknesses of material and which without the use of fasteners, is provided with a handle produced by bending the sheet material upon a score line.

Figure 2 is a perspective view of a drawer formed from the blank shown in Figure 1.

Figure 3 is a fragmentary sectional view on the plane 3—3 of Figure 2, showing the form of construction for the front wall and handle or pull of the drawer.

Figure 4 is a view in perspective of a wall piece having a tab adapted to serve as means for pulling the drawer open.

Figure 5 is a fragmentary sectional view similar to Figure 3, except that a wall piece as shown in Figure 4 is incorporated in the front wall.

Referring now to Figure 1, it will be seen that I illustrate one type of drawer or container blank formed as by cutting, scoring or stamping from suitable sheet material, such as corrugated board, container board, box board, and the like. The blank consists of a bottom 15, a front wall 16, rear wall 17, a front wall extension 18, a rear wall extension 19, side walls 20, side wall extensions 21, front wall tongues 22, rear wall tongues 23, auxiliary front and rear wall tongues 24 and 25 formed by the blank outlined and scores 26, 27, 28, 29, 30, 31, 32, and 33.

It will be noted that the score line 31 between the bottom 15 and the front 16 does not extend across the entire blank but is discontinuous in the center of the blank, the two halves being connected by the slots 1, 2, and 3 extending through the blank and outlining the tab 4. As is clearly shown in Figures 2 and 3, the tab 4 will lie in the plane of the bottom member 15 and project be-

yond the front 16 of the drawer leaving the slot 5 in the drawer front, backed up by the front wall extension 18 when the auxiliary wall 18 and the tongues 24 connected thereto are folded about scores 30 and caused to line on the wall 16 and tongues 22, and when the front wall 16 is folded at right angles to bottom member 15.

It will be understood that the front and rear wall extension and tongues 18, 19, 24 and 25 may be adhesively secured, respectively, to the portions 16, 17, 22 and 23. Rectangular portions 42 are cut out of the auxiliary front wall 18, and will occupy a position shown on wall 16 when folded as described. Rectangular portions 43 are cut out of the wall 19 and when said wall and tongues 25 are folded upon the scores 33, said portions will occupy a position on the wall 17. Tabs 44 and 45 cut from the tongues 22 and 23, are formed on the side wall extension 21 respectively. The tabs 44 and 45 are adapted to fit into the corresponding openings 42 and 43 respectively, when the container is set up in order to securely hold the parts thereof in position. Similarly, tabs 46 and 47 formed at the ends of the side wall extension 21 are adapted to fit in the openings 42 and 43 at the other side of the blank. The tabs 44 and 46 may be made of a distinctive shape and the openings 42 similarly shaped to serve as an aid in indicating to the consumer the manner in which the blank is to be folded and assembled. Also the tabs 45, 47 and notches 43 may be given still another shape for a similar purpose. Near the ends of each of the tongues, ears 48 are formed which are adapted to be juxtapositioned in pairs, and enter perforations 49 or 50 in the scores 28 and 29, respectively, when the container is folded.

In Figure 2 I show a perspective view of a drawer formed from a blank, like that shown in Figure 1, and the manner in which the side wall extension 21 is folded into the drawer to lock the lugs 48 in position. This view also shows the manner in which the side wall extension is locked in position by the tab 45 in the opening 43 formed in the rear wall extension 19. It will be understood that the corresponding parts at each corner of the drawer are similarly assembled and that when the drawer is finally set up, the surface of the tab 45 and rear wall extension 19 lie in the same place, making a smooth interior surface for the drawer. This view also shows the manner in which the tab 4 extends in front of the drawer to act as a handle for pulling the drawer from a casing.

Figure 3 shows a section of the front wall having the tab 4 cut from front wall 18 along the lines 1, 2, and 3 in Figure 1 and caused to project from the container in the plane of the bottom 15 when the front wall 18 is bent normal thereto. This construction is less costly than that of providing a separate handle.

It will be noted that by making the slits 1 and 2 relatively short, that is of the order of the thickness of the sheet material, the slot 5 thus produced is of the same order of thickness as the material and thus provides an opening through which a tab may be inserted from the rear of the front wall 16. Such a tab will extend through the slot and be accessible from the front of the drawer. This construction will now be described in further detail.

In Figure 5, I show the tab or drawer pull construction used in a three-ply front wall. In this case the slot 5 is formed in the blank through which a tab 7, formed on an auxiliary wall piece 6, see Figure 4, may project. The tab 7 is formed from the material of face 11 of the wall piece 6, leaving the opening 8 in the face 11. The tab 7 is adapted to lie in the same plane as a flange 10 also formed on the bottom of the piece 6. Figure 5 shows the opening 8 formed when the tab 7 is turned outwardly and also shows the position occupied by the tab 7 and flange 10 above described. It will be understood that the flange 10 may be secured adhesively or otherwise to the bottom 15 of the box. Moreover, it will be understood that the front wall extension 18 may be somewhat shorter than the front wall 16 in order to provide the space 9 between the bottom edge of the front wall extension 18 and the bottom 15 to accommodate the flange 10.

It is obvious that many modifications may be made in my invention within the scope and meaning of the appended claims, and I do not limit my invention to the particular form described, which is shown by way of illustration only. Now having described my invention in a manner that it may be readily understood by one skilled in the art,

I claim:

1. In a container, a front wall; side walls; and a bottom wall; said front wall comprising an inner and outer face; said outer face being an integral extension from said bottom wall; said inner face being an integral extension from said inner face; and a tab cut from said outer face beginning at the junction between said outer face and bottom wall, and extending only partly up the height of said outer face to maintain the upper portion of said outer face intact, said tab being integral with said bottom wall and protruding through the opening in said outer face formed by the cut-away tab.

2. In a container, a front wall; side walls; and a bottom wall; said front wall comprising an inner and outer face; said outer face being an integral extension from said bottom wall; said inner face being an integral extension from said inner face; a slot cut from said outer face beginning at the junction between said outer face and said bottom wall and extending partly up the height of said outer face to maintain the upper portion of said outer face intact; and a handle comprising a tab lying in a plane parallel to said bottom wall and protruding through the slot in said outer face.

3. In a container, a front wall; side walls; and a bottom wall; said front wall comprising an inner and outer face; said outer face being an integral extension from said bottom wall; said inner face being an integral extension from said inner face; a slot cut from said outer face beginning at the junction between said outer face and said bottom wall and extending partly up the height of said outer face to maintain the upper portion of said outer face intact; and a handle comprising a tab lying in a plane parallel to said bottom wall and protruding through the slot in said outer face, said tab being an integral extension of said bottom wall and including material cut from said outer face to form said slot therein.

PHILIP ZALKIND.