Oct. 11, 1938. E. E. MOHLER 2,132,638

DOUBLE WALL HANDLE BASKET

Filed July 11, 1936 2 Sheets-Sheet 1

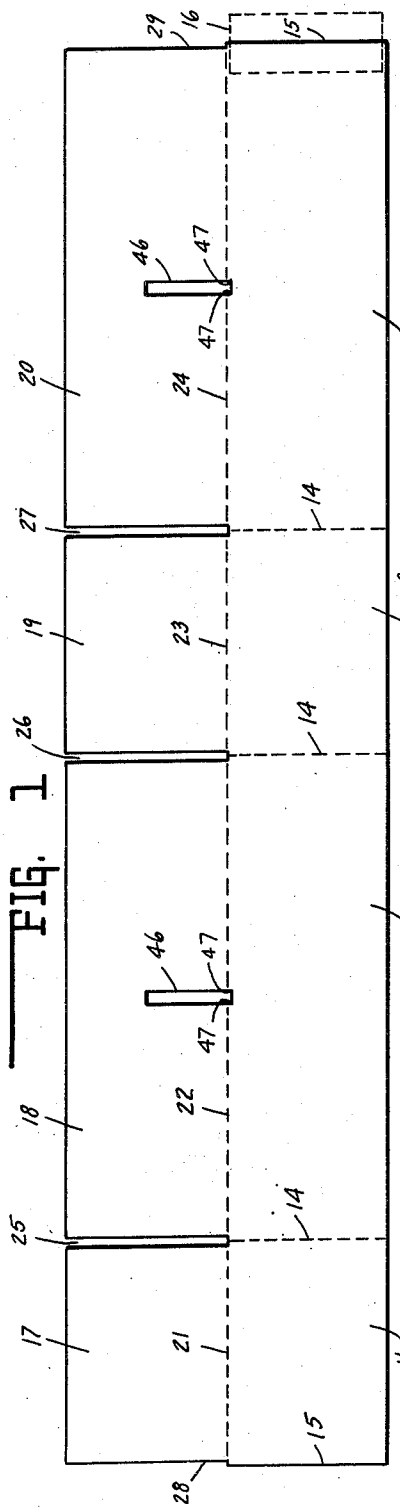


FIG. 1

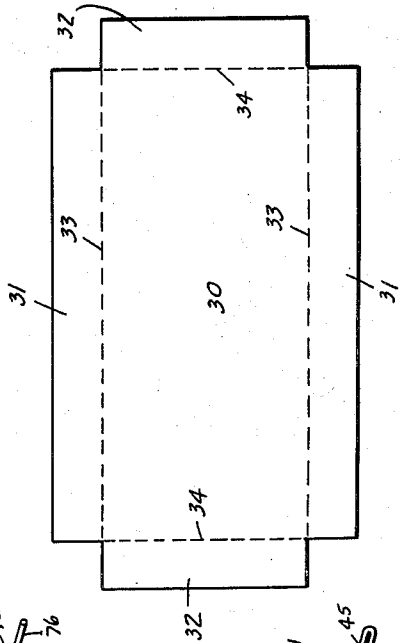


FIG. 2

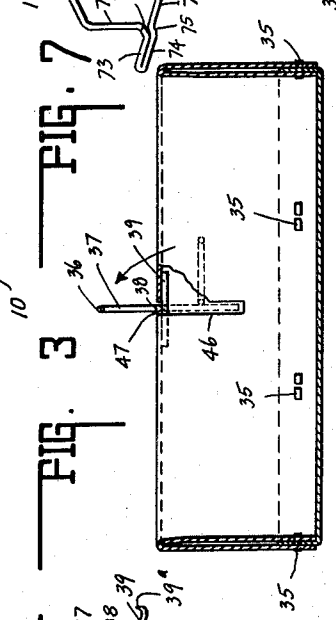


FIG. 3

FIG. 7

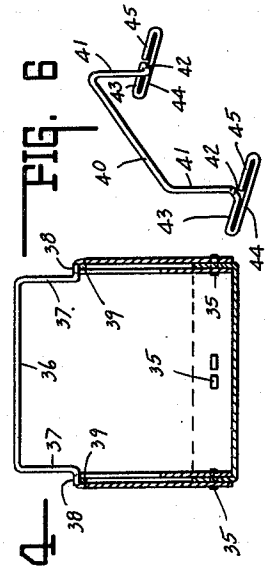


FIG. 6

FIG. 4

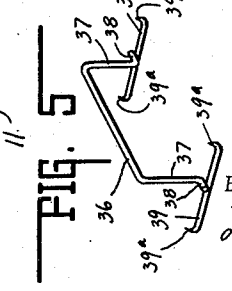


FIG. 5

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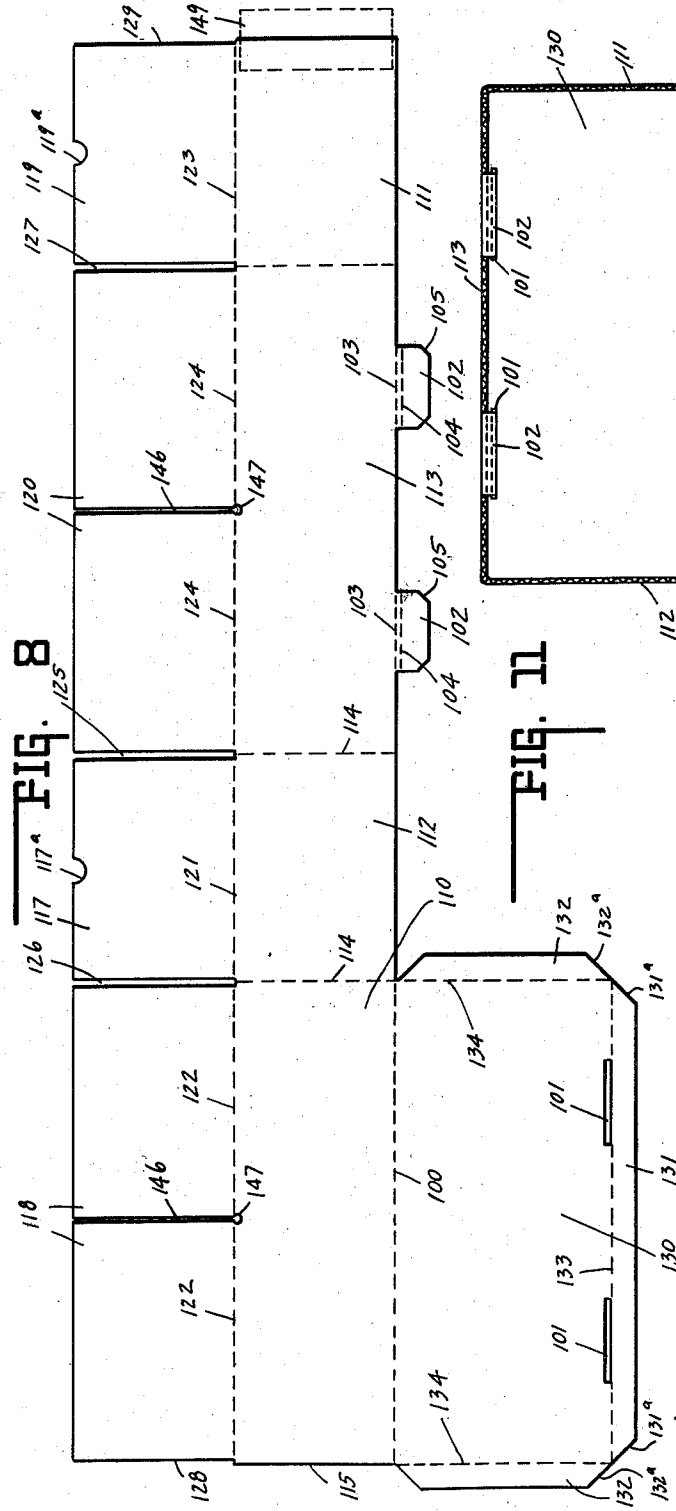


FIG. 8

FIG. 11

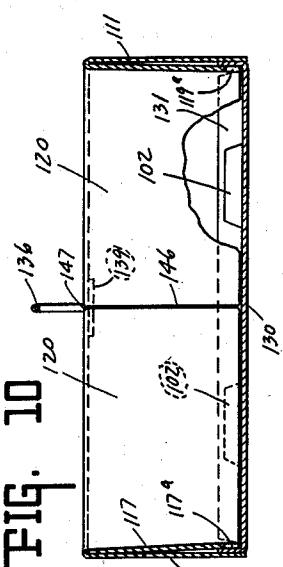


FIG. 10

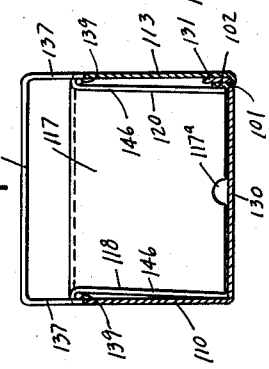


FIG. 9

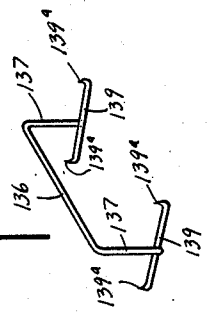


FIG. 12

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UNITED STATES PATENT OFFICE

2,132,638

DOUBLE WALL HANDLE BASKET

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Application July 11, 1936, Serial No. 90,114

15 Claims. (Cl. 229—16)

This invention relates to a handled basket structure wherein the handle is anchored to the container portion of the basket by means of an interlocking connection which does not require stapling, stitching, or the like, as has heretofore been the common practice.

This invention also relates to a container structure, wherein the walls other than the bottom are of dual character and the bottom is of single character.

The chief object of the invention is to produce a basket directed to both phases of the invention, as hereinbefore set forth.

One feature of the invention consists in the single bottom being telescopically associated with the dual peripheral wall structure, the inner and outer sides of which are suitably secured together and such relationship providing a space therebetween, permitting ready mounting of a handle thereto and which handle is of wire formation having T-type ends.

The full nature of the invention will be understood from the accompanying drawings and the following claims and description:

In the drawings, Fig. 1 is a plan view of the developed blank of the dual wall structure.

Fig. 2 is a plan view of the developed bottom-forming blank.

Fig. 3 is a longitudinal central sectional view of a handled basket embodying the invention, a portion of the inner side wall shown therein being broken away to show the final anchoring position of the handle.

Fig. 4 is a transverse sectional view through the basket in the plane of the handle.

Fig. 5 is a perspective view of one form of handle shown in Figs. 3 and 4.

Fig. 6 is a perspective view of a modified form of handle structure.

Fig. 7 is a perspective view of another modified form of handle structure.

Fig. 8 is a plan view of a one-piece blank providing a structure similar to that illustrated as of two pieces in Figs. 1 and 2.

Fig. 9 is a transverse, central sectional view similar to that illustrated in Fig. 4 and of the modified form of the invention.

Fig. 10 is a longitudinal, sectional view through the modified form of the invention, and is similar to that shown in Fig. 3.

Fig. 11 is a bottom plan view of the basket.

Fig. 12 is a perspective view of a handle similar to that shown in Fig. 5.

In Fig. 1 of the drawings, 10 indicates an exterior side wall portion of the blank, 11 an end portion, 12 a similar end portion and 13 another side portion. These portions are exterior walls and are alternately arranged, end and side, and connected by the score connections 14.

The two edges 15 which herein are shown at the left-hand portion of end wall 11 and the right-hand portion of side wall 13, are suitably secured together by suitable means, such as a tape 16, stapling, gluing or the like.

Integral with end wall 11 is an inner end wall 17. Integral with side wall 10 is an integral inner side wall 18. Integral with exterior end wall 12 is the inner end wall 19. Integral with the exterior side wall 13 is the inner side wall 20. These respective pairs of walls are integral with each other and are hingedly connected together by the scoring or creasing 21—22—23—24, respectively, which constitute a straight crease or score, which may be of single or dual character, as required by the stock utilized.

Portions 17, 18, 19 and 20 are each separated from the adjacent portions by the cut-outs 25, 26 and 27, which extend the full depth of the inner side wall arrangement. The left-hand end of member 17 is relieved as at 28 and the right-hand end of member 20 is relieved as at 29.

The bottom is indicated by the numeral 30 and includes side anchoring flaps or extensions 31 at opposite sides and end anchoring extensions 32, these being respectively connected to the bottom portion 30 with a hinge scoring or crease 33 and 34, respectively.

For a box or container structure without a handle arrangement, the aforesaid constitutes all the parts that are required. Both blanks may be formed from corrugated board which preferably is a board having an intermediate corrugated layer, faced on opposite sides by flat liner board, the same being adhesively secured together. Certain forms of solid fibre board may also be utilized, if, as and when desired, or one blank may be made of one type of board and the other blank of the other type of board.

A suitable number of bottom blanks are packaged and a suitable number of side wall blanks are packaged, it being understood that so far as each of these structures are concerned, they are each cut and creased, as before described, and upon a machine which is common to the paper board industry.

Thus, the side wall blank in folded relation is shipped flat, or knocked-down, to the basket purchaser, such as a fruit or vegetable packer, or the like.

In some instances the manufacturer will "set up" the basket.

The basket purchaser upon receiving the side wall structures in knock-down and the bottom structures in flat relation, turns the portions 31 and 32 at right-angles to the botom 30 so as to form a tray structure. Then the collapsed side wall structure is opened up into rectangular and tubular form and the tray structure is nested therein. Following such nesting, each of the individual, interior side wall members is turned inwardly and downwardly and thus overlaps the adjacent portions 31 and 32, said portions then being nestable between the walls of the dual wall structure. The purchaser of the basket then applies any suitable number of staples, or the like, as indicated at 35, to staple the side walls together in dual relationship and thereby simultaneously anchors the bottom to the side wall structure. The aforesaid constitutes a two-piece container having a single wall bottom and a dual side wall structure.

When a handle basket is desired, see Fig. 5, there is provided a handle having an upper portion 36, two depending portions 37, each of which has an offset portion 38 spot-welded to a transversely positioned anchoring member 39. This is one form of handle structure.

Another form of handle structure is shown in Fig. 6, wherein the overhead portion of the handle is indicated by the numeral 40, the two depending portions therefrom by numeral 41, offset portions by numeral 42 and the anchorage portions, in this instance, are formed integral with the foregoing portions of the handle by the transversely offset portion 43, a parallel portion 44 therebeneath and a parallel portion 45 in alignment with portion 43. Thus, the upper surface of portions 43 and 45 are in alignment and the general direction is transverse to the general direction of the portion 40. Other forms of handle structures may be utilized in lieu hereof.

One such is illustrated in Fig. 7 which is a one-piece structure having hand portion 70, depending portions 71, offset portions 72, the transverse extensions 73, the return portions 74, upwardly offset at 75 and terminating in ends 76 in alignment with portions 73 but oppositely directed.

When it is desired to anchor the handle structure, such as that illustrated in Figs. 5, 6 or 7, one form of anchorage which requires no stapling, stitching, or the like, consists of the following:

The side wall blanks are suitably slotted as at 46 and this extends from the fold between the interior and outer wall downwardly a distance approximately equal to the overall length of the portion 44 in Fig. 6 and the portion 39 in Fig. 5.

The handle structure when the basket has been fabricated, as aforesaid, is then positioned within the basket so that the portions 39 are vertically positioned and are seatable in the slots 46 in the two opposite side walls, see dotted lines in Fig. 3.

In the illustrated form of the invention, the slots are provided in the inside walls of the basket, which slots terminate at the upper edge 24 of the side wall.

Due to the fact that the portions 31 are included between said side walls at the bottom thereof, the inner and outer wall forming members are in relatively spaced relation and readily permit the handle structure to be turned clockwise, as shown dotted in Fig. 3, until the portions 39 lie substantially parallel to the horizontal and then the handle portion is elevated until the upper aligned surfaces of portions 39 engage the inside and bottom surface of the fold.

It will thus be apparent that the edge portion 47, see Figs. 1 and 3, prevents displacement of the handle lengthwise of the basket and due to the fact the dual wall structure at the fold is not spaced as widely apart as at the bottom, a friction anchorage for the handle is provided which normally retains the handle in the elevated position and prevents the handle from dropping downwardly. The transverse portion 39 by engaging along a considerable portion of the fold, provides a relatively elongated bearing, so that the handle stress per unit of bearing area is relatively small.

The ends of the cross member 39, see Fig. 5, may terminate in barbs or spurs 39a for further anchorage when desired. Also, it is to be observed that if the form of the transverse anchor portion of the anchor be changed, the entrance slot or opening should correspond therewith, so that, if the anchor end of the handle be of triangular shape, slot 46 must have a triangular portion to accommodate the nesting of the triangular end for passing the anchorage into position between the immediate adjacent walls.

In certain instances, when desired, the structure herein disclosed, may be utilized as a covered basket, and when such a structure is desired, the cover arrangement, for example such as shown in the Bomberger application, Serial No. 33,097, filed July 28, 1935, now Patent No. 2,057,002, dated Oct. 13,1936, see Fig. 2, would be provided. However, the notches for handle accommodation required herein would not be as wide as therein disclosed, because the form of handle herein disclosed is of lesser width.

In either event, whether a cover be employed or not, when the baskets are not overfilled, the handles may be forcibly lowered and extend immediately across the basket so they may be stacked like boxes, whether covered or uncovered. Such stacking arrangement would normally be employed by the fruit packer who after forming the basket, or container, proper, would mount the handle therein, as previously described but would omit the last elevating step and these baskets then would be stacked, ready for filling. When they were to be filled, the handles of each basket would then be elevated.

A modified form of invention is shown in Figs. 8 to 11, inclusive. In this form any one of the handle structures illustrated in Figs. 5, 6 and 7 may be utilized. This form of the invention is similar to that illustrated in Figs. 1 to 4, inclusive, in that the basket is of dual wall and single bottom type. However, this form of the invention differs therefrom in that the basket is of one piece of stock, see the blank illustrated in Fig. 8, and in place of slots, slits only are utilized or required. In these respects, this form of the invention is similar to the two-piece handled basket structure disclosed in a companion application, entitled, "Handle basket construction", filed June 18, 1936, and bearing Serial No. 86,019.

In Fig. 8 of the drawings, there is illustrated a one-piece blank of somewhat generally similar character to that illustrated in Figs. 1 and 2, representing a two-piece structure. In this form of the invention, numerals of the one hundred series are employed to designate like or similar parts, and the specific description of the same will be omitted, except in pointing out wherein the present disclosure differs from the previous disclosure.

Numeral 149 indicates a taped or equivalent connection.

In this form of the invention, each portion 117 and 119 is recessed or notched as at 117a and 119a for the purpose hereinafter to be described. Also in this form of the invention, in place of slots 46 being provided in the inner side walls 18 and 20 respectively, said inside walls 118 and 120 are slit from top to bottom as at 146 and each slit at the top fold terminates in an opening 147, this permitting the depending portions of the handle to project beyond the basket in handle formation.

In this form of the invention, the bottom 130 instead of being separate like bottom 30, see Fig. 2, is integral with one of the sides, and herein side 110, and is scoringly connected thereto as at 100. Also in this form of the invention, the bottom flaps 131 and 132 are provided with tapered side edges 131a and 132a.

Also in this form of the invention, the scoring 133 between the bottom 130 and flap 131 is interrupted and there are provided the slots 101. Integral with the other side wall and herein side wall 113, are a corresponding number of tongues and spaced relative to each other corresponding to the spacing between the slots 101. Said tongues 102 have a creased or scored connection 103 with the side wall 113 and have an intermediate scoring 104 therein. The side edges are angled or biased as at 105.

Whenever it is desired to have a one-piece basket proper and utilize stapling, the slots 101 and tongues 102 may be omitted and then the stapling will be applied to the two end walls and the side 113 to lock the bottom to the side walls and in nested relation.

There is a decided advantage, however, incident to the utilization of the single blank in that such utilization permits the elimination of all stapling and this is by reason of the interlocking relationship between the tongues and slits, last mentioned.

Just as previously described, the blank is shipped in the flat or knock-down, and the purchaser positions the side and end walls in tubular relation, then inserts inwardly the flaps on the bottom and nests these flaps within the tubular wall arrangement. Then the tongues 102 are tucked into the slots 101 and project inwardly and upwardly into the container resulting therefrom. With all the inner walls extending upwardly, the handle is positioned as shown in Figs. 9 and 10, and then the two portions of each side wall are turned inwardly and downwardly with the depending portions 37—for example, on the handle shown in Fig. 5 or more especially, the offset portion 38, being seated in the openings 147. The flaps 120 thus with the wall portion 113 nestingly receive not only the tongues 102 but the bottom extension 131. Then the two end wall extensions 117 and 119 are turned inwardly and downwardly, which locks the basket structure in basket-forming relation with the handle in proper position. The two notches or cutouts 117a and 119a are to facilitate subsequent elevation of the inner end wall locking portions whenever it is desired to collapse the structure.

Many of the claims hereinafter set forth are directed to the specific form of this invention and certain claims in the copending application referred to are of a dominating character relative to this specific form of the invention, such claims being directed primarily to the two-piece basket structure, irrespective of the specific formation thereof.

In Fig. 12 a handle structure is illustrated similar to that shown in Fig. 5 and bearing numerals similar to those applied to similar parts shown in Fig. 5. This form of the invention, however, differs from that illustrated in Figs. 5 to 7, inclusive, in that the offset portions between the depending portions is omitted, the same not being necessary. Also in this form of the invention, the barbs 139a may be provided, if, as and when desired.

While the invention has been described in great detail in the foregoing specification, and the description and illustrations thereof are in great detail, such description and illustrations are to be considered as illustrative and not restrictive in character and the various modifications suggested, illustrated and/or described herein and others which will readily suggest themselves to persons skilled in this art, are all considered to be within the broad scope of this invention, reference being had to the appended claims.

The invention claimed is:

1. In a handled container structure, the combination of a container having dual side and end walls having a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, and means securing the side portions and side walls together, the side portions of the bottom spacing apart the adjacent walls of the dual wall structure, and a substantially U-shaped handle having substantially parallel extensions at each end forming cross-bars, the smooth upper edges of a pair of opposite walls each including an aperture for handle accommodation, each aperture including a handle mounting extension of the recess in the inner wall, the cross-bars being receivable by the space between the apertured wall portions.

2. In a handled container structure, the combination of a container having dual side and end walls having a folded top connection providing a smooth upper edge, a tray type bottom having side portions substantially coextensive with the dual walls and nestable between the inner and outer walls near the bottom thereof, and means anchoring the side portions and inner and outer walls together, the side portions of the bottom spacing apart the adjacent walls of the dual wall structure, and a substantially U-shaped handle having substantially parallel extensions at each end forming cross-bars, the smooth upper edges of a pair of opposite walls each including an aperture for handle accommodation, each aperture including a handle mounting extension of the recess in the inner wall, the crossbars being receivable by the space between the apertured wall portions.

3. A handle for a basket including a hand-engaging portion, a pair of spaced leg portions depending therefrom, and transverse bearing and locking portions for each leg and projecting oppositely therefrom and in alignment and in a plane transverse to the plane of the hand portion and legs, said leg portions terminating in an offset portion directly secured to the transverse bearing and locking portions substantially as and for the purpose described.

4. A device as defined by claim 3, characterized by the addition of barb means on the termination of each locking portion.

5. In a container structure, the combination

of dual side and end connected walls having a folded top connection providing a smooth upper edge, a bottom integral with one wall at one edge and including side portions on the other edges and nestable between the inner and outer walls near the bottom thereof, and tongue and slot connecting means between another container wall and the bottom remote from the integral connection thereof, the tongue means being nestable between the inner and outer walls of the dual wall arrangement.

6. A handle for a basket including a hand-engaging portion, a pair of spaced leg portions depending therefrom, and transverse bearing and locking portions for each leg and projecting oppositely therefrom and in alignment and in a plane transverse to the plane of the hand portion and leg, and barb means on the termination of each locking portion.

7. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connections.

8. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, each wall of a pair of opposite dual walls having a portion thereof provided with an elongated receiving slit or slot of a length sufficient for reception of aligned handle extensions.

9. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, said inner surfaces of each anchoring wall structure adjacent the fold frictionally engaging the side surfaces of the aligned extensions of the handle therebetween for maintaining the handle in uppermost and handle-forming position.

10. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, each wall of a pair of opposite dual walls having a portion thereof provided with an elongated receiving slit or slot of a length sufficient for reception of handle extensions, said inner surfaces of each anchoring wall structure adjacent the fold frictionally engaging the side surfaces of the aligned extensions of the handle therebetween for maintaining the handle in uppermost and handle-forming position.

11. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, each wall of a pair of opposite dual walls having a portion thereof provided with an elongated receiving slit or slot of a length sufficient for reception of handle extensions, said handle being movable downwardly in the slit or slot for telescopic nesting, if, as and when desired, substantially as described, and when nested the midportion of the U-shaped portion of the handle extends across the container structure immediately adjacent the plane of the foldable top connection.

12. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, said inner surfaces of each anchoring wall structure adjacent the fold frictionally engaging the side surfaces of the aligned extensions of the handle therebetween for maintaining the handle in uppermost and handle-forming position, each wall of a pair of opposite dual walls having a portion thereof provided with an elongated receiving slit or slot of a length sufficient for reception of aligned handle extensions, said handle being movable downwardly in the slit or slot for telescopic nesting, if, as and when desired, substantially as described, and when nested the midportion of the U-shaped portion of the handle extends across the container structure immediately adjacent the plane of the foldable top connection.

13. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, said inner surfaces of each anchoring wall structure adjacent the fold frictionally engaging the side surfaces of the aligned extensions of the handle therebetween for maintaining the handle in uppermost and handle-forming position, the anchoring wall having therein a handle-receiving slot portion with its handle-receiving entrance at a distance from the fold, the side portions of the bottom spacing apart the adjacent walls of the dual wall structure for facilitating ready insertion of the oppositely directed handle extensions between the adjacent walls.

14. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, said inner surfaces of each anchoring wall structure adjacent the fold frictionally engaging the side surfaces of the aligned extensions of the handle therebetween for maintaining the handle in uppermost and handle-forming position, the anchoring wall having therein a handle-receiving slot portion with its handle-receiving entrance at a distance from the fold, the side portions of the bottom spacing apart the adjacent walls of the dual wall structure for facilitating ready insertion of the oppositely directed handle extensions between the adjacent walls, the handle requiring tilting and elevational movement to position the oppositely directed portions thereof horizontally and in contact with the inner surface of the fold.

15. In a handled container, the combination of a container having connected dual side and end walls with a folded top connection providing a smooth upper edge, a bottom having side portions nestable between the inner and outer walls near the bottom thereof, means securing a side portion of the bottom and the adjacent wall together for bottom and wall connection, and a handle structure having a substantially U-shaped hand-engageable portion projecting above the container, each end of the handle portion having aligned oppositely directed extensions, the upper surface of the aligned extensions bearing upon the inner and lower surface of the fold connection, said inner surfaces of each anchoring wall structure adjacent the fold frictionally engaging the side surfaces of the aligned extensions of the handle therebetween for maintaining the handle in uppermost and handle-forming position, the anchoring wall having therein a handle-receiving slot portion with its handle-receiving entrance at a distance from the fold, the side portions of the bottom spacing apart the adjacent walls of the dual wall structure for facilitating ready insertion of the oppositely directed handle extensions between the adjacent walls, the handle requiring elevational movement to position the extension thereof in contact with the inner surface of the fold.

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