

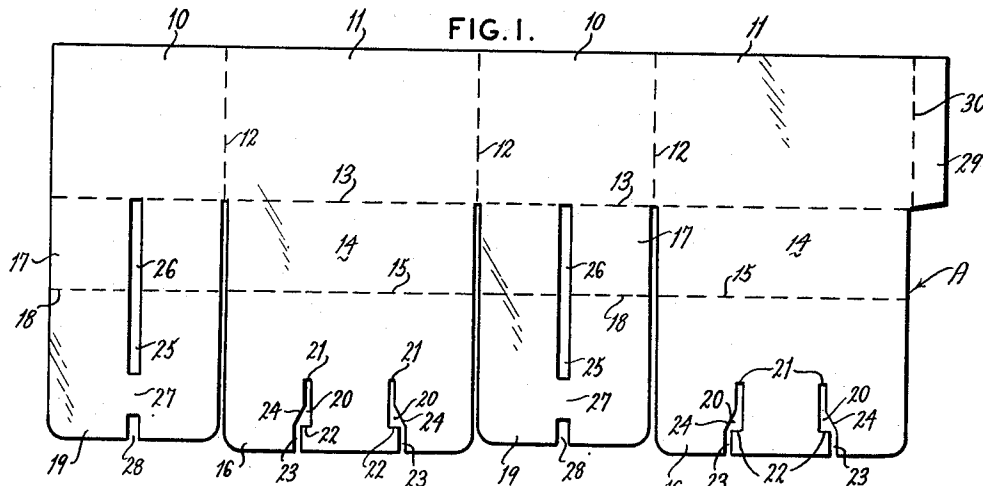
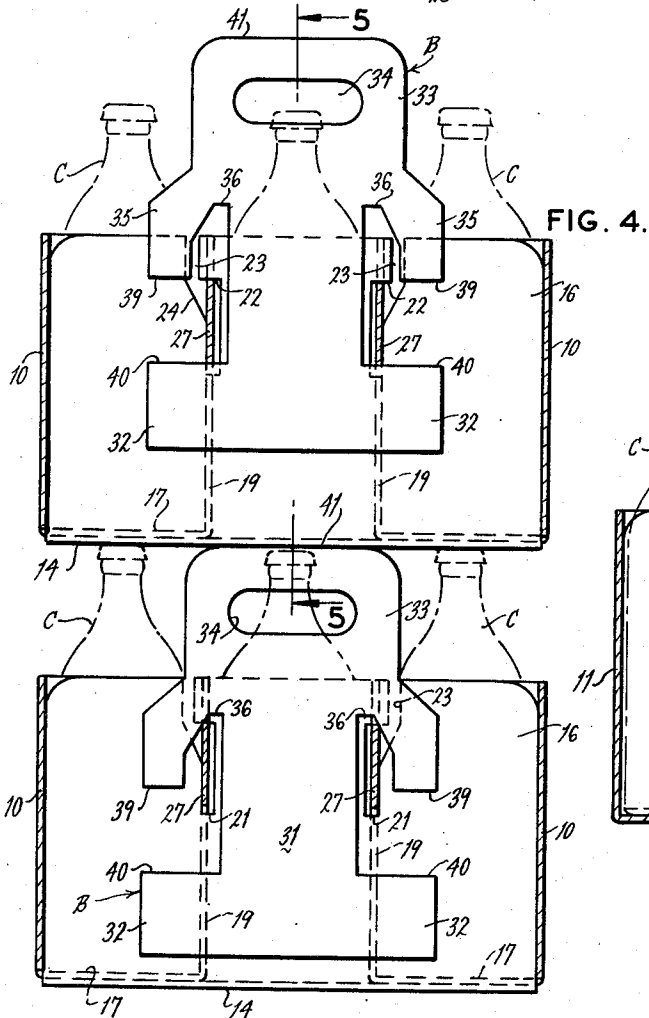
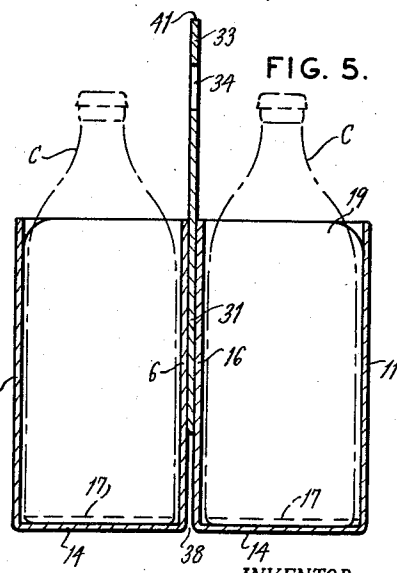
Sept. 24, 1957

H. H. STRAUSS
CONTAINER AND A HANDLE

2,807,389

Filed Oct. 7, 1953

2 Sheets-Sheet 1



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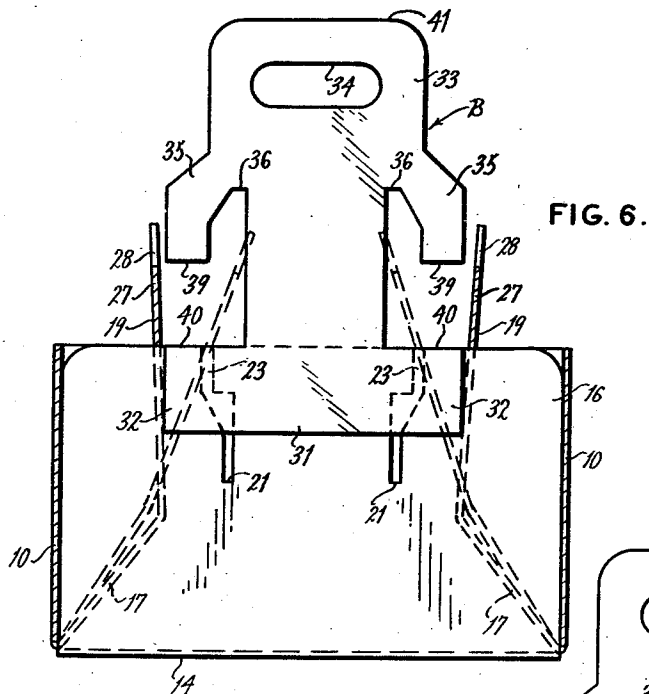
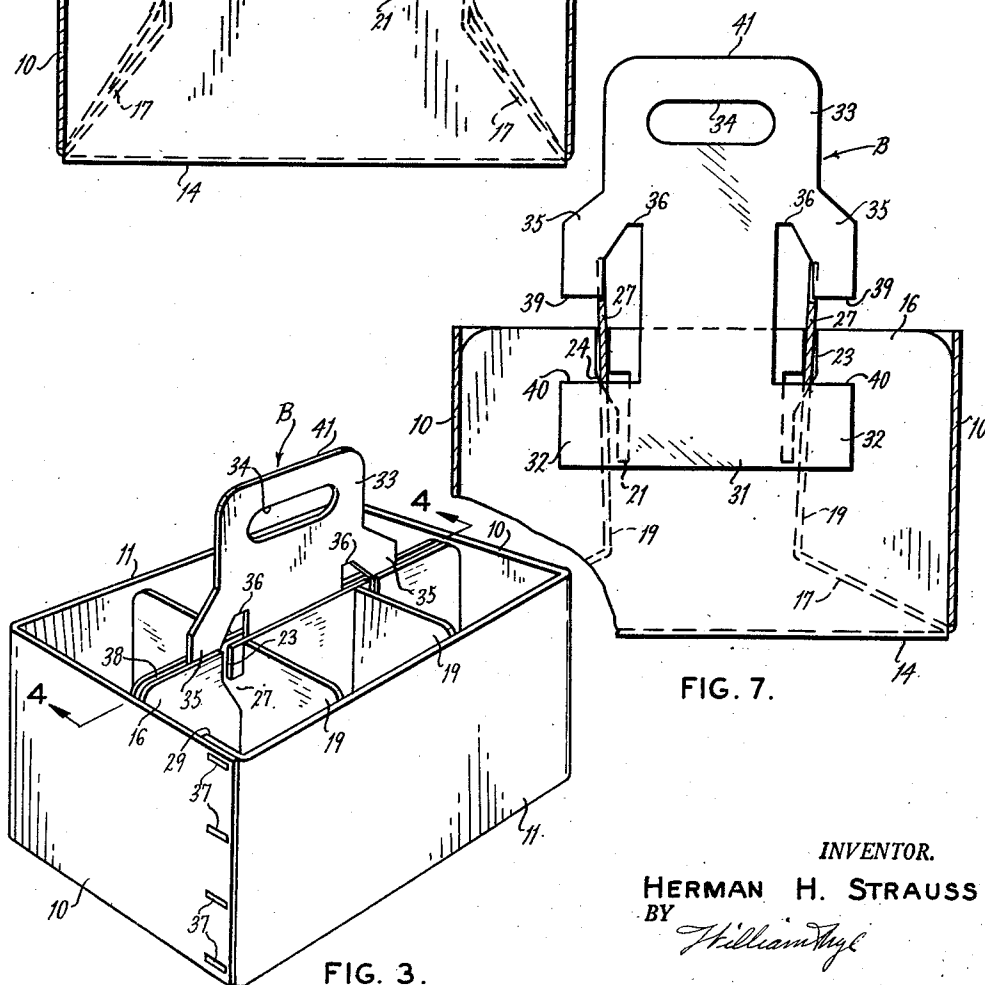
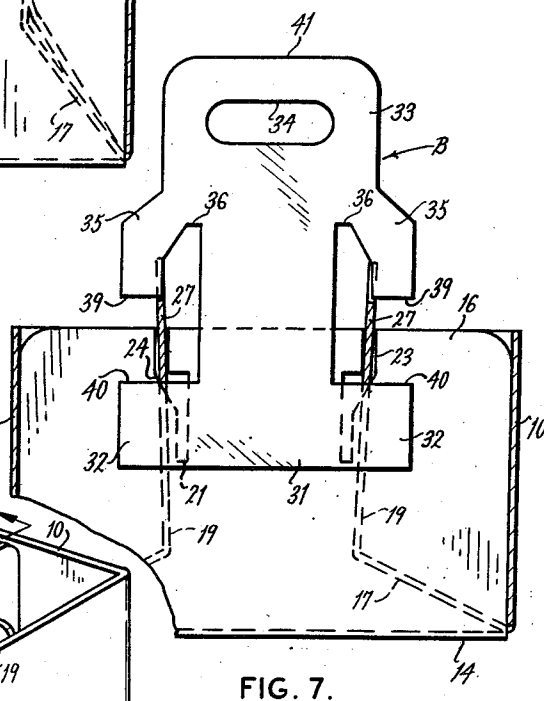
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2 Sheets-Sheet 2



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2,807,389

CONTAINER AND A HANDLE

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6 Claims. (Cl. 220—105)

This invention appertains, in general, to carrying receptacles and in particular to a retractable handled carton for transporting bottled beverages and the like. The carton of this invention may be made out of solid fibreboard, corrugated fibreboard or any other suitable material.

It is customary for purveyors of bottled beverages and similar articles to provide handled containers to facilitate the carrying of a plurality of bottles by customers and users. In most instances, containers are designed to carry six bottles or twelve bottles, however, in some instances, even other size containers are employed. It is highly desirable to stack the containers, fully loaded with bottles, one upon another for both storage and display purposes. In order to provide a sturdy, non-wobbling stack, it is important that the handle or carrying device does not extend above the tops of the bottles or other articles carried. In this way each carrier can be firmly and securely supported on the tops of the bottles on each subjacent carrier. Conversely, it is decidedly easier to grasp the handle of the container if the handle or carrying means extends substantially above the level of the tops of the box. Therefore, it is an object of this invention to provide a carrying carton for bottled beverages and other articles, wherein the handle member of the container may be extended above the level of the tops of the articles carried, and may also be retracted to a position below the level of the articles carried.

It is a further object of this invention to provide a container which may be shipped to the user in knock-down, flatwise relation and may be readily erected and assembled without requiring the use of stitches, staples or other securing means.

Another object is to provide a container having an integral bottom cellular partition forming construction wherein the partition structure is designed to slidably accommodate a retractable carrying handle.

Still another object is to provide a container with an integral cellular partition forming structure wherein the container is locked into erected position and yet may be readily collapsed if desired.

A further object is to provide a container employing a retractable handle member wherein the handle member cannot be accidentally removed or displaced by the user.

Still another object is to provide a container having a reinforced bottom structure particularly adapted for carrying relatively heavy objects.

These and other objects will be apparent to those skilled in the art upon a further understanding of the invention as further described in the description which follows:

In the drawings, which form a part of the specification, like numerals and like symbols refer to like parts wherever they occur.

Fig. 1 is a plan view of a preferred form of a blank employing this invention;

Fig. 2 is a plan view of a handle member for a container employing this invention;

Fig. 3 is a perspective view of the erected container

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blank and handle member illustrated in Figs. 1 and 2;

Fig. 4 is a vertical view taken through section 4—4 of Fig. 3 of a fully loaded container shown with the handle in the retracted position and another, similar container with the handle extended, resting on the tops of the bottles of the first container;

Fig. 5 is a vertical, sectional view taken through section 5—5 of Fig. 4;

Fig. 6 is a vertical, sectional view of a container and handle employing this invention as the handle member is being inserted into position; and

Fig. 7 is a vertical, sectional view similar to Fig. 6 except that the handle member is shown in a further, advanced stage of assembly.

Fig. 1 illustrates a substantially rectangular body blank A which is provided with end wall panels 10 and side wall panels 11 defined by vertical corner scores 12 and a bottom score 13. Each side wall panel 11 is provided with a foldably connected side flap 14 whose width is approximately equal to one-half the width of the adjacent end wall panel 10. Each side flap 14 in turn is provided with a side score 15 which defines a foldably connected longitudinal partition flap 16.

Similarly, each end wall panel 10 is provided at its lower margin with a foldably connected end flap 17 which, in the six-celled embodiment described, is equal in width to approximately one-third the length of the adjacent side wall panel 11. Each end flap 17 is provided with an end score 18 which defines a foldably connected, transverse partition flap 19. In the particular body blank A described, the side scores 15 and the end scores 18 are in substantial alignment since the particular container is designed to contain six bottles of beverage or the like.

The longitudinal partition flaps 16 are provided with offset locking notches 20 which have a seating portion 21, a shoulder portion 22 and an entry portion 23. An inclined edge 24 lies adjacent the shoulder portion 22. The locking notches 20 substantially trisect the length of the longitudinal partition flaps 16.

Bisecting each transverse partition flap 19 and its adjacent end flap 17 is a partition slot 25 having an inner portion 26 which extends from the bottom score 13 to a transverse supporting neck 27. The outer portion 28 of the partition slot 25 extends from the supporting neck 27 to the free outer margin of the transverse partition flap 19.

A stitch flap 29 is foldably connected to the end edge of one of the side wall panels 11 along a flap score 30. In the event the body blank is taped together or otherwise erected, the stitch flap 29 may be omitted.

A handle member B, illustrated in Fig. 2, is provided with a vertical section 31 having laterally projecting bottom lugs 32. The upper portion 33 of the handle member B is provided with a suitable hand receiving opening 34. In the embodiment illustrated, the upper portion 33 is slightly wider than the vertical section 31. Downwardly and outwardly disposed top lugs 35 extend from the lower boundary of the upper portion 33 and define shoulder notches 36 adjacent the vertical section 31.

A preferred method of erecting the body blank A is to fold the end-most end wall panel 10 about its adjacent corner score 12 into flatwise relation with the adjacent side wall panel. Next, the side wall panel 11, to which the stitch flap 29 is foldably connected, is folded about its adjacent corner score 12 so that the stitch flap 29 is in overlapping relation of the adjacent free marginal end wall edge with the previously folded end wall panel 10. The stitch flap and the panel 10 are then secured together by stitches 37, glue or other suitable means. The body blank is now in collapsed, pre-assembled form and is ready to be shipped to the user.

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To further erect the container, the collapsed body member is opened so that the opposing end wall panels 10 and the side wall panels 11 form a rectangularly shaped body section. The transverse partition flaps 19 are then folded inwardly about the end scores 18 into angular relationship with the adjacent end flaps 17. The end flaps 17 are then folded inwardly and upwardly between the previously positioned side wall panels 14 substantially as shown by the broken line portions in Fig. 6. With the transverse partition flaps 19 and the end flaps 17 in this position, the longitudinal partition members 16 are each bent inwardly about their adjacent side scores 15. The free edges thereof are inserted through the inner portion 26 of the partition slot 25. The longitudinal partition flaps 16 are then pulled together upwardly until the side flaps 14 are substantially right angularly disposed to the adjacent side wall panels 11. In this stage of erection the body portion will appear approximately as illustrated in the solid line portion of Fig. 6.

The handle member B is attached to the erected body portion by placing the upper portion 33 into a space 38 between the previously positioned longitudinal partition flaps 16. The handle member B is then forced further upwardly through the space 38 into position between the transverse partition flaps 19. When the horizontal top edges of the bottom lugs 32 are even with the top edges of the transverse partition flaps, as shown in Fig. 6, it will be noted that the distance between the lower edge 39 of the top lugs 35 and the partition flaps 16 is approximately equal to the width of the supporting neck 27. The transverse partition flaps 19 are then moved inwardly until the supporting neck 27 is in vertical registering relationship with the entry portion 23 of the locking notches 20. The transverse partition flaps are then simultaneously forced downwardly into the entry portion 23, at the same time the handle member B is forced downwardly into the space 38. As the transverse flaps 19 continue downwardly, the supporting neck 27 is bent or deflected as it passes the shoulder portion 22. It is necessary to exert substantial force to overcome the frictional contact between the shoulder portion 22 and the neck 27. The flaps 19 are forced further downwardly until the upper edge of the supporting neck portion 27 is beneath the horizontal portion of the shoulder 22. The inherent resiliency of the transverse partition flaps 22 will cause them to spring into vertical relationship as shown in Fig. 4. In this position, the supporting neck 27 is in firm contacting relationship with the bottom edge of the seating portion 21. The container is now ready for use.

The edges of the transverse partition flap 19 adjacent the outer portion 28 of the partition slot 25 will support the shoulder portion 22 so as to prevent deflection or bending of that portion.

The handle member B may be retracted by pushing it downwardly into the space 38 until the shoulder notches 36 engage the top of the supporting neck 27 thereby preventing it from actually falling out of the container. After the handle member is collapsed for carrying, the handle member may be slid upwardly within the space 38 until the upper edge 40 of the bottom lugs 32 is in engaging, contacting relation with the supporting neck 27. It is apparent that the handle member will be maintained in proper longitudinal relationship with respect to the container since the side edges of the vertical section 31 will contact against the supporting neck 27 to maintain the handle member between the two transverse partition flaps 19.

The completed container is then loaded with bottles C. In the preferred form of the container described, top edge 41 of the upper portion 33 of the handle member B will be substantially the same height as the tops of the bottles C. There is sufficient friction between the handle member B and the spaced longitudinal partition flap 16 to maintain the handle member in either an extended or retracted position. However, the handle will be easily

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and automatically retracted when one loaded container is sacked upon a subjacent container as illustrated in Fig. 4.

The handle member B may be removed from the body member by lifting the handle member B upwardly as far as it will go, that is, until the upper edge 40 is in engagement with the supporting neck 27. The transverse partition flaps are then sprung simultaneously outwardly and upwardly around the shoulder portion 22 and upwardly through the entry portion 23. The flaps 19 are moved upwardly until the lower edge of the supporting neck 27 is above the level of the top edge of the longitudinal partition flaps 16. The transverse partition flaps 19 are then pulled outwardly simultaneously toward the end wall panels 10 as illustrated in Fig. 6. The handle member B may then be lifted easily upwardly out of the space 38.

The container body member may be collapsed by maintaining the end flaps 17 and the partition flaps 19 in the upward position shown in Fig. 6 and simultaneously pulling the side flaps 14 and the longitudinal partition flaps 16, downwardly out of the partition slots 25. After the flaps 14 and 16 are clear of the end flaps 17 and the transverse partition flaps 19, the latter members may be folded downwardly and outwardly and the body portion may be collapsed.

While the invention has been described in detail in the drawings and the foregoing description, the same is to be considered illustrative and not restrictive in character.

What I claim as my invention is:

1. An article carrying partitioned container comprising a body having opposed sides and end walls connected together along vertical fold lines, each end wall having a bottom end flap foldably connected to its lower edge, said bottom end flap having connected to its side margin an upwardly extending, transverse partition flap, each said transverse partition flap and its adjacent bottom end flap being centrally slotted, said slot extending continuously from the foldable connection adjacent the lower edge of the end wall upwardly to the free end edge of the transverse partition flap except for an integral, transverse supporting neck spaced from the free end edge of the transverse partition flap, each side wall having a half-bottom side flap connected to its bottom edge with a longitudinal, upwardly extending, centrally disposed partition flap connected to its side edge, said longitudinal partition forming members being disposed in spaced parallel relation upwardly through the central slots in said bottom end flaps and said transverse partition flaps, the upper margin of each said longitudinal partition panel being provided with a marginal, supporting neck receiving notch positioned with its lower portion within the vertical plane of the transverse partition forming flap and a shoulder portion extending from one edge of the receiving notch intermediate the upper and lower portions thereof and having a horizontally disposed edge portion thereon engaging the upper edge of the supporting neck, said neck receiving notch and said supporting neck co-acting to substantially immobilize said longitudinal and transverse partitions in right angular relation to said end and side walls respectively and a retractable flat handle member comprising a vertical body portion having marginal, laterally disposed, bottom extensions and downwardly, outwardly depending, upper marginal top projections defining horizontal shoulder notches intermediate said top projections and said central, vertical portion, and an upper portion with a hand receiving opening therethrough, said handle member being slidably disposed intermediate the longitudinal partition flaps, the laterally disposed bottom marginal extensions and the downwardly, outwardly disposed upper said projections extending through the slots in the transverse partition flaps and positioned respectively opposite the lower and upper edge of the supporting neck.

2. The article carrying container set forth and claimed in claim 1 wherein the horizontal shoulder notches on said handle member engage the upper edge of the supporting

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neck in the retracted position of the handle member, and the upper edge of the bottom extensions engage the lower edge of the supporting neck in the carrying position of the handle member.

3. A partitioned container comprising a body having opposed side and end walls, each end wall having a lower marginal, bottom end flap provided with an upwardly extending, marginal, transverse partition flap, each said transverse partition flap and its adjacent bottom end flap being centrally slotted, said slot extending continuously from the end wall upwardly to the free end edge of the transverse partition flap except for an integral, transverse supporting neck spaced from the free end edge of the transverse partition flap, each side wall having a lower marginal, half-bottom side flap connected to its bottom edge with a marginal, longitudinal, upwardly extending, centrally disposed partition flap connected to its side edge, said longitudinal partition forming members being disposed in spaced parallel relation through the central slots in said transverse partition flaps, the upper margin of each said longitudinal partition panel being provided with a supporting neck receiving notch positioned with its lower portion within the plane of the transverse partition forming flaps, and a shoulder portion extending from one edge of the receiving notch, said shoulder portion having a horizontally disposed edge portion thereon engaging the upper edge of the supporting neck, said supporting neck and said neck receiving slot co-acting to substantially immobilize said longitudinal and transverse partitions in right angular relation to said end and side walls respectively, and a retractable flap handle member comprising a vertical body portion having laterally disposed bottom extensions and downwardly, outwardly depending upper marginal top projections defining horizontal shoulder notches adjacent said central, vertical portion, and an upper portion with a hand receiving opening therethrough, said handle member being slidably disposed between the longitudinal partition flaps, the laterally disposed bottom marginal extensions and the downwardly, outwardly disposed upper side projections extending through the slots in the transverse partition flaps and positioned respectively below and above the said supporting neck.

4. A partitioned carrying container comprising a body having six article receiving cells, said container having opposed side and end walls connected together along vertical fold lines, each end wall having a bottom end flap substantially equal in width to the individual article carried, each end flap being foldably connected to the lower edge of its adjacent wall, said bottom end flap having connected to its side margin an upwardly extending transverse partition flap, each transverse partition flap and its adjacent bottom end flap being centrally slotted continuously from the foldable connection adjacent the lower edge of the end wall upwardly to the free end edge of the transverse edge of the transverse partition flap except for a supporting neck spanning the slot and spaced from the free end edge of the transverse partition flaps, said supporting neck having horizontal upper and lower edges and being integrally connected with the portions of the transverse partition flap defining said central slot, each side wall having a half bottom side flap connected on its bottom edge with a longitudinal, upwardly extending,

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centrally disposed partition flap connected to its side edge, said longitudinal partition forming members being disposed in spaced parallel relation upwardly through the central slots in said bottom end flaps and said transverse partition flaps, the upper edges of said transverse and longitudinal partition flaps being substantially even with the upper edges of the opposed side and end body walls, the upper margin of each said longitudinal partition panel being provided with a pair of marginal, supporting neck receiving notches positioned with their lower portions within the vertical plane of the adjacent transverse partition forming flap and the upper portion of said receiving notch being disposed upwardly and outwardly with respect to the lower portion thereof and a shoulder portion extending from one edge of the receiving notch intermediate the upper and lower portions thereof and having a horizontally disposed edge portion thereon engaging the upper edge of the supporting neck, and a retractable flat handle member comprising central, vertical bottom portion having marginal, laterally disposed, bottom extensions and downwardly, outwardly depending upper marginal top projections defining horizontal shoulder notches intermediate said top projections and said central, vertical portion and an upper portion with a hand receiving opening therethrough, said handle member being vertically, slidably disposed between the longitudinal partition flaps, the laterally disposed bottom marginal extensions and downwardly, outwardly disposed upper side projections extending through the slots in the transverse partition flaps and positioned respectively below and above the supporting neck.

5. In an article carrying partitioned container comprising closely spaced, parallel, vertical, longitudinal, upstanding partition panels and a pair of upstanding transverse partition members intersecting said longitudinal partition panels and spaced to provide a plurality of article receiving cells, the transverse partition members being centrally, vertically slotted to receive the intersecting portions of said longitudinal partition means, said slot being provided with a transverse web portion engaged into registering locking notches disposed in the longitudinal partition panels, a relatively flat, separate carrying handle slidably disposed within the space between said longitudinal partition panels and having bottom projections extending within the slots in said transverse partition panels and engaging the underface of said transverse web portion to restrict upward movement of the handle member.

6. The invention as set forth and claimed in claim 5 wherein the handle member is provided with upper marginal top projections defining shoulders adapted to engage onto said transverse web portion to restrict downward movement of said handle between said longitudinal partition panels.

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