March 1, 1960 B. D. OSTEEN 2,926,780

COMBINATION CARRYING AND DISPLAY CONTAINER

Filed March 31, 1958 3 Sheets-Sheet 1

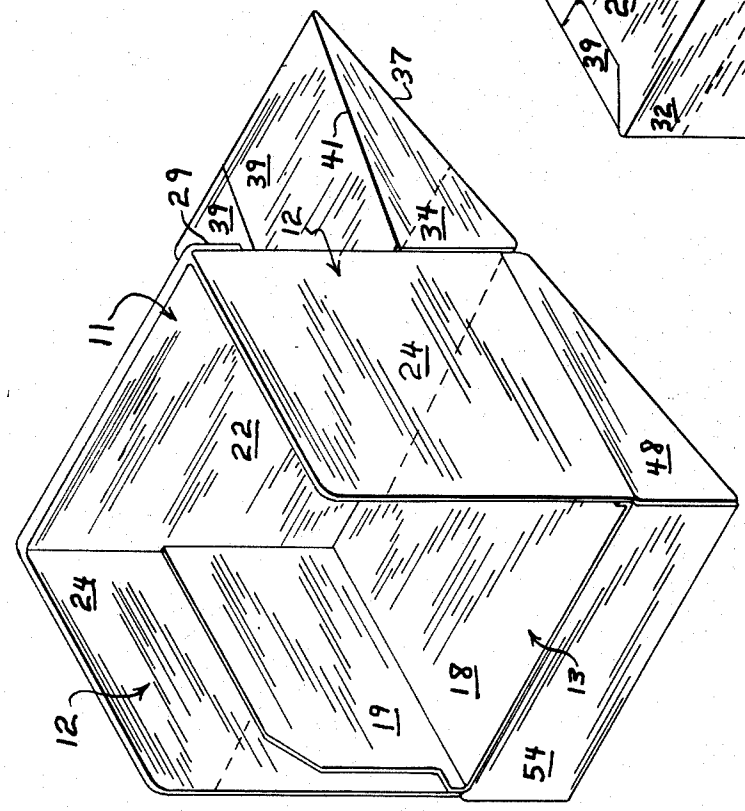


FIG - 1

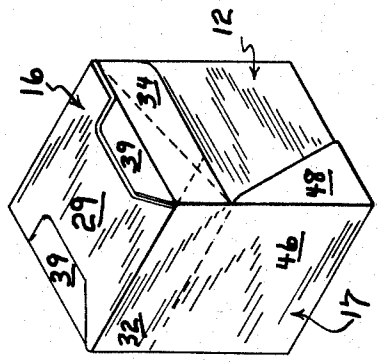


FIG - 2

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COMBINATION CARRYING AND DISPLAY CONTAINER

Filed March 31, 1958 3 Sheets-Sheet 2

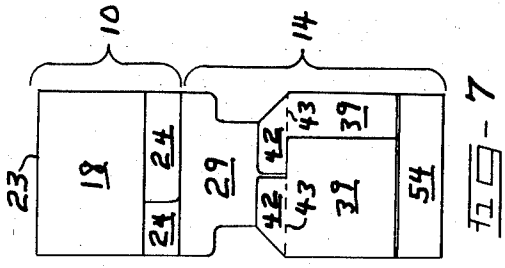


FIG - 7

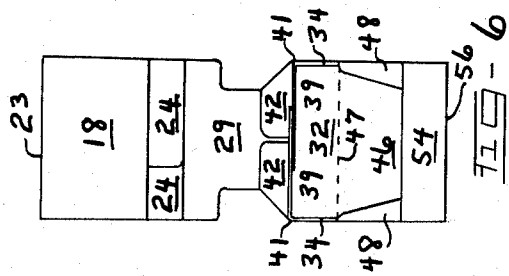


FIG - 6

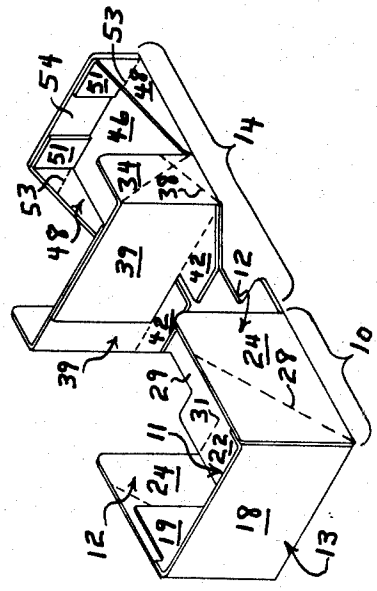


FIG - 3

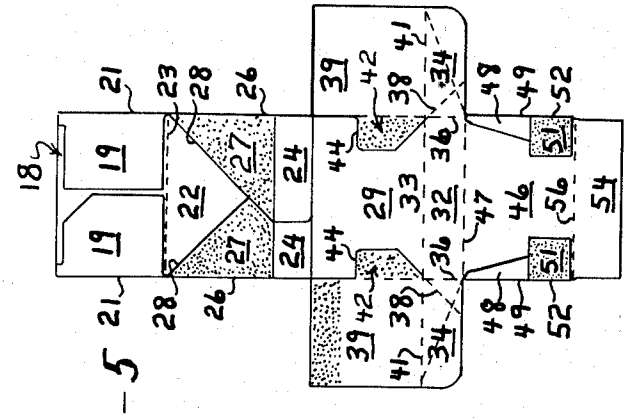


FIG - 5

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March 1, 1960 B. D. OSTEEN 2,926,780

COMBINATION CARRYING AND DISPLAY CONTAINER

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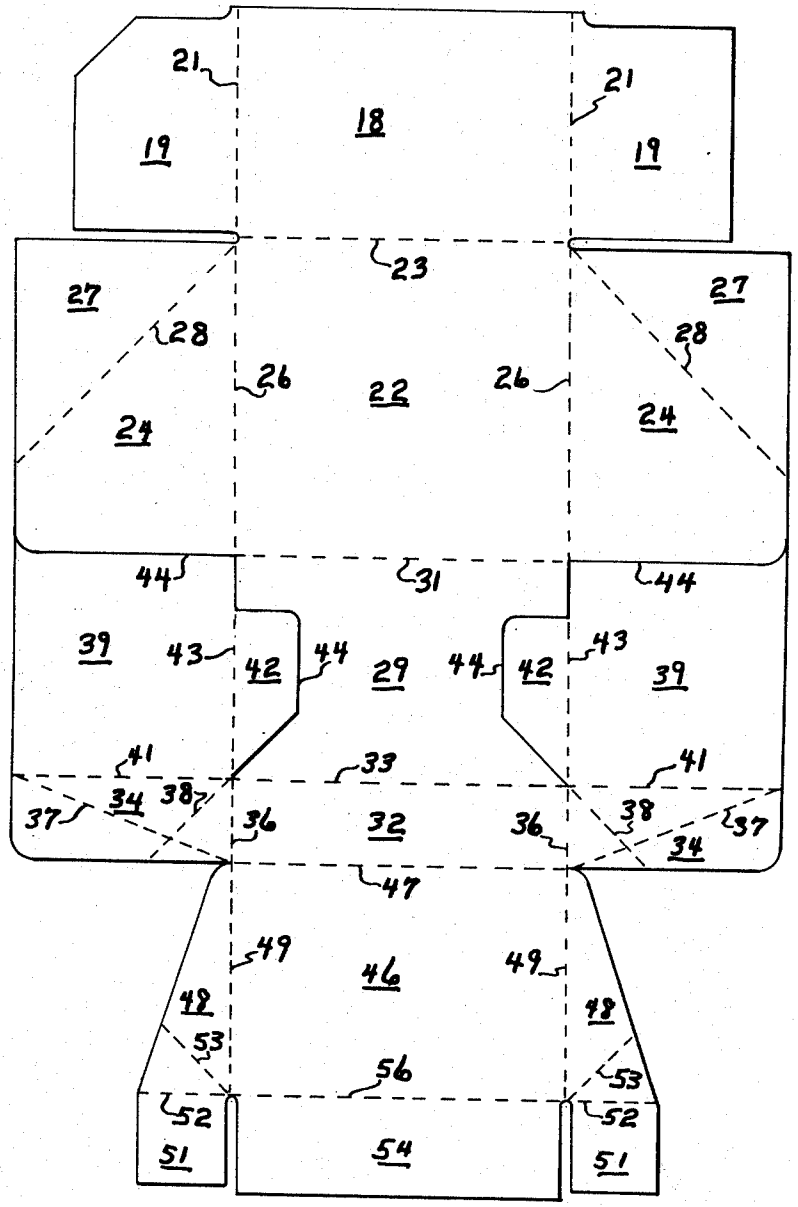


FIG - 4

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2,926,780

COMBINATION CARRYING AND DISPLAY CONTAINER

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Application March 31, 1958, Serial No. 725,002

6 Claims. (Cl. 206—45.21)

This invention relates to a container or carton for carrying articles, such as packaged crackers and the like, and more particularly to an integral collapsible container that is easily converted from a carrying container to a display container.

Heretofore, in constructing integral containers that are convertible from a carrying container to a display container, a plurality of interlocking tongue and slot arrangements has been employed to secure the sides and ends of the container together. Further, these prior art containers have not been collapsible after they have been erected, thus necessitating the assembly of the container immediately prior to the filling of the container with the articles to be carried. The assembly of the prior art containers requires a considerable amount of time that necessarily increases the labor required in the packing or filling of the containers.

The present invention comprises a collapsible container having its walls adhesively secured without the use of any interlocking tongue and slot arrangements, and being easily converted from a carrying position to a display position. The container is formed from an integral blank which, after being cut and scored, may be folded to a flat collapsed position with adhesive being applied during the folding steps for securing the panels. After the container is folded to a flat collapsed position, all that is necessary in order for the container to be filled with the articles is that the bottom wall be pulled outwardly from its collapsed position to form the body portion of the container into which the articles are placed.

It is an object of my invention to form a collapsible container that may be easily converted from a carrying position to a display position, all without the use of any interlocking tongue and slot arrangements.

Briefly described, my improved container comprises a main body portion having side, bottom and rear walls, with a cover portion hingedly connected to the top edge of the rear wall and forming the top and front walls of the container when in carrying position and forming a support for the body portion in display position. The top wall has a pair of inner panels that are disposed in face-to-face contacting relation to a top wall outer panel to form a triple panel thickness in the top wall in the carrying position of the container. A bottom cover panel is hingedly connected to the front wall and covers a portion of the bottom wall in the carrying position of the container to hold the cover portion in position about the body portion. For converting the container from the carrying position to the display position, all that is necessary is that the bottom cover panel be removed from adjacent the bottom wall, and the cover portion bent about the hinge line connecting the cover portion to the rear wall thereby disposing the top wall outer panel in contacting relation to the rear wall while the top wall inner panels are arranged in a substantially perpendicular relation to the top wall outer panel for supporting the container in the display position. The container may easily be folded to flat collapsed position by

folding the bottom wall inwardly against the rear wall through hinge lines in the side walls thereof, the top wall inner panels to flat collapsed position on the front wall, and the bottom cover panel inwardly against the front wall through hinge lines in the side cover panels. To load the container starting from collapsed position, the bottom wall is pulled outwardly to erected position which also erects the side walls simultaneously. Thus, the body portion is erected for loading by a single pull on the bottom wall. The cover portion is erected by an outward pull on the bottom cover panel and an upward pull on the top wall inner panels. After the body portion is loaded, the cover portion is folded thereover and secured about the bottom wall in carrying position.

Apparatus embodying features of my invention is illustrated in the accompanying drawings, forming a part of this application, in which:

Fig. 1 is a perspective view showing my improved combination display and carrying container in display position;

Fig. 2 is a perspective view of the container shown in Fig. 1 in the carrying position;

Fig. 3 is a perspective view of my container showing the body portion thereof after it has been erected for filling with articles, such as packaged peanuts or crackers and the like, with the cover portion erected and adapted for folding about the body portion after it is loaded;

Fig. 4 is a top plan view of the blank for forming the container shown in Figs. 1, 2 and 3;

Fig. 5 is a top plan view of the blank shown in Fig. 4 after the first folding step;

Fig. 6 is a top plan view of the blank shown in Fig. 5 after the second folding step; and,

Fig. 7 is a top plan view of the container shown in flat collapsed position and adapted for erection to the position shown in Fig. 3.

Referring now to the drawings for a better understanding of my invention, I show in Figs. 1, 2 and 3 my collapsible combination display and carrying container comprising a main body portion **10** (see Fig. 3) having a rear wall **11**, opposed side walls **12** and a bottom wall **13**. A cover portion **14** (see Fig. 3) is hinged to the upper edge of the rear wall **11** and comprises a top wall **16** and a front wall **17**. My container is converted from the carrying position shown in Fig. 2 to the display position shown in Fig. 1 by merely folding the cover portion **14** rearwardly from the position shown in Fig. 2 so that a portion of the front wall **17** is disposed under the bottom wall **13** as shown in the display position of Fig. 1.

Referring now to Fig. 4, in which the blank for forming the container shown in Figs. 1, 2 and 3 is shown, I show a bottom wall panel **18** having inner side wall panels **19** foldably connected to opposed sides thereof through hinge lines **21**. A rear wall panel **22** is foldably connected to the bottom wall panel **18** through hinge line **23** and has outer side wall panels **24** foldably connected on opposed sides thereof through hinge lines **26**. The outer side wall panels **24** have an adhesive portion **27** foldably connected thereto through hinge line **28**.

A top wall outer panel **29** is connected to the side of rear wall panel **22** opposite the bottom wall panel **18** through hinge line **31**. An upper front wall panel **32** is foldably connected to outer panel **29** on the side thereof opposite rear wall panel **22** through hinge line **33**, and side cover panels **34** are foldably connected to opposed sides of the upper front wall panel **32** through hinge lines **36**. The side cover panels **34** have a diagonal perforated line **37** so that the panel **34** can be torn or folded therealong as will be explained further below. A fold line **38** is also provided in the side cover panels **34** so that the container may be collapsed. A top wall inner

panel 39 is foldably connected through hinge lines 41 to each of the side cover panels 34 and adhesive is applied to a section of one of the panels 39 for securing the panels together. Glue flaps 42 are cut out from the end portions of the top wall outer panel 29 and are foldably connected to the top wall inner panels 39 by hinge lines 43. A slit 44 extends along the inner edge of the top wall inner panels 39 adjacent the top wall outer panel 29 and the outer side wall panels 24 thereby permitting the top wall inner panels 39 and flaps 42 thereon to be folded upwardly about the hinge lines 41 when the container is formed.

A lower front wall panel 46 is foldably connected to the upper front wall panel 32 through hinge line 47 on the side thereof opposite the top wall outer panel 29. Side cover panels 48 are hingedly connected to opposite sides of the lower front wall panel 46 through hinge lines 49. A glue flap 51 is hingedly connected to each of the side cover panels 48 through hinge lines 52 and fold lines 53 are provided in the side wall panels 48 for folding the erected container to collapsed position. A bottom cover panel 54 is foldably connected to the lower front wall panel 46 through hinge line 56 and is adapted for holding the cover portion 14 in position about the body portion 10 in the carrying position of the container shown in Fig. 2.

For folding the blank shown in Fig. 4 to the flat collapsed position shown in Fig. 7, in which position it is adapted for erection and loading in the position shown in Fig. 3, several folding steps are necessary. Fig. 5 shows the blank after the first folding step in which the inner side wall panels 19 are folded about hinge lines 21 in face-to-face contact with the bottom wall panel 18 and outer side wall panels 24 are folded about hinge lines 26 in contact relation to rear wall panel 22 with the adhesive portions 27 of the outer side wall panel 24 being folded about hinge lines 28. In addition, the side cover panels 48 are folded about hinge lines 49 in contact relation to the lower front wall panel 46 and glue flaps 51 are folded about hinge lines 52 with the side cover panels 48 being bent through the hinge lines 53 to the position shown in Fig. 5. This completes the first folding step. A glue layer, indicated by stippling in Fig. 5, is applied to the adhesive portions 27, glue flaps 42 and 51, and panel 39 by suitable means, such as a glue roller.

The blank in Fig. 6 is shown after the second folding step in which the bottom wall panel 18 with the inner side wall panels 19 thereon is folded about the hinge line 23, and the inner side wall panels 19 are adhesively secured to the adhesive portions 27. The bottom cover panel 54 is folded about hinge line 56 and is adhesively secured to the glue flaps 51. In addition, the side cover panels 34 are folded upwardly about the hinge lines 36 and are arranged in perpendicular relation to the upper front wall panel 32 while the top wall inner panels 39 are folded about the hinge lines 41 in a perpendicular relation to the top wall outer panel 29 and secured thereon by the glue flaps 42 which are adhesively disposed in face-to-face contact with the top wall outer panel 29. Thus, the top wall inner panels 39 and the side cover panels 34 are disposed in a perpendicular relation to the remainder of the blank as shown in Fig. 6.

Fig. 7 shows the blank in flat collapsed position and the only remaining step necessary is that the top wall inner panels 39 be folded downwardly about hinge lines 43 with the side cover panels 34 being folded downwardly about the hinge lines 36 and 38. The container in the flat collapsed position shown in Fig. 7 is ready for shipment to the user or consumer where it is loaded or filled with material, such as packaged crackers or peanuts and the like.

In order to erect the flat collapsed container shown in Fig. 7 to the position shown in Fig. 3 in which position it may be loaded with packaged articles, all that is necessary is that the bottom wall panel 18 be pulled upwardly in perpendicular relation to the rear wall panel 22, the outer side wall panels 24 being bent about hinge lines 28 and the inner side wall panels 19 being disposed in right angular relation to the rear wall panel 22 and bearing thereagainst to retain the body portion 10 in erected position as shown in Fig. 3. In this position, the body portion 10 may be filled or loaded with articles. Also, the bottom cover panel 54 is pulled outwardly from the lower front wall panel 46, the side cover panels being bent about the hinge lines 53 simultaneously. The top wall inner panels 39 are also folded upwardly about the hinge lines 43 with the side cover panel 34 being folded about the hinge lines 38 simultaneously therewith to the position shown in Fig. 3.

After the container has been loaded, the cover portion 14 is bent about hinge line 31 and the top wall inner panels 39 are disposed in face-to-face contact with the top wall outer panel 29 upon the folding of the cover panel 14 about the body portion 10. The lower front wall panel 46 and the upper front wall panel 32 form the front wall 17, and the top wall outer panel 29 with the top wall inner panels 39 form the top wall 16 as shown in Fig. 2.

For securing the cover portion 14 about the body portion 10, the bottom cover panel 54 is disposed under the bottom wall 13. The side cover panels 34 and 48 are disposed adjacent the side walls 12 in the carrying position of the container as shown in Fig. 2, and the articles within the container are thereby completely enclosed by the walls of the container. It should be noted that the top wall 16 is of a triple panel thickness which provides strength in the top wall which has been commonly of a single or a double thickness. By having a greatly strengthened top wall, breakage of the articles or materials in the container, such as crackers which are fragile, is reduced from that of the prior art containers.

To convert the container shown in Fig. 2, to the display position shown in Fig. 1, it is only necessary to pull the bottom cover panel 54 outwardly from the bottom wall 13 and fold the cover portion 10 rearwardly about the hinge line 31 on rear wall panel 22. In the display position, the top wall outer panel 29 is disposed in contact relation to the rear wall panel 22 and the top wall panels 39 are disposed in a substantially perpendicular relation to the top wall outer panel 29 for supporting the container rearwardly. The side cover panels 34 are folded about the perforated lines 27 and the outer portions of the panels 34 are either folded inwardly under the container in the display position or torn off and discarded. The container is thus supported in a level, even position. The bottom cover panel 54 is disposed in perpendicular relation to the bottom wall 13 so as to incline the body portion 10 rearwardly thereby restraining the articles in the body portion 10 from slipping outwardly from the container. The side cover panels 48 are also disposed along opposed sides of the bottom wall 13 and aid in supporting the body portion 10 in the display position.

If it is desired to collapse the carton from the position shown in Fig. 3, all that is necessary is that the side walls 12 be pushed inwardly about the hinge lines 28 thereby moving the inner side wall panels 19 inwardly of the body portion and inclining panels 19 in relation to the rear wall panel 22. The bottom wall panel 18 may then be folded downwardly in flat collapsed position on the rear wall panel 22 with the side wall panels 19 and 24 disposed therebetween. The bottom cover panel 54 may be folded downwardly by pushing inwardly on the side cover panels 48 about hinge lines 53 thereby folding the bottom cover panel 54 downwardly on the lower front wall panel 46. The top wall inner panels 39 are also folded downwardly in contact relation to the lower front wall panel 46 by inward folding of the side cover panels 34 about the hinge lines 38. The carton is thus

collapsed in the position shown in Fig. 7 and may be reused for packaging articles, if desired.

From the foregoing, it will be seen that I have devised an integral collapsible container that may be converted from a carrying container to a display container with the container being capable of being reused several times by collapsing the container to flat condition after it has been used and thereafter filling it with articles. Further, the top wall of my container is of a triple panel thickness which increases the strength in this wall at a place where it has been weak heretofore. This results in a decrease of breakage of the articles carried by the container.

While I have shown my invention in but one form, it will be obvious to those skilled in the art that it is not so limited, but is susceptible of various changes and modifications without departing from the spirit thereof, and I desire, therefore, that only such limitations shall be placed thereupon as are specifically set forth in the appended claims.

What I claim is:

1. An integral paperboard blank for a collapsible combination display and carrying container comprising a bottom wall panel having a side wall panel integrally hinged on opposite ends thereof, a rear wall panel integrally hinged on one side of said bottom wall panel, a side wall panel on opposite ends of said back wall panel, a top wall outer panel integrally hinged to said rear wall panel on the side thereof opposite said bottom wall panel, an upper front wall panel integrally hinged to said top wall outer panel at the side thereof opposite said rear wall panel, a side cover panel integrally hinged to each end of said upper front wall panel, a top wall inner panel integrally hinged to each of the side cover panels along hinge lines in alignment with the hinge line connecting said top wall outer panel and said upper front wall panel and extending along the ends of said top wall outer panel, a flap member slit from the end portions of the top wall outer panel and hingedly connected to each of the top wall inner panels along hinge lines in alignment with the hinge line connecting the side cover panels to the upper front wall panel, said flap members being adapted for disposition in face-to-face contact with an adjacent wall panel for securing the top wall inner panels, a lower front wall panel integrally hinged to the upper front wall panel on the side thereof opposite said top wall outer panel, and a bottom cover panel integrally hinged to said lower front wall panel on the side thereof opposite said upper front wall panel.

2. An integral blank for a collapsible container comprising a bottom wall panel, a rear wall panel integrally hinged to one side of the bottom wall panel, side wall panels integrally hinged on opposite ends of said rear wall panel, a top wall outer panel integrally hinged to said rear wall panel on the side thereof opposite said bottom wall panel, a front wall panel integrally hinged to said top wall outer panel on the side thereof opposite said back wall panel, a side cover panel integrally hinged to each end of said front wall panel, a top wall inner panel integrally hinged to each of the side cover panels along hinge lines in alignment with the hinge line connecting said top wall outer panel and said front wall and extending along the ends of said top wall outer panel, a flap member slit from the end portions of the top wall outer panel and hingedly connected to each of the top wall inner panels, and said flap members being adapted for disposition in face-to-face contact with an adjacent wall panel for securing the top wall inner panels.

3. In an integral collapsible paperboard container adapted for folding from a carrying position to a display position, the combination of a body portion comprising bottom, side and rear walls, said side walls having hinge lines therein for folding to a flat collapsed relation on said rear wall with said bottom wall also being disposed in flat collapsed relation upon folding of said side walls, a cover portion hingedly connected to the upper edge of said rear wall, said cover portion comprising a top wall outer panel, a pair of top wall inner panels secured to each other and disposed in face-to-face relation to said top wall outer panel for forming a top wall of triple panel thickness in the carrying position of the container, each of said top wall inner panels having a side cover panel hingedly connected to an end thereof for overlying the side walls, a flap member hingedly connected to each of the top wall inner panels and adhesively secured in face-to-face contact with a wall of the container for securing said inner panels, a front wall integrally hinged to the front edge of said top wall outer panel, a side cover panel on opposite sides of said front wall for covering a portion of the side walls and a bottom cover panel integrally hinged to a side of the front wall opposite the top wall outer panel for covering a portion of the bottom wall in the carrying position of the container and securing the cover portion over the body portion in covering relation thereto.

4. In an integral collapsible paperboard container adapted for folding from a carrying position to a display position, the combination of a body portion comprising bottom, side and rear walls, said side walls having hinge lines therein for folding to a flat collapsed relation on said rear wall with said bottom wall being disposed in flat collapsed relation on said rear wall upon folding of said side walls, a cover portion hingedly connected to the upper edge of said rear wall, said cover portion comprising a top wall outer panel, a pair of top wall inner panels secured to each other and disposed in face-to-face relation to said top wall outer panel for forming a top wall with triple panel thickness in the carrying position of the container, each of said top wall inner panels having a side cover panel hingedly connected to a side thereof for overlying the side walls, a flap member hingedly connected to each of the top wall inner panels and adhesively secured in face-to-face contact with a wall of the container for securing said inner panels, a front wall integrally hinged to a side of said top wall outer panel opposite said rear wall, a side cover panel on opposite sides of said front wall for covering a portion of the side walls in carrying position, a bottom cover panel connecting the front wall cover panels and integrally hinged to a side of the front wall opposite the top wall outer panel for covering a portion of the bottom wall in the carrying position of the container and securing the cover portion over the body portion in covering relation thereto, side cover panels integrally hinged to said top wall inner panels and having hinge lines therein for folding to flap collapsed position with the top wall inner panels being disposed in flat collapsed relation on said front wall, said side cover panels on the front wall having hinge lines therein for folding to flat collapsed position with the bottom cover panel being disposed in flat collapsed position on said front wall upon folding of said side cover panels, the folding of the cover portion about the hinge line on said rear wall converting the container from the carrying to the display position and disposing the top wall inner panels in a substantially perpendicular relation to the top wall outer panel and rearwardly thereof, the side wall cover panels on the top wall inner panels providing a rear support for the container, the front wall being disposed in face-to-face contact relation to the bottom wall, and the bottom cover panel disposed under the bottom wall in substantially perpendicular relation thereto for providing an inclined raised support for the container in display position.

5. A collapsible container as defined in claim 4 further characterized in that the side cover panels on said top wall inner panels have a hinge line extending diagonally for substantially the entire length of the side cover panels, and the side cover panels on the top wall are folded about the diagonal hinge lines inwardly of the container in the display position thereof for supporting the container.

6. A collapsible combination display and carrying container adapted for folding from a carrying position to a display position and comprising a body portion having bottom, side and rear walls, a top wall outer panel integrally hinged to the upper end of said rear wall opposite said bottom wall, a front wall integrally hinged to said top wall outer panel opposite said rear wall, a side cover panel integrally hinged to opposite sides of said front wall adjacent said top wall outer panel, a top wall inner panel integrally hinged to each of the side cover panels, an adhesive flap hingedly connected to each of the top wall inner panels and adhesively secured in face-to-face contact with a wall of the container and positioning the top wall inner panel in face-to-face contact with the outer panel in the carrying position, a front wall panel integrally hinged to the top wall outer panel on the side thereof opposite said rear wall and having side and bottom cover panels hinged thereto for partially

covering the side and bottom walls, respectively, in the carrying position, said side and bottom cover panels being foldable in flat collapsed position on said front wall, said top wall inner panels and said side cover panels hinged thereto being foldable in flat collapsed relation on said front wall, said top wall outer panel being foldable in face-to-face contact with said rear wall in display position, and said top wall inner panels being foldable rearwardly of the container substantially perpendicular to the top wall outer panel in the display position and providing a support for the container.

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