Dec. 11, 1956 F. McCORMICK 2,773,327

CRADLE-TYPE CARTON FOR DOLLS

Filed Nov. 26, 1954 2 Sheets-Sheet 1

FIG. 1.

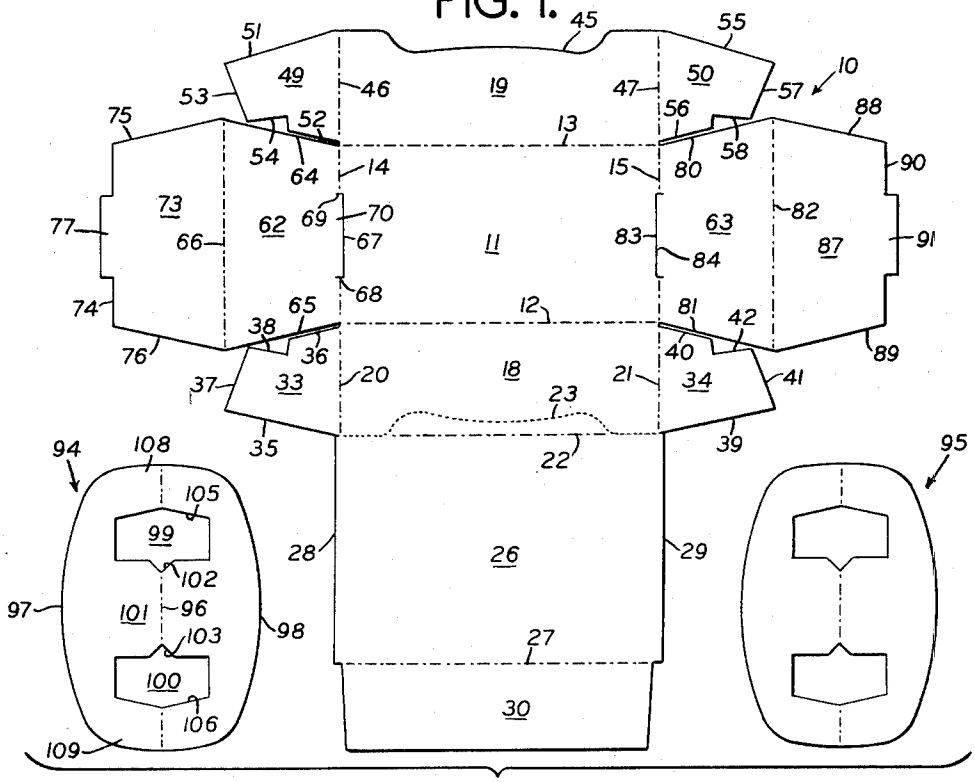


FIG. 2.

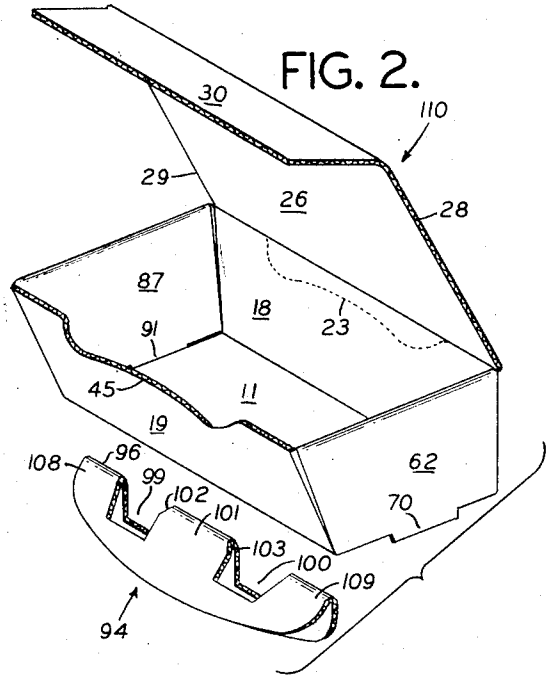


FIG. 3.

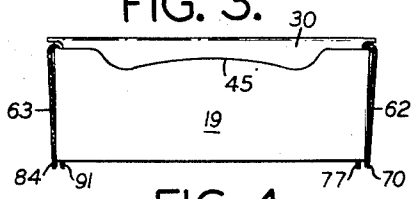
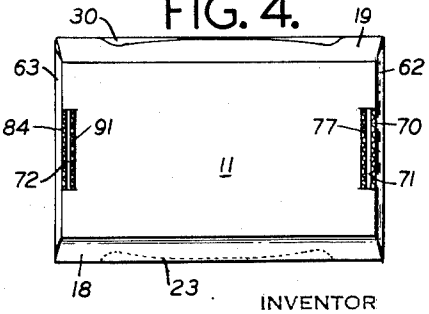


FIG. 4.



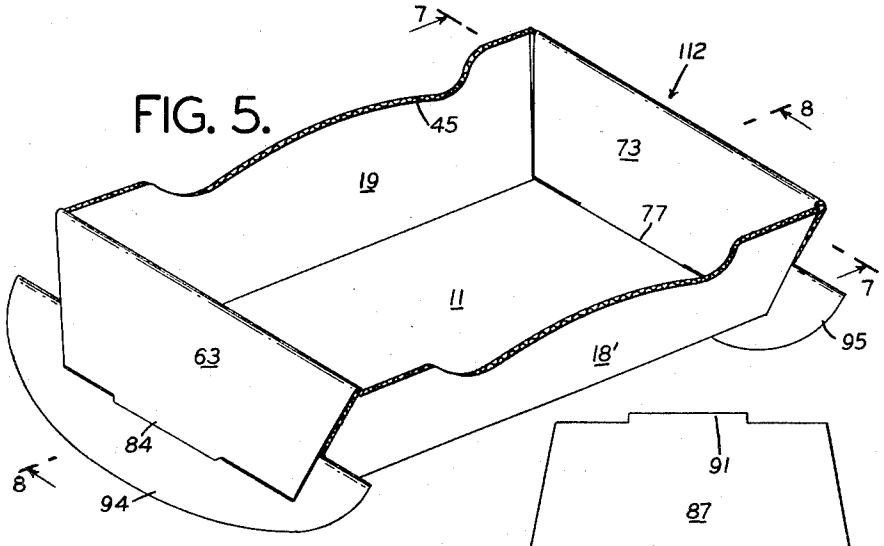
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CRADLE-TYPE CARTON FOR DOLLS

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FIG. 5.



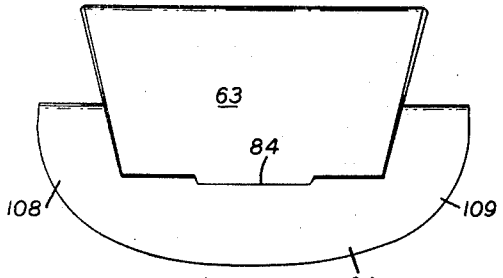


FIG. 6.

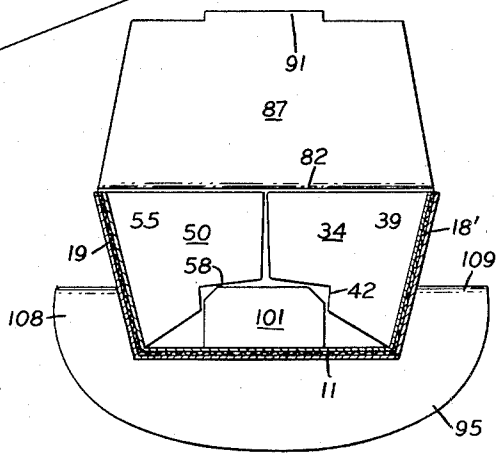


FIG. 7.

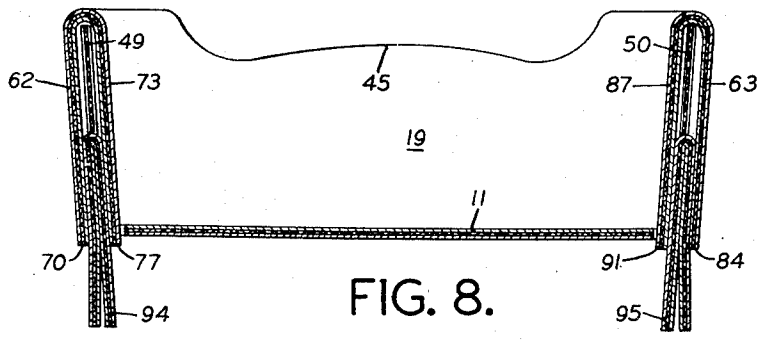


FIG. 8.

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2,773,327

CRADLE-TYPE CARTON FOR DOLLS

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Application November 26, 1954, Serial No. 471,214

11 Claims. (Cl. 46—15)

This invention relates generally to containers, and is particularly directed to container constructions adapted to serve plural purposes.

The particular embodiment of the present invention, which is illustrated in the drawings, and which will be described hereinafter in greater detail, comprises generally a bottom wall, and upstanding side and end walls on the bottom wall, the end walls combining with the bottom wall to provide means for the detachable connection thereto of a pair of depending support members.

While the present invention has been primarily developed and employed in connection with containers for toys and especially dolls, and will be described hereinafter with particular reference thereto, it is appreciated that the invention has a wide variety of additional applications, which are intended to be comprehended herein. In the packaging of toys, and particularly dolls, as is well known to those versed in the art, the carton or other container must be relatively staunch and strong in order to adequately protect the contained article throughout the period of storage and transit. Further, while packaging represents a substantial expense to the manufacturer, the container employed is generally discarded immediately upon removal therefrom of the article by the consumer.

Accordingly, it is a general object of the present invention to provide a novel container construction which overcomes the above mentioned difficulties, which serves to completely enclose and fully protect its contents, such as a doll or the like, and which is readily converted after removal of its contents to form a useful article, such as a cradle or the like for a doll. Hence, the container is not wastefully discarded upon ultimate purchase of the contained article, but rather serves a new and continuing function in conjunction with the article.

It is another object of the present invention to provide a plural purpose container device having the advantageous characteristics mentioned in the foregoing paragraph, which is capable of being quickly and easily converted to serve its different functions, even by a small child, which can be fabricated completely from foldable, self-sustaining sheet material, such as paper board or the like, which is staunch and sturdy in construction to satisfactorily perform its different functions and afford a relatively long useful life.

It is a more particular object of the present invention to provide a container device of the type described which combines with a pair of support members to serve as a doll cradle, and wherein the container and support members are each capable of being fabricated of a single sheet of foldable material, so as to permit of shipment and storage in a flat, space-saving condition. Further, the device of the present invention is adapted to be set up or erected as a container quickly and easily from its flat condition, either automatically or by hand; and, the erected container is capable of quick and easy transformation by combination with the support members to provide a cradle or other desired plaything.

It is still a further object of the present invention to provide a convertible container construction having the novel features mentioned above, which is simple in construction and attractive in appearance, and which multiplies the usefulness of a conventional container at little or no additional cost.

Other objects of the present invention will become apparent from the following specification and referring to the accompanying drawings, which form a material part of this disclosure.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, which will be exemplified in the construction hereinafter described, and of which the scope will be indicated by the appended claims.

In the drawings:

Figure 1 is a plan view showing the container blank and a pair of support member blanks of the present invention;

Fig. 2 is an exploded view showing the container of the present invention in setup condition, and showing a rocker in condition for attachment to the container;

Fig. 3 is a front elevational view showing the erected container of the present invention;

Fig. 4 is a bottom plan view of the erected container of Fig. 3;

Fig. 5 is a top perspective view showing the container of the present invention converted to form a doll cradle;

Fig. 6 is an end elevational view of the doll cradle of Fig. 5;

Fig. 7 is a transverse sectional view taken substantially along the line 7—7 of Fig. 5, with one panel of the container blank swung upwards; and

Fig. 8 is a longitudinal sectional view taken substantially along the line 8—8 of Fig. 5.

Referring now more particularly to the drawings, and specifically to Fig. 1 thereof, the embodiment of the invention illustrated therein comprises three sheets or blanks fabricated of foldable, self-sustaining material, such as paper board or the like, which are adapted to form the container, and a pair of support members or rockers for converting the container to a doll cradle.

The container blank, generally designated **10** is cut and creased to form an elongated, main or central panel **11**, of generally rectangular configuration, bounded on its sides by fold lines **12** and **13** and on its ends by fold lines **14** and **15**. A pair of longitudinally extending, generally rectangular side panels **18** and **19** are hingedly connected to opposite sides of the central panel **11** by the creases **12** and **13**, respectively. The ends of the side panel **18** are defined by folds or creases **20** and **21**, in alinement with the creases **14** and **15** respectively, while the outer side edge of the panel **18** is formed by a crease **22** disposed parallel to the creases **12** and **13**. In addition, a generally curvilinear line of perforations **23** is formed in the side panel **18** with its opposite ends extending to the fold line **22**.

A generally rectangular panel **26** is disposed longitudinally of and adjacent to the side panel **18** and has one side hingedly connected to the latter panel by the crease **22**. The other side of the panel **26**, remote from the side panel **18**, is defined by a fold line **27** parallel to the fold line **22**, while the ends of panel **26** are defined by parallel edges **28** and **29** extending between the folds **22** and **27**. Hingedly connected to the distal side of panel **26** by the crease **27** is a closure flap **30**.

A pair of end flaps **33** and **34** are swingably connected to opposite ends of the side panel **18** by the fold lines **20** and **21**, respectively. The side edges **35** and **36** of the end flap **33** converge toward the free end edge **37** of the

end flap; and the side edge 36 of the end flap 33 is formed with a cut-out or notch 38 adjacent to the free end edge. More specifically, the outer side edge 35 of the flap 33 extends from the adjacent end of the crease 22 toward the free end edge 37 and is angulated inwards, while the inner side edge 36 extends from the adjacent end of the crease 12 toward the free end edge and is angulated outwards. The end flap 34 is preferably identical to the end flap 33, and includes outer and inner side edges 39 and 40 extending from the adjacent ends of the fold lines 22 and 12, respectively, and converging toward the free end edge 41 of the end flap. The inner side edge 40 is also provided with a notch or cut-out 42 adjacent to its free end edge 41.

The side panel 19 is generally rectangular in configuration, and may have its outer side defined by an edge 45 of any desired, attractive configuration. The ends of the side panel 19 are defined by fold lines or creases 46 and 47 extending in parallelism with respect to each other between the fold 13 and outer side edge 45, and in respective alinement with the folds 14 and 15. Hingedly connected to opposite ends of the side panel 19, by the creases 46 and 47 are end flaps 49 and 50, respectively, preferably identical to the end flaps 33 and 34. In particular the flap 49 has outer and inner side edges 51 and 52 which converge from the adjacent ends of the edge 45 and crease 13 toward the free end edge 53 of the flap, the inner side edge 52 being formed with a notch or cut-out portion 54 adjacent to the free flap end. The flap 50 is similarly formed with outer and inner side edges 55 and 56 converging from the adjacent ends of the panel edge 45 and crease 13 toward the free end edge 57 of the flap 50. The inner side edge 56 is also formed with a cut-out or notch 58 adjacent to the free end of the flap 50.

Extending longitudinally outwards from opposite ends of the central panel 11 are a pair of intermediate panels 62 and 63, both of generally trapezoidal configuration. The intermediate panel 62 includes side edges 64 and 65 which diverge outwards from adjacent ends of the creases 13 and 12, respectively, and terminate at opposite ends of a crease or fold line 66 which is disposed parallel to the crease 14.

Formed in the central panel 11 and intermediate panel 62 is a three-sided, generally U-shaped cut or severance 67. That is, the cut includes a relatively long, laterally extending medial portion formed in the central panel and terminating short of the creases 12 and 13, and further includes transverse portions or legs 68 and 69 extending from opposite ends of the medial cut portion across the crease 14 and into the intermediate panel 62. The crease 14 is preferably discontinuous between the legs 68 and 69 of the cut 67, so as to form an extension 70 on one edge of the intermediate panel 62, which extension enters into one end of the central panel 11 when the blank 10 is in its flat condition.

Hingedly connected by the fold line 66 to the intermediate end panel 62, is a terminal panel 73 of a configuration generally congruent to that of the intermediate panel. Hence, the terminal panel 73 is generally trapezoidal, having its free edge 74 parallel to the fold line 66, and its side edges 75 and 76 converging from opposite ends of the crease 66 to opposite ends of the edge 74. Formed on the edge 74 of the terminal panel 73, medially thereof, so as to be in substantial alinement with the extension 70, is a similar, rectangularly shaped extension 77.

The intermediate panel 63 is substantially identical to the intermediate panel 62, and has outwardly diverging side edges 80 and 81 which terminate at opposite ends of a fold line or crease 82 parallel to the fold line 15. Further, a laterally extending, three-sided cut or severence line 83 is formed in the intermediate panel 63 and adjacent end portion of the central panel 11. The cut 83 is spaced between the side creases 12 and 13 and interrupts the crease 15 to define an extension 84 on the intermediate panel entering into the central panel when the blank is in its flat condition, substantially the same as described hereinbefore in connection with the extension 70.

A second terminal panel 87 is hingedly connected to the intermediate panel 63 by the crease 82 and is substantially congruent to the latter panel. Hence, the terminal panel 87 is substantially identical to the terminal panel 73, and includes side edges 88 and 89 converging from opposite ends of the crease 82 to opposite ends of the free end edge 90, which is parallel to the latter crease. A generally rectangular extension or tab 91 is formed on the free edge 90 of the terminal panel 87, spaced intermediate the side edges 88 and 89 and in substantial alinement with the extension 84.

A pair of blanks generally designated 94 and 95, also adapted to be fabricated of foldable, self-sustaining sheet material such as paper board or the like, are also illustrated in Fig. 1 and adapted to be formed into support members or rockers for use in conjunction with the container of the present invention. As the rocker blanks are preferably identical in construction, a detailed description of one will suffice. The rocker blank 94 is generally elongated in configuration, and formed with a fold line or crease 96 extending along the longitudinal center line of the blank. Opposite side edges 97 and 98 of the rocker blank are preferably both convexly arcuate in configuration and symmetrical about the center crease 96. A pair of spaced apertures or openings 99 and 100 are formed in the blank 94, each extending transversely across and being symmetrical about the center crease 96. Further, the cut-outs 99 and 100 are preferably of congruent configuration and equally spaced from opposite ends of the blank 94, so as to define a centrally disposed blank portion 101 between the openings, and end portions 108 and 109 outwardly of the openings 99 and 100, respectively. The openings 99 and 100 are generally of rectangular configuration, and each formed with a notch as at 102 and 103 extending into the blank portion 101 intermediate the openings. Also, the outer edges 105 and 106 of the openings are shaped to form a relatively wide V, all for purposes appearing presently.

In order to erect or set up the container generally designated 110 in Figs. 2, 3 and 4, from the blank 10 of Fig. 1, it is first necessary to bend the side panels 18 and 19 upwards with respect to the central panel 11 along the creases 12 and 13, respectively, after which the side wall end flaps 33, 34, 49 and 50 are bent transversely inwards about their respective fold lines. That is, the end flaps 33 and 49 are bent to extend toward each other in substantial alinement with the crease 14, while the end flaps 34 and 50 extend toward each other in substantial alinement with the crease 15. This condition is best seen in Fig. 7.

The intermediate panels 62 and 63 are then bent upwards about their respective hinged connections 14 and 15 so as to be disposed exteriorly of the adjacent pair of inwardly bent end flaps. The extensions 70 and 84 on the intermediate panel 62 and 63 will then swing downwards from the plane of the central panel 11 and depend from the intermediate panels below the central panel. Further, swinging movement of the extensions 70 and 84 to their depending positions leaves openings or cut-outs 71 and 72 formed in opposite ends of the central panel 11, see Fig. 4.

The terminal panels 73 and 87 are then bent inwards, toward each other, about the creases 66 and 82 over the outer or upper edges of the end flaps so as to be disposed interiorly of the latter. As best seen in Fig. 7, the terminal panel 87 is swung inwards and disposed interiorly of the end flaps 34 and 50, so that the upper edges 39 and 55 of the end flaps are engageable with the crease or hinged connection 82 of the terminal and intermediate panels 87 and 63. This will of course hold the end flaps in position and retain the side panels in their upstanding condition. In order to secure the terminal panels 73 and 87 in their inwardly swung position, the extensions 77 and 91 are inserted through the cut-outs 71 and 72 and positively retained therein.

It will now be seen that the central or main panel **11** of the blank **10** forms the bottom wall of the container **110**, and the side panels **18** and **19** serve to provide side walls extending upwards from opposite sides of the bottom wall, while the intermediate panels **62** and **63** each combine with the adjacent terminal panels **78** and **87**, respectively, to provide end walls extending upwards from opposite ends of the bottom wall. More particularly, the intermediate panels **62** and **63** are disposed exteriorly to define outer end panels, and the terminal panels **73** and **87** are disposed interiorly to define inner end panels. Similarly, the intermediate panel extensions **70** and **84** are disposed outwards of the terminal panel extension **77** and **91**.

The additional panel **26** is of course swingable into and out of covering relation with respect to the bottom wall **11**, as seen in Fig. 3, to define a top wall for the container **110**, and the flap **30** is removably insertable into snug frictional engagement with the inner surface of the side wall **19**. In this condition, the container **110** is well adapted to serve as a shipping and storage container for various articles, such as dolls and the like, to completely protect the contained articles and retain its sturdy construction and attractive appearance throughout the period of its normal container function.

The rocker blanks **94** and **95** may then be incorporated with the container **110** to transform the latter into a device for use in conjunction with the contained article, such as the cradle **112** illustrated in Figs. 5–8 of the drawings. The top wall **26**, along with the flap **30**, and adjacent portion of the side wall **18**, are preferably separated from the container **110** along the perforated line **23** and crease **22**, so that the side wall **18'**, remaining after removal of the top wall, is substantially identical to the side wall **19**.

Each of the rocker blanks **94** and **95** is folded or doubled upon itself, along its respective center line crease, as the crease **96** of the blank **94**. The arcuate side edges **97** and **98** of the blank **94** are thus brought into substantial contiguity along their entire lengths, while the blank portion **101** between the openings **99** and **100** forms a tab or tongue extending away from the arcuate longitudinal edges. As best seen in Fig. 2, the notches **103** and **104** of the rocker blank **94** serve to chamfer or bevel the end corners of the tab **101**.

The end portions **108** and **109** of the rocker blank also define tabs or tongues extending upwards or away from the arcuate edges **97** and **98** when the rocker blank is in its folded condition. As the rocker blank **95** and the rocker formed thereby are identical to the blank **94** and its rocker, a description of the latter is believed to be sufficient.

To combine the rockers with the container, it is only necessary to insert the medial or center tab of each rocker, as the tab **101** of the rocker **94**, upwards between the depending extensions of each pair of inner and outer end panels. Thus, the tab **101** of the rocker **94** is inserted upwards between the depending extensions **84** and **91** of the outer and inner end panels **63** and **87**. That is, the tab **101** is inserted upwards through the cut-out **72** between the extensions **84** and **91**, the insertion being facilitated by the beveled tab corners, as defined by the notches **103** and **104**. It will be observed in Fig. 7 that the tab **101** is received in the notches **42** and **58** of the end flaps **34** and **50**, so that the tab may be of substantial length for better securement between the inner and outer end panels **87** and **63**. As the folded rocker blank will tend, at least partially, to resume its initial, flat condition, the overlying or folded portions of the tab **101** will thus frictionally engage with the facing surfaces of the inner and outer end panels **87** and **63**, which action further increases firm retention of the tab **101** in the cut-out **72**.

As the upwardly extending end portions **108** and **109** of the rocker **94** are disposed beyond the side walls **18'** and **19**, it is desirable to reinforce or strengthen the rocker in its longitudinal direction. This is simply and effectively

accomplished by the V-shaped bounding edges **105** and **106** of the openings **99** and **100**, which edges snugly engage with the side edges **80** and **81** of the outer end panel **63** when the tab **101** is fully inserted between the depending extensions **84** and **91**. By this construction, bending or deflection of the laterally spaced rocker end portions or extensions **108** and **109** is effectively prevented. Of course, the rocker blank **95** is folded and assembled in the same manner as the rocker blank **94**, with its medial or center tab inserted upwards between the depending extensions **70** and **77**.

It will be noted that in the assembled condition of carton **110**, the end edges of side walls **18** and **19** extend laterally outwardly of the outer end walls **62** and **63**. Accordingly, when the bounding edges **105** and **106** of the openings **99** and **100** frictionally engage the side edges **80** and **81** of the outer end panel **63**, the inner faces of the wings **108** and **109** abut the respective end edges of the side walls **18** and **19**. This serves to brace the wings **108** and **109**, and contributes additionnal rigidity to the combined carton and rocker structure.

From the foregoing, it is seen that the present invention provides a container construction which fully accomplishes its intended objects, and which is well adapted to meet practical conditions of manufacture and use.

Although the present invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications may be made within the spirit of the invention and scope of the appended claims.

I claim:

1. In combination, a shipping carton and a pair of support elements for assembly with said carton to convert it into a cradle or the like, said carton being formed from a unitary blank which is cut, scored and folded to define a bottom wall and side and end walls connected to said bottom wall, said carton having laterally extending slots in said bottom wall adjacent the respective end edges thereof, each said support element comprising registering support walls hingedly connected at their top edges, the hinge connection of said support walls being such as to urge them away from each other, the bottom of said support element being convex, said support element having a pair of cut-outs extending downwardly from its top edge to divide its upper portion into a central tab portion and a pair of side wings spaced from said central tab portion, each said tab portion being frictionally positioned within a respective slot with said support element extending laterally, the lower edges of said cut-outs abutting the bottom edge of said end wall, the proximate side edges of said wings respectively frictionally abutting the side edges of said end wall.

2. A combination in accordance with claim 1, said carton also having a cover hingedly connected to one of said side walls, said cover being perforated adjacent the side wall to which it is connected to facilitate separation of said cover from said carton during its conversion into a cradle or the like.

3. In combination, a carton container comprising a generally rectangular bottom wall, side walls respectively hingedly connected to the side edges of said bottom wall, end flaps respectively hingedly connected to the end edges of said side walls, outer end walls respectively hingedly connected to the end edges of said bottom wall and respectively located outwardly of said end flaps, and inner end walls respectively hingedly connected to the top edges of said outer end walls and respectively located inwardly of said outer end walls, said bottom wall having a pair of lateral slots at the end edges thereof, said inner end walls respectively having tab extensions at the lower edges thereof which are frictionally positioned within respective slots, said end flaps being held frictionally between said inner and outer end walls, and a pair of laterally extending end rockers, each said end rocker

comprising registering rocker walls hingedly connected at their top edges, the hinge connection of said rocker walls being such as to urge them away from each other, the bottom of said end rocker being convex, said end rocker having a pair of cut-outs extending downwardly from its top edge to divide its upper portion into a central tab portion and a pair of side wings spaced from said central tab portion, each said tab portion being adapted to be frictionally positioned within a respective slot, said end flaps being cut away so as to permit said tab portion to be frictionally interfitted between said inner and outer end walls with the lower edges of said cut-outs abutting the bottom edge of said outer end wall, the proximate side edges of said wings respectively frictionally abutting the side edges of said outer end wall, the inner faces of said wings respectively abutting respective end edges of said side walls.

4. In combination, a carton container comprising a generally rectangular bottom wall, side walls respectively hingedly connected to the side edges of said bottom wall, end flaps respectively hingedly connected to the end edges of said side walls, outer end walls respectively hingedly connected to the end edges of said bottom wall and respectively located outwardly of said end flaps, and inner end walls respectively hingedly connected to the top edges of said outer end walls and respectively located inwardly of said outer end walls, said bottom wall having a pair of lateral slots at the end edges thereof, said inner end walls respectively having tab extensions at the lower edges thereof which are frictionally positioned within respective slots, said end flaps being held frictionally between said inner and outer end walls, and a pair of laterally extending end support elements, each said support element having an upstanding central tab adapted to be frictionally inserted within a respective slot, said end flaps being cut away so as to permit said central tab to be frictionally interfitted between said inner and outer end walls with the upper edge of the main portion of said support element abutting the bottom edge of said outer end wall.

5. A combination in accordance with claim 4, each said support element having upstanding side tabs which are spaced from said central tab and which are respectively adapted to frictionally abut the respective side edges of said outer end wall, the inner faces of said side tabs respectively abutting end edges of said side walls.

6. A combination in accordance with claim 5, said carton also having a cover hingedly connected to one of said side walls, said cover being perforated adjacent the side wall to which it is connected to facilitate separation of said cover from said carton during its conversion into a cradle or the like.

7. In combination with a carton blank having a bottom panel with lateral end slots, proximate end panels respectively hingedly connected to the ends of said bottom panel, remote end panels hingedly connected to the outer edges of said proximate end panels and having outer tongue extensions, said blank being adapted to be folded to erect the end panels, position the remote end panels inwardly of the proximate end panels and dispose the tongues frictionally within the respective slots, a pair of rocker blanks, each said rocker blank having a central hinge line to divide it into panels which are adapted to be placed in registration by folding of said blank along its hinge line, the side edges of said panels being convex, said blank having a pair of cut-outs which are spaced in the direction of length of said hinge line and which extend across said hinge line so as to divide said blank into a central portion located between said cut-outs and end portions located outwardly of said cut-outs, said central portion being sized to permit its frictional insertion within a respective slot and between said proximate and remote end panels upon folding of said rocker blank on its hinge line, said end portions being then adapted to frictionally abut the sides of said end panels when said tongues are inserted in said slots.

8. In combination, a carton container comprising a generally rectangular bottom wall, side walls and outer end walls respectively hingedly connected to the respective side and end edges of said bottom wall, inner end walls respectively hingedly connected to the top edges of said outer end walls and respectively located inwardly of said outer end walls, said bottom wall having a pair of lateral slots at the respective end edges thereof, said inner end walls respectively having tab extensions at the lower edges thereof which are frictionally positioned within respective slots, and a pair of laterally extending end support elements, each said support element having an upstanding central tab adapted to be frictionally inserted within a respective slot and between said inner and outer end walls with the upper edge of the main portion of said support element abutting the bottom edge of said outer end wall.

9. A combination in accordance with claim 8, each said support element having upstanding side tabs which are spaced from said central tab and which are respectively adapted to frictionally abut the respective side edges of said outer end wall, the inner faces of said side tabs respectively abutting end edges of said side walls.

10. A combination in accordance with claim 9, said carton also having a cover hingedly connected to one of said side walls, said cover being perforated adjacent the side wall to which it is connected to facilitate separation of said cover from said carton during its conversion into a cradle or the like.

11. In combination, a carton container comprising a generally rectangular bottom wall, side and outer end walls respectively hingedly connected to the respective side and end edges of said bottom wall, and inner end walls respectively hingedly connected to the top edges of said outer end walls and respectively located inwardly of said outer end walls, said inner end walls respectively having tab extensions at the lower edges thereof which are frictionally positioned within respective slots, and a pair of laterally extending rockers, each said end rocker comprising registering rocker walls hingedly connected at their top edges, the hinge connection of said rocker walls being such as to urge them away from each other, the bottom of said end rocker being convex, said end rocker having a pair of cut-outs extending downwardly from its top edge to divide its upper portion into a central tab portion and a pair of side wings spaced from said central tab portion, each said tab portion being adapted to be frictionally positioned within a respective slot and between said inner and outer end walls with the lower edges of said cut-outs abutting the bottom edge of said outer end walls, the proximate side edges of said wings respectively frictionally abutting the side edges of said outer end wall, the inner faces of said wings respectively abutting respective end edges of said side walls.

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