The invention, in general, relates to foldable boxes and more particularly relates to an improved readily assembled carton capable of carrying fragile and perishable merchandise without likelihood of loss thereof or damage thereto, as well as capable at all times of effectively displaying the merchandise.

While my present invention is entirely suitable for adaptation to the distribution of a wide variety of items of merchandise, such as fruits or vegetables or like foods, the present embodiment of the invention has been especially devised for carrying, distributing and displaying cut flowers, corgases and the like, and, accordingly, for purposes of explanation is illustrated and described in that environment.

One of the principal problems confronting florists, especially wholesalers, in connection with the distribution of their fragile and often rapid perishable merchandise, is to avoid or minimize loss or damage. A corollary problem, of course, is that of retention of the custom and goodwill of their patrons who to a large extent are retailers. Heretofore, cut flowers including corgases have been put up in make-shift boxes and often are packaged only in enveloping thin paper. Such make-shift containers not only are highly unsatisfactory from an aesthetic standpoint, but are deleterious to the merchandise since it reaches its destination often in a wilted or otherwise damaged condition unfit for re-sale or display. The present invention is directed to the provision of a highly efficacious carton which obviates inherent disadvantages of prior containers and possesses the added features of inexpensive production yet durability under all shipping and distribution conditions.

A primary object of the present invention is to provide a cradle type carton for carrying and distributing fragile merchandise which affords substantial continuous display of the contents during shipment and which enables the display at its destination of fresh, attractive merchandise.

Another object of my invention is to provide an improved cradle type carton of the indicated nature which is additionally characterized by its ready conversion for alternative forms of display of its contents; which affords air circulation around the merchandise to maintain the same in fresh, wholesome and saleable condition; and which is readily assembled initially in desired forms for display of the merchandise.

A still further object of my present invention is to provide an improved cradle type carton especially adaptable to the distribution of such fragile merchandise as cut flowers, corgases and the like, which is inexpensive to manufacture yet durable for meeting and withstanding severe distribution handling.

Other objects of the invention, together with some of the advantageous features thereof, will appear from the following description of a preferred and a modified embodiment of the invention which are illustrated in the accompanying drawings. It is to be understood that I am not to be limited to the precise embodiments shown, nor to the precise arrangement of the various parts thereof, as my invention, as defined in the appended claims, can be embodied in a plurality and variety of forms.

Referring to the drawings:

Fig. 1 is a perspective view of a preferred embodiment of the invention as assembled for one type or form for display of contained merchandise.

Fig. 2 is another perspective view of the preferred embodiment of the invention, as assembled for a different form for display of merchandise.

Fig. 3 is a perspective view of the preferred embodiment of the invention in folded state for shipment prior to use for distribution of merchandise.

Fig. 4 is a development or plan view of the preferred embodiment of the invention in unfolded and unassembled condition.

Fig. 5 is an inverted perspective view of a modified embodiment of the invention.

In its preferred form, the improved cradle type carton of my present invention preferably comprises a sheet of bendable material of greater length than width; said sheet having a first and second pair of fold lines therein upon which the sheet may be bent to define a pair of bottom panels and a pair of end panels; said sheet having a third pair of fold lines therein within said end panels to define a cradle lengthwise of the carton when said sheet is folded on said third pair of fold lines, and said sheet being severed longitudinally adjacent to its lateral edges between said third pair of fold lines to define a pair of top strips and an open top as well as a hinged panel on the carton when the sheet is folded and assembled.

As particularly illustrated in Fig. 4 of the annexed drawings, I provide a blank or planar sheet 11 which may be fabricated from any suitable bendable material, such as cardboard, and which preferably is cut to a greater length than width. The longitudinal extremities of the blank 11 are provided with an adhesive 12 so that upon folding of the sheet the ends 13 and 14 thereof can be overlapped and joined together by means of such adhesive.

In accordance with the present invention the sheet 11 is formed with a first pair of transverse fold lines 16 and 17 extending from side 18 to side 19 of the blank, the fold lines 16 and 17 being arranged in spaced relationship and adjacent to the opposite ends of the sheet so as to define a pair of bottom panels 21 and 22 when the sheet is folded on the lines 16 and 17. Moreover, I form the sheet 11 with a second pair of transverse fold lines 23 and 24 adjacent to the center of the blank or sheet 11 and extending from side to side of the sheet, such fold lines 23 and 24, together with the fold lines 16 and 17, serving to define a pair of end panels 26 and 27 of the carton when sheet 11 is folded on such two pairs of fold lines.

To provide a cradle within the carton, I also form the sheet 11 with a third pair of transversely extending fold lines 28 and 29 extending partially across the sheet and lying within the end panels 26 and 27, the fold line 28 terminating at points 31 and 32 and the fold line 29 terminating at points 33 and 34 adjacent to the lateral extremities of the sheet. In addition, the sheet 11 is severed longitudinally between the termini of the fold lines 28 and 29, or from points 31 and 33 of the fold lines 28 and 29, respectively, as well as between points 32 and 34 of the fold lines 28 and 29 respectively, thus defining a hinged strip 36 between the fold lines 28 and 29 which constitute the cradle. Then the sheet 11 is folded on such fold lines 28 and 29. The folded blank 11 also affords a pair of top strips 37 and 38 and an otherwise open top 39 for the assembled carton.

With the sheet or blank 11 formed and severed as here-
in above described, the same may be folded first on the fold lines 16 and 17 and then on fold lines 23 and 24 to bring the bottom panels 21 and 22 into overlapping relationship, where they are secured together by adhesives 12, and to bring the end panels 26 and 27 into right angle relationship to the bottom panels 21 and 22 as well as the top strips 37 and 38 at right angles to the end panels and parallel to the bottom panels, this folding and assembly being illustrated in Figs. 1 and 2 of the annexed drawings. Thereafter, should it be desired to display a cut flower, such as an orchid, or a corsage, all not shown; on an incline for purposes of attractive display of a single flower or a single unit, such as the corsage, it is only necessary to fold the strip 36 on the portions 25' and 24' of the transverse fold lines 23 and 24 of the blank, in opposite directions of folding, to present the strip 36 on an incline, as illustrated in Fig. 1. In this assembly, the inclined strip 36 serves as a support for a single flower or single unit flower arrangement.

Should it be desired to arrange the flowers so as to lie wholly within the carton and upon the bottom thereof, without likelihood of damage thereto in transit, the central strip 36 can be disposed adjacent to the bottom strips 21 and 22 of the carton in overlying relationship thereto by folding the sheet 11 on the intermediate fold lines 20 and 21 of folding. By such arrangement and folding, the cradle defined by the fold lines 28 and 29, extending lengthwise of the carton and designated by the reference characters A, B, see Fig. 2, will be afforded for receiving the stems of the flowers and supporting the same, without avoidance of petals and blossoms. Due to the severance of the blank 11 adjacent to its lateral extremities, and the provision of substantially the open top 39, it is apparent that flowers can readily be lowered either onto the inclined strip 36, as shown in Fig. 1 from the top of the carton or lowered onto the horizontally disposed strip 36 when assembled as shown in Fig. 2, through the open top, with the extended stems of the flowers resting on the cradle A, B.

A slightly modified embodiment of the invention is shown in inverse perspective in Fig. 5 of the annexed drawings. This modification is provided with tongues 41 and 42 on the longitudinal ends of the blank 11, in lieu of the adhesive 12, whereby the bottom panels 21 and 22 of the formed and assembled carton can be joined together by interlocking of the tongues 41 and 42.

The foldable carton of the preferred and modified embodiments of the present invention, as illustrated and described affords a cradle AB having its greater length longitudinally of the assembled carton with the bed of the cradle adjustable by virtue of the hinged strip 36 which is integral with the end panels 26 and 27 and hingedly joins such panels at the second pair of fold lines 23 and 24. The adjustability of the strip 36 or bed of the cradle AB is two fold in that in addition to affording foldability the strip on fold lines 23 and 24, the bed of the cradle or strip 36 is foldable on the third pair of fold lines 28 and 29 thus enabling the adjustment of the bed of the cradle, or strip 36, to inclined positions wherein either end of the strip 36 may be elevated with respect to its opposite end, or the entire bed of the cradle may be adjusted on the two pairs of fold lines above mentioned, so that the strip 36 will be disposed horizontally or parallel to the bottom panel of the set-up carton. Accordingly, single cut flowers, or a corsage or the like can be placed on the cradle at an incline or laid flat on the bed of the cradle with the stems and petals of the flower or flowers resting on the ends of the cradle AB elevated from the bottom panel.

Being being fabricated of relatively inexpensive material, and provided with fold lines, as indicated, as well as severed longitudinally to afford the substantially open top for the carton when the blank is folded upon itself, can be manufactured inexpensively in volume. To minimize the space required for shipping the blanks 11, and thus utilize all available space for larger quantity shipments thereof, the blanks can be partially folded, in flat form, as illustrated in Fig. 3 and stacked upon each other in bulk or in larger packages. The simplicity of setting up the carton from the partially folded blank eliminates the need for assembly instructions, and it is optional whether the carton be utilized in the forms shown in Fig. 1 or Fig. 2 or other folded state.

It is to be understood that the appended claims are to be accorded a range of equivalents commensurate in scope with the advance made over the prior art.

1. A cradle type foldable carton comprising a sheet, a first pair of transverse fold lines in said sheet arranged in spaced relationship adjacent to opposite longitudinal extremities thereof, a second pair of transverse fold lines in said sheet arranged in spaced relationship on opposite sides of the longitudinal center of said sheet; folding of said sheet on said first and second pair of fold lines defining a bottom panel and two end panels of the carton, and a third pair of fold lines extending partially across said sheet; one of said third pair of fold lines lying within in one end panel and the other of said pair of fold lines lying within the other end panel of the carton; said sheet being slitted longitudinally adjacent the sides of said sheet between the termini of said third pair of fold lines to define a cradle hingedly connected to and spanning said end panels; said cradle being adjustable for placement on an incline with respect to said bottom panel by folding said cradle on one fold line of said second pair of transverse fold lines as well as for placement in parallel relationship to said bottom panel by folding said cradle on both of said second pair of transverse fold lines.

2. A cradle type foldable carton comprising a sheet foldable upon itself to define a bottom panel and a pair of end panels, and a pair of longitudinally extending slits in said sheet between said end panels adjacent the sides of the sheet defining a hinged strip serving as the bed of a cradle, hinges connecting said cradle to said end panels; a pair of fold lines intermediate the ends of said cradle; said cradle being adapted to be adjusted for disposal at an incline with respect to said bottom panel by folding the cradle on one of said fold lines as well as for disposal in parallel relationship to said bottom panel by folding said cradle on both of said fold lines.

3. A cradle type foldable carton comprising a sheet foldable upon itself to define a pair of bottom panels and a pair of end panels, tongues on said bottom panels for detachably interlocking said bottom panels with another to define a single continuous bottom panel, and a strip hingedly connected to and between said end panels, a pair of fold lines in said strip to permit adjustment of said strip to an incline position with respect to said single continuous bottom panel and to a position substantially parallel to said single continuous bottom panel to cradle on said strip merchandise retained in the carton at desired positions.

4. A cradle type foldable carton comprising a sheet foldable upon itself to define a bottom panel and a pair of end panels; said sheet being slitted adjacent to each side thereof between said end panels to define a pair of top strips and said sheet being slitted adjacent to the top for a hinged strip on said sheet extending between said top strips and between said end panels, a pair of transverse fold lines in said strip to permit adjustable placement of said strip at an inclined position with respect to said bottom panel and at a substantially parallel relationship with respect to said bottom panel to cradle merchandise inserted through said open top onto hinged strip.

5. A cradle type foldable carton comprising a sheet foldable upon itself to provide a pair of bottom panels and a pair of end panels, tongues on said bottom panels
for detachably interlocking said bottom panels together, a pair of transverse fold lines in said end panels terminating adjacent to the sides of said sheet, a cradle hingedly connected to said end panels on said fold lines, and a second pair of transverse fold lines in said sheet adjacent to opposite ends of said cradle to enable adjustment of said cradle for inclined disposition and for parallel disposition with respect to said bottom panels.