Dec. 18, 1962 F. B. CHAMBERLIN, JR 3,069,060

CHICK SHIPPING CONTAINER WITH DETACHABLE FEEDER TRAY

Filed July 17, 1961 3 Sheets-Sheet 1

Fig. 1

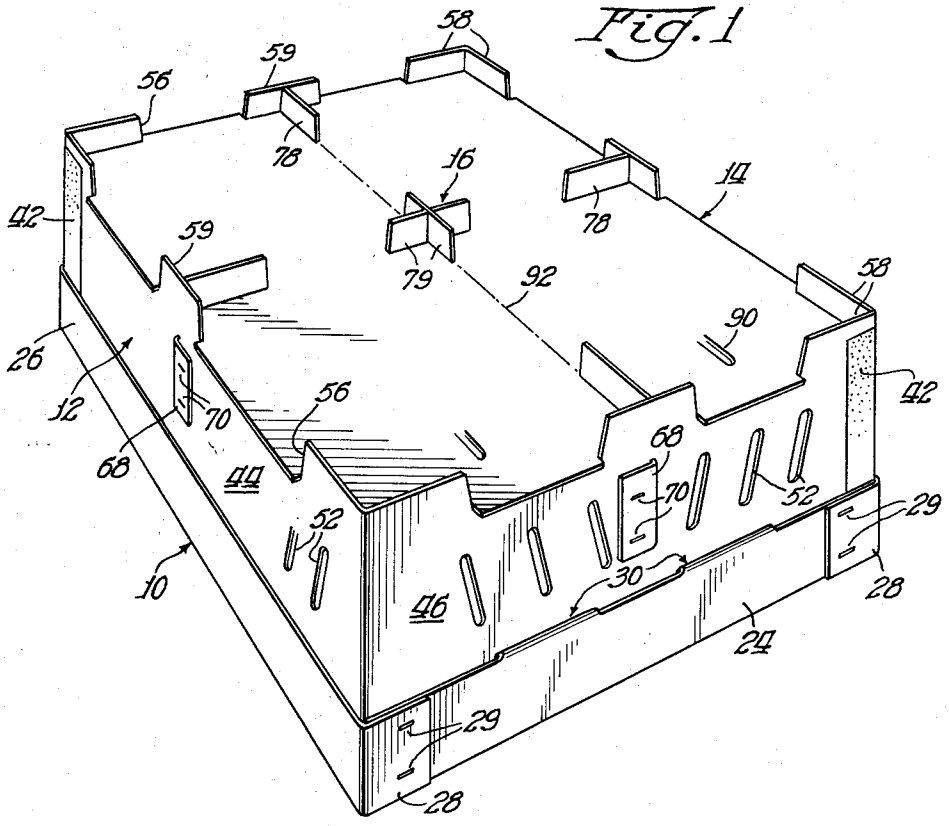
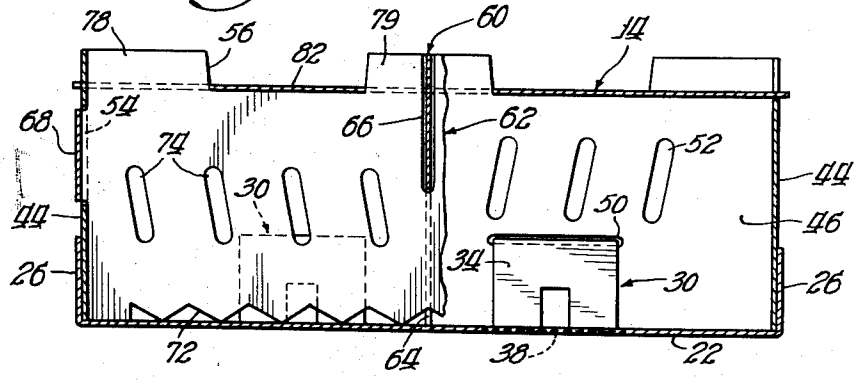



Fig. 4




Inventor:
Frederick B. Chamberlin, Jr.
By: Richard W. Campbell
Atty.

Dec. 18, 1962 F. B. CHAMBERLIN, JR 3,069,060

CHICK SHIPPING CONTAINER WITH DETACHABLE FEEDER TRAY

Filed July 17, 1961

3 Sheets-Sheet 2

Fig. 2

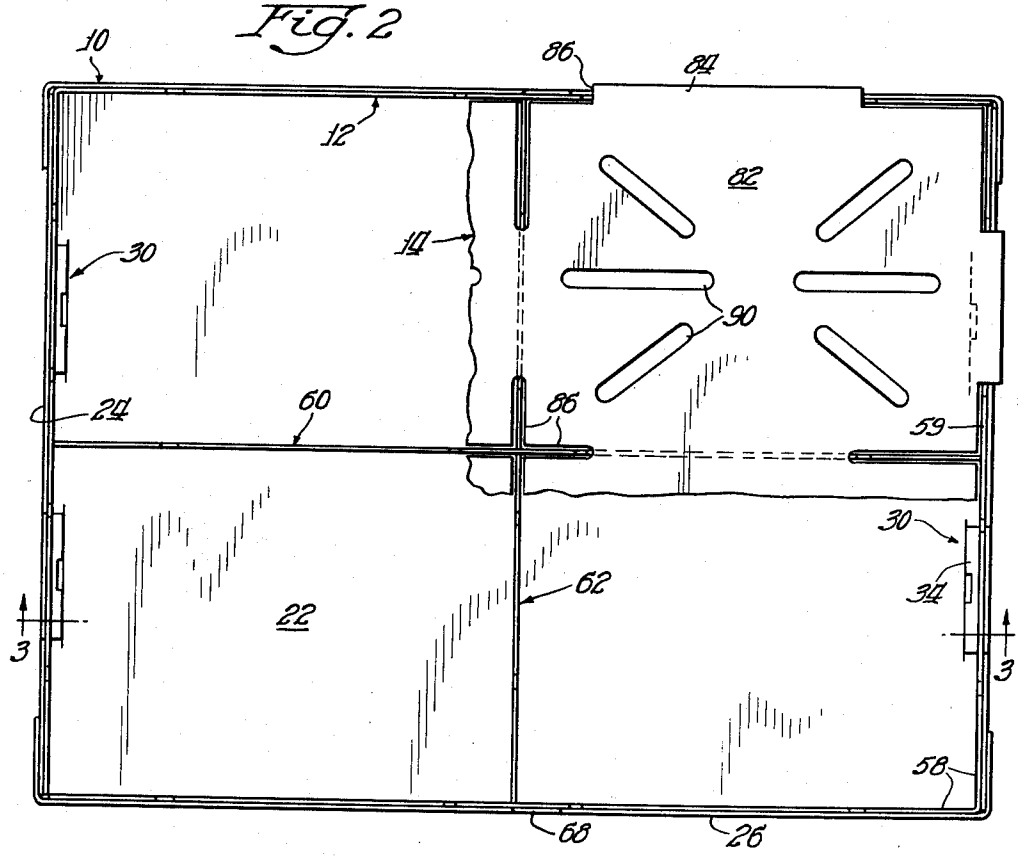
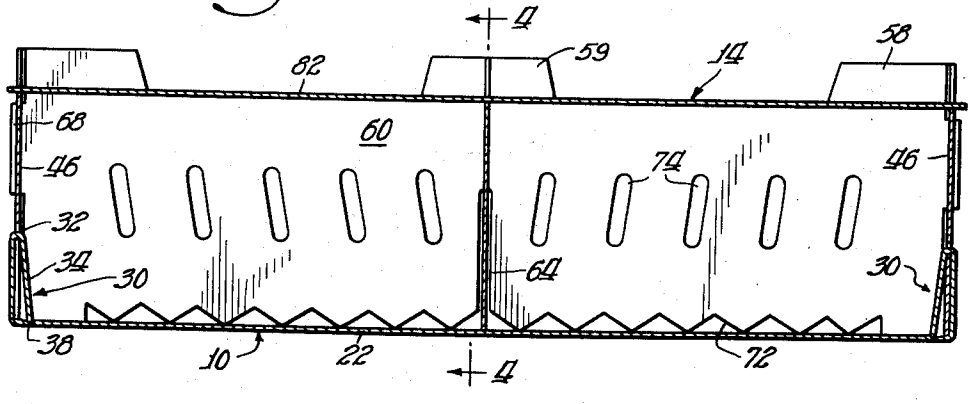



Fig. 3




Inventor:
Frederick B. Chamberlin, Jr.
By: Richard W Carpenter
Atty.

Dec. 18, 1962 F. B. CHAMBERLIN, JR 3,069,060

CHICK SHIPPING CONTAINER WITH DETACHABLE FEEDER TRAY

Filed July 17, 1961 3 Sheets-Sheet 3

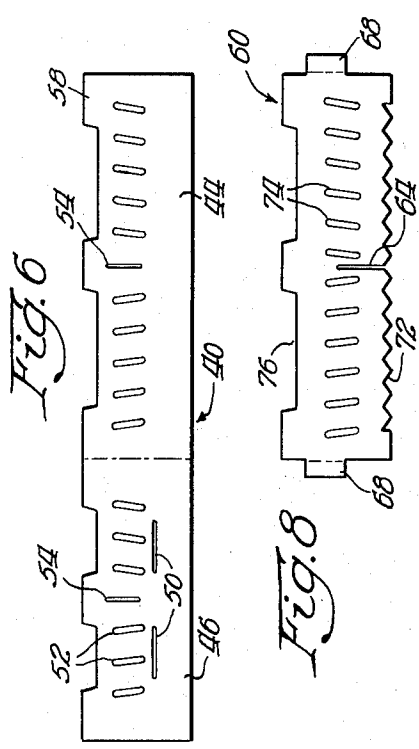



Fig. 6




Fig. 8

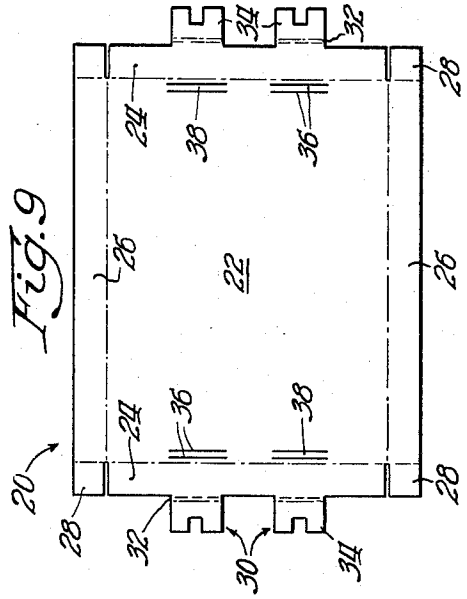



Fig. 9

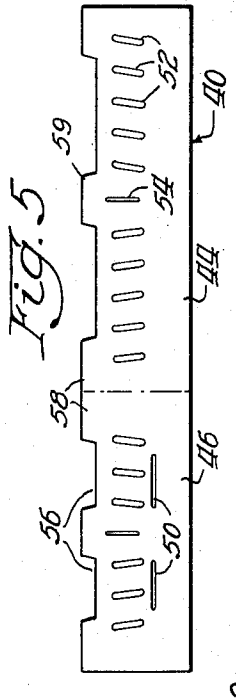



Fig. 5

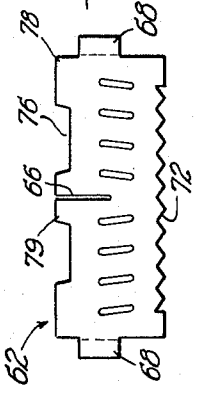



Fig. 7

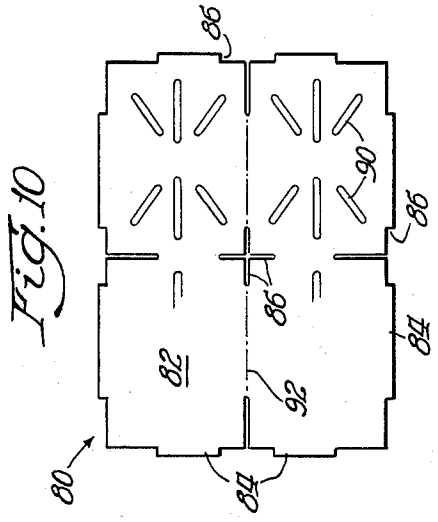



Fig. 10

Inventor:
Frederick B. Chamberlin, Jr.
By: Richard W. Carpenter
Atty

United States Patent Office 3,069,060 Patented Dec. 18, 1962



3,069,060

# CHICK SHIPPING CONTAINER WITH DETACHABLE FEEDER TRAY

Frederick B. Chamberlin, Jr., Portland, Oreg., assignor to Container Corporation of America, Chicago, Ill., a corporation of Delaware

Filed July 17, 1961, Ser. No. 124,513
1 Claim. (Cl. 229—6)

This invention relates to containers of the type employed in the transportation of chicks from hatcheries to the growers.

The invention comprehends a collapsible paperboard shipping container for chicks comprising a reusable body portion and a readily detachable tray portion.

In the past it has been the practice of hatcheries making deliveries of chicks to growers to transport the chicks in various types of containers which, after delivery of the chicks, are returned to the hatchery, fumigated, and then reused.

When the chicks are removed from the containers at the grower, the grower has to be supplied with chick feeder trays, which are only needed for three or four days use thereafter.

It is an object of this invention, therefore, to overcome, in an efficient manner, the problem of furnishing additional chick feeder trays by providing a chick shipping container with a readily detachable tray portion which can be left with the grower for use as a feeder tray, while the remainder of the container is returned to the hatchery for reuse.

A more specific object of the invention is the provision of a paperboard chick shipping container having a tray portion which is readily detachable from the body portion to facilitate its further use as a feeder tray and also the reuse of the body portion in a new chick shipping container.

These and other objects of the invention will be apparent from an examination of the following description and drawings, wherein:

FIGURE 1 is a perspective view of a chick shipping container embodying features of the invention;

FIGURE 2 is a fragmentary top plan view of the container of FIGURE 1 with portions of the structure broken away;

FIGURE 3 is a vertical section taken on line 3—3 of FIGURE 2;

FIGURE 4 is a vertical section on line 4—4 of FIGURE 3;

FIGURES 5 and 6 are side elevational views of the respective sections which comprise the container body of FIGURE 1;

FIGURES 7 and 8 are side elevational views of respective sections which comprise the container partition of FIGURE 1;

FIGURE 9 is a top plan view of the blank from which the tray of the container of FIGURE 1 may be formed; and

FIGURE 10 is a top plan view of the cover of the tray of FIGURE 1.

It will be understood that, for purposes of clarity, certain elements have been intentionally omitted from certain views where they are illustrated to better advantage in other views.

Referring now to the drawings for a better understanding of the invention, and particularly to FIGURE 1, it will be seen that the shipping container arrangement embodying features of the invention comprises a generally rigid tray **10** within which is partially disposed a tubular or sleeve-like collapsible body **12**, having disposed therein and secured thereto a collapsible partition **16**, and having



seated thereon, in interlocking engagement with both the body and the partition, a removable cover **14**.

The tray is preferably rigid in construction and comprises a bottom wall having a plurality of interconnected side walls upstanding therefrom. Referring to FIGURE 9 of the drawings, it will be seen that the tray can be formed from a single blank, indicated generally at **20**, of sheet material such as foldable paperboard. The blank comprises a generally rectangular center panel **22**, which serves as the bottom wall of the tray member of the container, and which has hingedly attached to opposite ends thereof a pair of end panels **24**, which serve as the end walls of the tray, and which has hingedly attached to opposite sides thereof a pair of side panels **26** which serve as the side walls of the tray. Hingedly attached to opposite ends of each side panel **26** are a pair of end closure flaps **28** which may be folded around the corners of the tray and secured to the adjacent end portions of the respective end panels **24** in any desired manner, such as by means of staples **29**.

Still referring to FIGURE 9 of the drawings, it will be seen that each of the tray end panels **24** has hingedly secured to its free or upper edge thereof one or more locking tabs **30**. Each locking tab **30** includes a relatively narrow fold strip **32** hingedly attached at one edge to the related tray end wall panel **24** and having hingedly attached to its opposite edge a locking panel **32**.

Inwardly adjacent the ends of the tray center panel **22** there may be provided, in alignment with each of the respective locking tabs **30**, a pair of transversely extending parallel slits or cuts **36** which define therebetween an opening or depression **38** adapted to receive the free end of the related locking tab in a manner described later in the specification.

The body **12** of the container is a collapsible member of tubular or sleeve-like construction which may be formed from a single blank, or preferably from the pair of related blanks **40** illustrated in FIGURES 5 and 6 in the drawings, which may have their corresponding free ends secured together in any desired manner, as for example by means of tapes **42**, as shown in FIGURE 1 of the drawing. Each of the sections **40** of the body **12** includes a pair of longitudinally and transversely extending panels **44** and **46**, respectively, which are hingedly connected to each other. The transverse panels **46** of the body may be provided with a pair of transversely spaced vertically aligned horizontally extending slots **50** which are so located as to receive the locking tabs **30** of the container tray when the body is placed in position on the tray in a manner hereinafter described.

Both the transverse and longitudinal panels **44** and **46**, respectively, may be provided with a plurality of ventilating slots **52** to permit air to circulate freely through the container. Also, each of the panels of the body sections may be provided with a vertically extending slot **54** disposed in approximately the center of the panel and in vertical alignment with the corresponding slots of the other panels. The purpose of the slots **54** is to receive portions of a partition member which will be described in detail later in the specification.

At their upper edges the longitudinal and transverse panels of the body may be recessed as at **56** to provide raised corner extensions **58** and raised center extensions **59** to afford interlocking engagement between the body member and the cover member in a manner described later in the specification.

If desired the container may be provided with a partition member, indicated generally at **16** which comprises a pair of longitudinally extending and transversely extending panels **60** and **62**, respectively, which are shown in FIGURES 8 and 7 of the drawings. Panels **60** and

62 may be provided intermediate their ends with downwardly and upwardly extending slots 64 and 66, respectively, adapted for mutual engagement with each other to provide interlocking engagement between the two panels and thereby form a semi-rigid, though collapsible, partition member in the body of the container. In order to secure the partition member to the body of the container each of the panels of the partition may be provided at its ends with a pair of outwardly projecting locking tabs 68 hingedly connected to the free edges of the partition panels and adapted to be received through the slots 54 in the adjacent panels of the body of the container in a manner shown in FIGURE 1 of the drawings. After the partition has been placed within the container with its locking tabs projecting through the slots in the body panels the tabs may be bent at 90° angles and secured to the outer surfaces of the respective body panels in full face engagement therewith in any desired manner, as for example by means of the staples 70.

In order to afford additional means of ventilation the panels of the partition may each be provided at their lower edges with a saw-tooth or undulated configuration, as indicated at 72, and also the panels may be provided with a plurality of ventilating slots 74.

The undulated configuration of the partition panel bottom edges not only affords additional ventilation, but even more important, it also serves to reduce the size of the partition bottom edge which rests on the tray so as to minimize the likelihood of the chicks catching their toes between the partition and tray.

The upper edges of the partition panels may also be recessed, as shown at 76, in the same manner as the panels of the body member, and in corresponding locations, to provide raised end and center extensions 78 and 79, respectively.

Referring now to FIGURE 10 of the drawings, it will be seen that the cover member 14 may be provided from a single blank, indicated generally at 80. The blank comprises a generally rectangular flat center panel 82 having projecting from the side and end edges thereof a plurality of co-planar seating flanges or projections 84 which are so located on the cover member as to be in alignment with the recesses 56 of the body panels. Also, the center panel 82 of the cover member may be provided at its sides with inwardly projecting slots 86 which are adapted to receive the end extensions 78 of the partition, and centrally with a pair of intersecting center slots 88 adapted to receive the center extensions 79 of the respective partition panels.

The cover may also be provided with a plurality of slots 90 to afford additional ventilation for the interior of the container.

In order to facilitate collapsibility of the cover it may be provided with a medial longitudinally extending score line 92, so that the cover can be folded in half.

In assembling the container, after the tray has been constructed in a manner previously described, the partition is inserted within the body of the container with its locking tabs 68 extending through the body panel slots 54 and secured to the body panels by means of the staples.

At this point the body is inserted within the tray and the tray locking tabs 30 are inserted through the slots 50 in the transverse or end panels of the tray with the fold strip 32 of each locking tab being disposed within the panel slot, and with the locking panel 34 extending downwardly with its lower extremity received within the related depression 38 in the upper surface of the bottom wall 22 of the tray.

At this point the container can be filled with the chicks, and then the cover member 14 inserted in position with its seating projections 84 received within the related recesses of the longitudinal and transverse panels of the body and with the extensions of the partition received within and extending through the related slots in the cover member, so as to afford interlocking engagement between the cover member and both the body and partition members of the container.

After the containers filled with chicks have been delivered to the growers, the cover and body members may be separated from each other and from the tray and collapsed for return to the hatcheries, while the chicks may be left in the tray member which serve as a feeding tray for the next few days as needed. By virtue of the construction of the body member and partition and the connection therebetween the entire body member with the partition secured thereto can be collapsed, and also the cover member can be folded in half along the score line 92 to provide a compact article for transportation back to the hatcheries for reuse.

I claim:

A combination chick shipping container and feeding tray arrangement formed substantially of foldable paperboard, comprising:

(*a*) a rigid tray member having a bottom wall and a plurality of side walls hinged thereto and upstanding therefrom;

(*b*) a reusable, collapsible, tubular body member, open at the top and bottom, received partially within the tray member and having a plurality of hingedly interconnected side walls co-extensive with and disposed inwardly adjacent corresponding side walls of the tray member; and

(*c*) at least one integral tab hinged to a side wall of the tray member;

(*d*) said tab extending through an opening in a corresponding side wall of the body member and having a free end portion received within an opening in the tray member to provide a detachable interlocking connection between the members.

**References Cited** in the file of this patent

UNITED STATES PATENTS

| | | |
|---|---|---|
| 1,641,974 | Huye | Sept. 13, 1927 |
| 1,994,803 | Atkins | Mar. 19, 1935 |
| 2,618,429 | Donnell | Nov. 18, 1952 |
| 2,814,408 | Zebarth | Nov. 26, 1957 |