Nov. 10, 1931. R. A. GORSUCH 1,831,444

COMBINATION SHIPPING BOX AND FEEDER

Filed Nov. 4, 1930

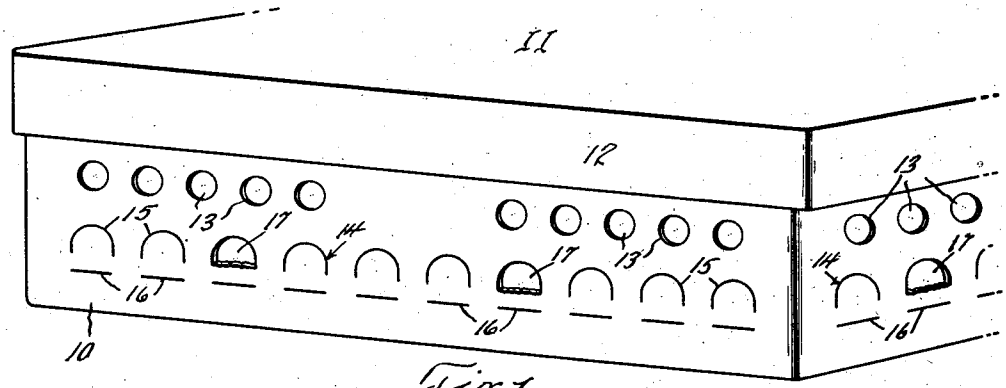

Fig. 1

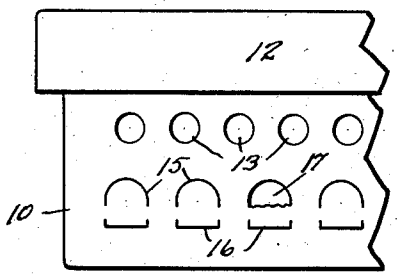

Fig. 2

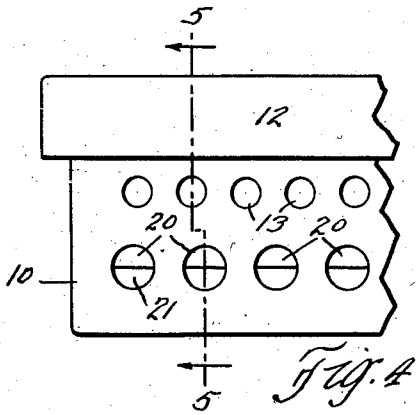

Fig. 4

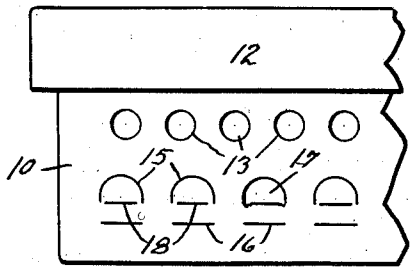

Fig. 3

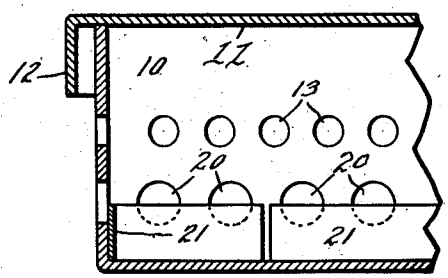

Fig. 5

Inventor

R. A. Gorsuch

By Hull Brock & Swat

Attorney

Patented Nov. 10, 1931 1,831,444

UNITED STATES PATENT OFFICE

ROBERT A. GORSUCH, OF GAMBIER, OHIO, ASSIGNOR TO THE CONGOR MFG. COMPANY, OF GAMBIER, OHIO, A CORPORATION OF OHIO

COMBINATION SHIPPING BOX AND FEEDER

Application filed November 4, 1930. Serial No. 493,311.

This invention relates to a combination shipping box and feeder for baby chicks. In a device of this type it is necessary to provide for ventilation during shipment and for feeding the baby chicks after their arrival at destination. Inasmuch as a large number of chicks are shipped in the same container, it is not feasible to place the food in such container. Openings must therefore be provided in the walls of the box of sufficient size to admit the heads of the chicks so that they may feed from food receptacles outside the shipping box feeder. In the provision of feeding openings means must be provided to prevent during the process of shipment any possibility that the heads of the chicks may be inserted through such openings to the outside of the box, since loss of or injury to the chicks might result.

It is the principal object of my invention to provide a combined shipping box and brooder which shall meet the above requirements, which may be provided at a minimum expense and which affords a maximum of safety against injury to the chicks.

A further object is to provide the feeding openings of such character that they may be partly opened for securing extra ventilation. A further object is to avoid the necessity for employing larger boxes for the same number of chicks in hot weather. Other and more limited objects will appear as the description proceeds.

I attain the foregoing and other objects in and through the constructions, illustrative examples of which are shown in the accompanying drawings in which Fig. 1 is a fragmentary perspective view of a preferred embodiment of my invention; Fig. 2 is a fragmentary elevation of a slightly modified form; Fig. 3 is a similar elevation of a third form; Fig. 4 is a similar elevation of yet another modification; and Fig. 5 is a section on line 5—5 of Fig. 4.

The embodiment of my invention shown in Fig. 1 comprises a shipping box preferably of corrugated paper board and including the usual bottom, upright walls 10 and a cover 11 provided with a depending flange 12. A plurality of small ventilation openings 13 is provided near the upper edge of the upright walls and similar openings may also be provided in the top of the cover 11. Knockout cuts 14 are provided in said upright walls, spaced a convenient distance from the bottom edge thereof and comprising inverted U-shaped slits 15 and straight slits 16 opposite the open end of the U-shaped slits and spaced therefrom. It will be evident from the drawings that during the process of shipment the knockouts within the cuts 14 will close the feeding openings and that when it is desired to use the receptacle for a brooder, these knockouts can be removed by inserting a penknife at the ends of the U-shaped slits and cutting straight downwardly to join the straight slits 16. This construction also affords the possibility of extra ventilation by breaking away the portion of the knockout above the ends of the U-shaped slit as indicated at 17.

In the form shown in Fig. 2 the construction is identical with that shown in Fig. 1 except that the straight slits 16 have upwardly extending right angular portions adapted to provide greater ease in forming the feeding openings and thereby to render possible the removal of the same without the use of a pen knife simply by pushing one finger against the lower edge of the knockout and the other against the upper edge on the opposite side, thereby twisting out the remaining knockout portion.

In the modification of Fig. 3 I provide in addition to the U-shaped slit 15 and straight slit 16 spaced from the ends of the U-shaped slit a shorter slit 18 on a line joining the ends of the arms of the U-shaped slit but being of a length less than the distance between the ends of such arms whereby removal of the upper portion of the knockout for ventilating purposes is facilitated. The use of a portion of the feeding opening for ventilation during transit is a very decided advantage since it renders unnecessary the larger hot-weather shipping box. This may also in certain cases serve to eliminate either some or all the ventilation openings 13.

In the modifications of Figs. 4 and 5 I provide a box identical with those of the other modifications except that circular knockouts 20 are provided for feeding openings and a strip 21 is secured on the inside of the box and partially covers the opening 20. This strip may be in the form of a rectangle which is slipped into the box and held in place by friction or gravity, or it may be a plurality of shorter pieces pasted or glued to the inner wall and adapted for easy removal after shipment to convert the box into a brooder. It will be evident that when the strip or strips 21 cover the lower halves of the openings 20, said openings will not afford egress to the heads of the chicks.

I may, within the contemplation of my invention, provide these shipping boxes and feeders with printed outlines instead of cut outlines whereby the user may form the openings by cutting around the printed outline. While such an embodiment of my invention is not as satisfactory as the other form, it may be justifiable in some cases, due to decreased cost of production. The drawings in this application may be considered to indicate either a cut or printed outline in the case of the modifications of Figs. 1, 2 and 3. Likewise the circular lines 20 of the modification of Fig. 4 may be printed instead of scored or cut and they may indicate either printed or cut outlines.

For the purpose of this specification and disclosure, the term "outline" is to be understood as including printed, scored or cut outlines. The word is also to be understood as including either a completely formed or defined outline or one which is sufficiently nearly complete as to suggest the fully completed form in an unmistakable manner.

While I have illustrated certain preferred embodiments of my invention I wish it understood that I am not limited to the details thereof but that numerous changes in construction may be made within the scope of the appended claims and without departing from the spirit of the invention.

Having thus described my invention, what I claim is:

1. A device of the character described comprising, a box having the usual bottom, upright walls and cover, a series of knock-out cuts formed in one or more of said upright walls near the bottom thereof to form, when the cut-outlined area is removed, openings of a size to admit the head of a chick, said shipping box being provided with means, including at least the top part of one or more of said last-mentioned cut-outlined portions, whereby a series of openings of a size too small to admit the head of a chick may be provided temporarily by a simple knocking-out operation and whereby one or more of said last openings may be enlarged to a size sufficient to admit the head of a chick by the simple operation of removing obstructing means from obstructing relation to the lower portion of said cut-outlined areas.

2. A device of the character described comprising, a box having the usual bottom, upright walls and cover, one or more of said upright walls having formed therein a series of knock-out cuts, each said cut comprising a U-shaped slit and a substantially straight slit opposite the open end of said U and spaced from the ends of the legs thereof.

3. A device of the character described comprising, a box having the usual bottom, upright walls and cover, one or more of said upright walls having formed therein a series of knock-out cuts, each said cut comprising an inverted U-shaped slit and a substantially straight slit opposite the open end of said U and spaced from the ends of the legs thereof.

4. A device of the character described comprising, a box having the usual bottom, upright walls and cover, one or more of said upright walls having formed therein a series of knock-out cuts, each said cut being positioned near the bottom of one of said upright walls, and a strip inside said box extending around said upright walls and removable therefrom, said strip being of such a height as to obstruct portions of said openings when it is in place.

5. A device of the character described comprising, a box having the usual bottom, upright walls and cover, one or more of said upright walls having formed therein near but spaced from the bottom a series of knock-out cuts, each said cut comprising a U-shaped slit and a substantially straight slit opposite the open end of said U and spaced from the ends of the legs thereof.

6. A device of the character described comprising, a box having the usual bottom, upright walls and cover, one or more of said upright walls having formed therein near but spaced from the bottom a series of knock-out cuts, each said cut comprising an inverted U-shaped slit and a substantially straight slit opposite the open end of said U and spaced from the ends of the legs thereof.

7. In a device of the character described, a box having bottom, side walls and cover, and means whereby said box may be conveniently used as a ventilated shipping box and subsequently as a feeding box, said means including an outline defining an opening of a size to admit the head of a chick, said means also being so formed and arranged as to facilitate the provision of an opening within said outline of a size too small to admit the head of a chick.

8. In a device of the character described, a box having bottom, side walls and cover, and means whereby said box may be conveniently used as a ventilated shipping box and subsequently as a feeding box, said means including an outline defining an opening of a

size to admit the head of a chick, said means also being so formed and arranged as to facilitate the provision of an opening within said outline of a size too small to admit the head of a chick, said outline being composed in part of one or more slits.

9. A device of the character described comprising, a box having the usual bottom, upright walls and cover, ventilation knock-out cuts formed in said walls and forming, when the cut-outlined area is removed, openings of a size too small to allow the passage of the head of a chick, a series of knock-out cuts formed in one or more of said upright walls near the bottom thereof and adapted to form, when the cut-outlined area is removed, openings of a size to admit the head of a chick, said shipping box being provided with means, including at least the top part of one or more of said last-mentioned cut-outlined portions, whereby a series of openings of a size too small to admit the head of a chick may be provided temporarily by a simple knocking-out operation and whereby one or more of said last openings may be enlarged to a size sufficient to admit the head of a chick by the simple operation of removing obstructing means from obstructing relation to the lower portion of said cut-outlined areas.

10. A device of the character described comprising, a box having the usual bottom, upright walls and cover, one or more of said upright walls having formed therein a series of knock-out cuts, each said cut being positioned near the bottom of one of said upright walls, and a strip inside said box extending around said upright walls and removable therefrom.

11. In a device of the character described, a box having the usual bottom and side walls and cover and provided in one or more of the side walls with a series of slit outlined areas, each such area being defined by a plurality of separated slits and being of a size when the outlined material is removed to admit the head of a chick.

In testimony whereof, I hereunto affix my signature.

ROBERT A. GORSUCH.