

Jan. 25, 1938.

R. O. BATE

2,106,266

CHICK FEED TROUGH

Filed April 5, 1937

2 Sheets-Sheet 1

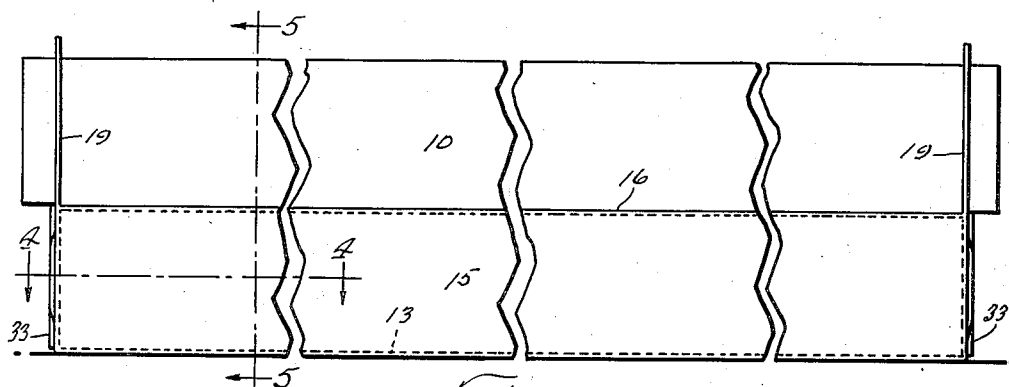


Fig. 1

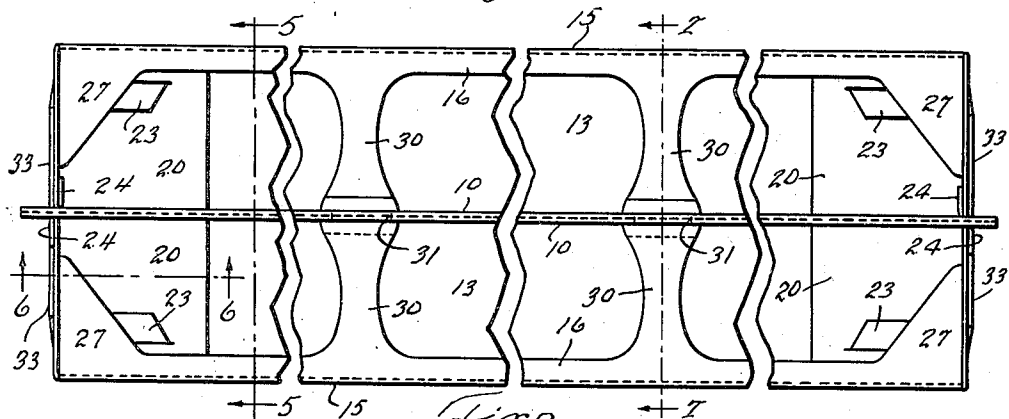


Fig. 2

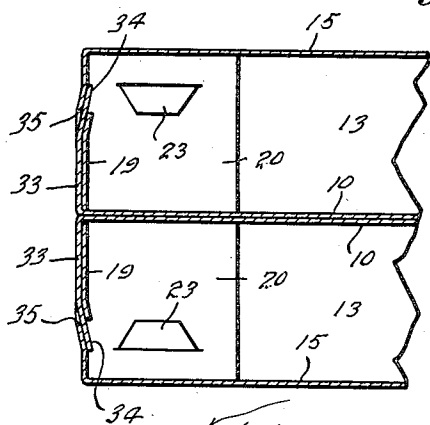


Fig. 4

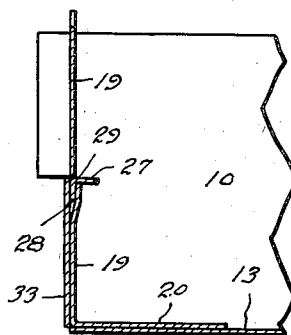


Fig. 6

INVENTOR.

BY R.O. Bate
Hull Brockmeyer

ATTORNEY.

Jan. 25, 1938.

R. O. BATE

2,106,266

CHICK FEED TROUGH

Filed April 5, 1937

2 Sheets-Sheet 2

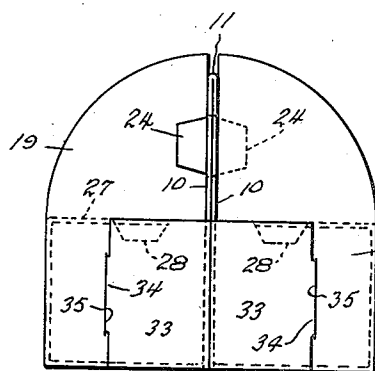


Fig. 3

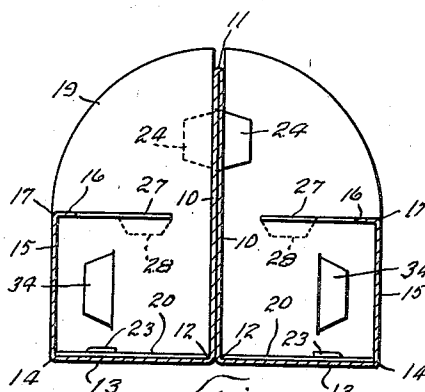


Fig. 5

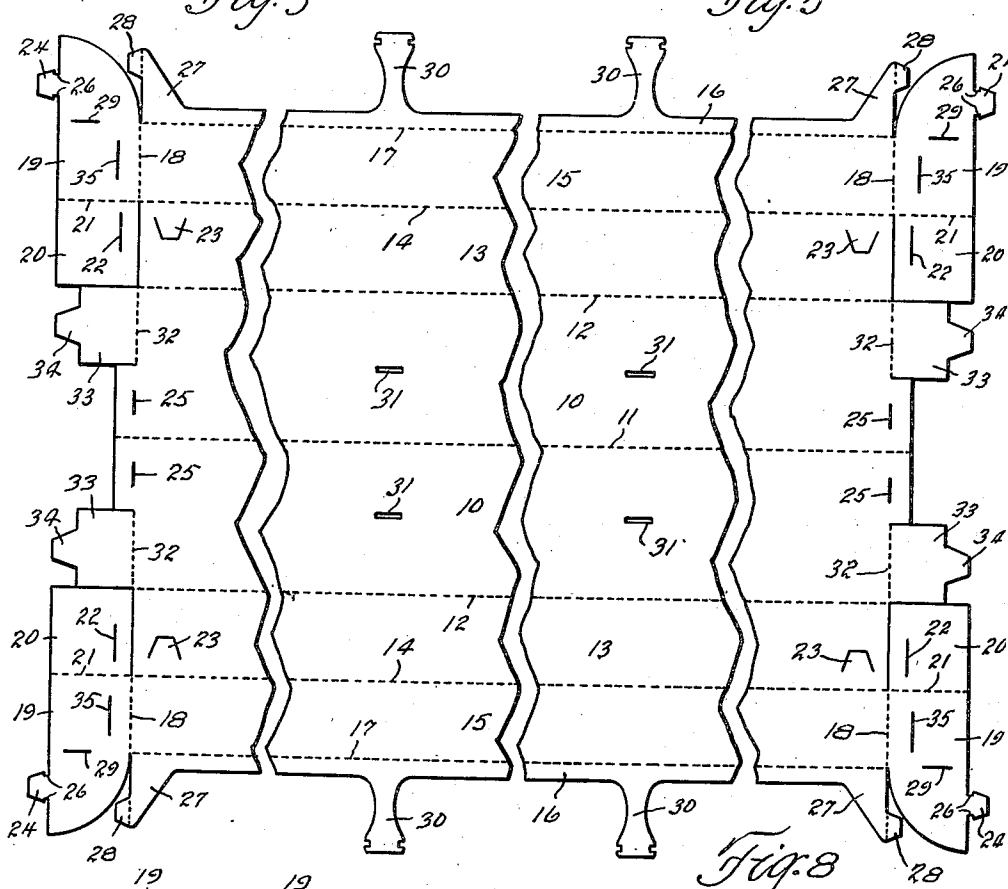


Fig. 8

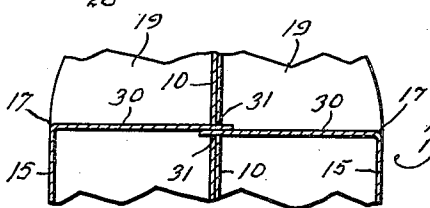


Fig. 7

INVENTOR.

BY *R. O. Bate*
Hull Brockwest
ATTORNEY.

UNITED STATES PATENT OFFICE

2,106,266

CHICK FEED TROUGH

Russell O. Bate, Macedonia, Ohio

Application April 5, 1937, Serial No. 134,967

11 Claims. (Cl. 119—61)

This invention relates to a feeding trough for chicks and has for its principal object to provide such a device which will be highly satisfactory and at the same time extremely cheap. To this end, the device is designed to be die-cut from a single sheet of cardboard or the like so that it may be formed by a single operation. It is contemplated that the blanks so produced will carry printed directions for forming the completed article, together with any desired advertising matter.

More specifically, an object of the invention is to provide a twin trough which will have a large capacity and at the same time provide quite narrow feed containing spaces so that the chicks will be unlikely to get into the trough.

It is a further object to provide for increased stability by the use of the twin construction so that the device will be unlikely to be overturned by the chicks.

A further object is to provide a flange at the feeding edge which will prevent the chicks from "billing" out the feed and extensions of which serve as locking means for connecting the two halves of the device and afford an intermediate support for the side walls as well as convenient locking means at the ends.

A still further object is to provide novel and superior end closure means which will at the same time contribute to the sturdy character of the device and provide an effective and complete closure whereby no feed will leak out.

Other and more limited objects will be in part apparent and in part pointed out hereinafter in connection with the accompanying drawings wherein Fig. 1 is a side elevation of the completed device broken to indicate that it may be of any desired length; Fig. 2 a top plan view thereof; Fig. 3 is an end elevation thereof; Fig. 4 is a fragmentary section taken on the line 4—4 of Fig. 1; Fig. 5 is a section on line 5—5 of Fig. 1 or Fig. 2; Fig. 6 is a fragmentary section taken on the line 6—6 of Fig. 2; Fig. 7 is a fragmentary section on the line 7—7 of Fig. 2 and Fig. 8 is a development of the blank from which the device is formed.

In the drawings the numeral 10 indicates either of two elements making up a central partition. Each of these may be looked upon as a wall of one of the twin elements of the device. They are integral with each other at their upper edges or fold line as indicated at 11. Integral with the walls or partition elements 10 at the lower edge thereof, that is, at the fold line 12, are bottom wall elements 13. Integral with the outer edge of the bottom walls 13, that is, at the fold lines 14,

are side walls 15, each of which terminates in an intumed horizontal flange 16 connected therewith at the fold lines 17. The walls just described, together with the end closure construction to be described presently make up what I term a twin trough or twin box feeding trough.

Inasmuch as the blank from which the device is formed is bilaterally symmetrical with respect to the fold line 11 and with respect to a central line extending at right angles to the fold line 11, the end closure construction is identical at the four corners of the device. It will therefore be necessary to describe the construction of only one of the four similar portions.

In Fig. 8, folds are indicated by dotted lines while cuts are indicated by full lines. Integral with the side wall 15 at the fold line 18 is the end wall element 19 which is provided with a flap 20 adapted to be folded on the line 21 to overlie a portion of the bottom wall 13. The flap 20 is provided with a slot 22 which is adapted to receive a tab 23 struck up from the bottom wall 13. The end wall 19 is provided with a locking tab 24 adapted to pass through both the slots 25 in the central partition elements. The tabs 24 are undercut as indicated at 26 for the purpose of locking with the partition elements at the slots 25. The horizontal flanges 16 are provided with end locking elements 27 each having a tab 28 adapted to be received in the slot 29 in the end wall 19. These flanges are also provided with one or more intermediate locking projections 30, each of which is adapted to extend through both slots 31 in the central partition elements 10. Integral with the partition elements 10 at the fold lines 32 are flaps 33 which are adapted to fold outwardly and lock by means of the tab 34 and slot 35 with the end walls 19. Since the tab 28 is turned downwardly and the flap 33 overlies the same, this forms an effective lock for holding the projection 27, and the end wall 19 in proper relation to each other.

In forming the device from the blank, the blank is first folded along the line 11, after which the bottom walls are turned outwardly to right angles with the walls 10 and the side walls are turned up to right angles with the bottom walls, the flaps 20 are then folded up against the end walls 19 and the end walls then folded along the line 13 whereby the flap 20 overlies a portion of the bottom wall. The tabs 23 are introduced through the slots 22, after which the flaps 16 are folded down and the tabs 28 introduced through the slots 29. The locking elements 24 and 30 are then introduced through the slots 25 and 31 respectively, after which the tabs 28 are turned down-

wardly along the end walls 19 and the flap 33 is folded along the line 32 and the tab 34 introduced into the slot 35 in overlying relation to the tab 28.

Having thus described my invention, what I claim is:

1. A feed trough for chicks composed of a single blank of sheet material and comprising a central partition consisting of two walls integral at the top, bottom walls integral with and extending outwardly from the lower edges of the partition elements respectively, side walls integral with the outer edges of the said bottom portions and of a height less than that of said central partition walls, inwardly turned flange portions integral with the upper edges of said side walls and provided with locking extensions extending inwardly, end wall elements integral with the ends of said side walls, flaps integral with the bottom edges of said end walls and overlying portions of said bottom walls, said locking extensions of said flanges being connected with said central partition, and locking elements connecting the inner edges of said end walls with said central partition.
2. A device according to claim 1 wherein the locking elements connecting said end walls and said central partition are located above the top of said side walls and connected with both of said partition elements.
3. A device according to claim 1 wherein said central partition walls are provided with flaps extending from the ends thereof outwardly and locked with said end walls.
4. A feed trough for chicks composed of a single blank of sheet material and comprising a central partition consisting of two walls integral at the top, bottom walls integral with and extending outwardly from the lower edges of the partition walls respectively, side walls integral with the outer edges of the said bottom walls and of a height less than that of said central partition walls, inwardly turned portions integral with the upper edges of said side walls and providing locking elements extending inwardly, end wall elements integral with one of said aforementioned walls, certain of said locking extensions being end walls and overlying portions of said bottom walls, certain of said locking extensions being connected with said end walls and others thereof with said central partition, and locking elements connecting the inner edges of said end walls with said central partition.
5. A twin feed trough for chicks comprising two troughs of similar construction, each comprising bottom and side walls, one side wall of each being higher than the other, such higher side walls being positioned in contact with each other, each side wall of lesser height being provided with an intumed upper flange, said intumed upper flange being provided with one or more locking extensions each extending inwardly and passing through and locked with both said higher side

walls, and integral means closing the ends of said troughs.

6. A device according to claim 5 wherein said last means includes end walls integral with said lower side walls and having portions locked with both said higher side walls.

7. A twin feed trough for chicks comprising two troughs of similar construction, each comprising bottom and side walls, one side wall being higher than the other, the side wall of lesser height being provided with an intumed upper flange substantially coextensive therewith, said intumed upper flange being provided with one or more locking extensions each extending inwardly and secured to said higher side wall and integral means closing the ends of said trough, said higher side walls being placed in contact with each other and secured together.

8. A chick feed trough comprising bottom and side walls, one side wall being higher than the other, the side wall of lesser height being provided with an intumed upper flange substantially coextensive therewith, said intumed upper flange being provided with one or more locking extensions each extending inwardly and passing through and locked with said higher side wall and integral means closing the ends of said trough.

9. A single blank twin feed trough for chicks including a central partition made up of two elements integral at the top, bottom walls, one integral with each of said partition elements at the lower edges thereof, a side wall integral with the outer edge of each bottom wall and provided with inwardly extending flanges at the top, said flanges being provided with inward extensions at their ends, each such inward extension carrying a tab, end walls integral with said side walls at their ends and locked with said partition elements, said tabs extending through said end walls and turned downwardly, and flaps integral with said partition elements extending outwardly and overlying said tabs and locked with said end walls.

10. A device according to claim 9 wherein said flange is provided with one or more intermediate locking elements extending horizontally and locked with both of said partition elements.

11. A feed trough for chicks composed of a single blank of sheet material and comprising a central partition consisting of two walls integral at the top, bottom walls integral with and extending outwardly from the lower edges of the partition walls respectively, side walls integral with the outer edges of the said bottom walls and of a height less than that of said central partition walls, inwardly turned portions integral with the upper edges of said side walls and providing locking extensions extending inwardly, end wall elements integral with one of said aforementioned walls, and flaps integral with the bottom edges of said end walls and overlying portions of said bottom walls, one or more of said locking extensions being connected with said central partition.

RUSSELL O. BATE.