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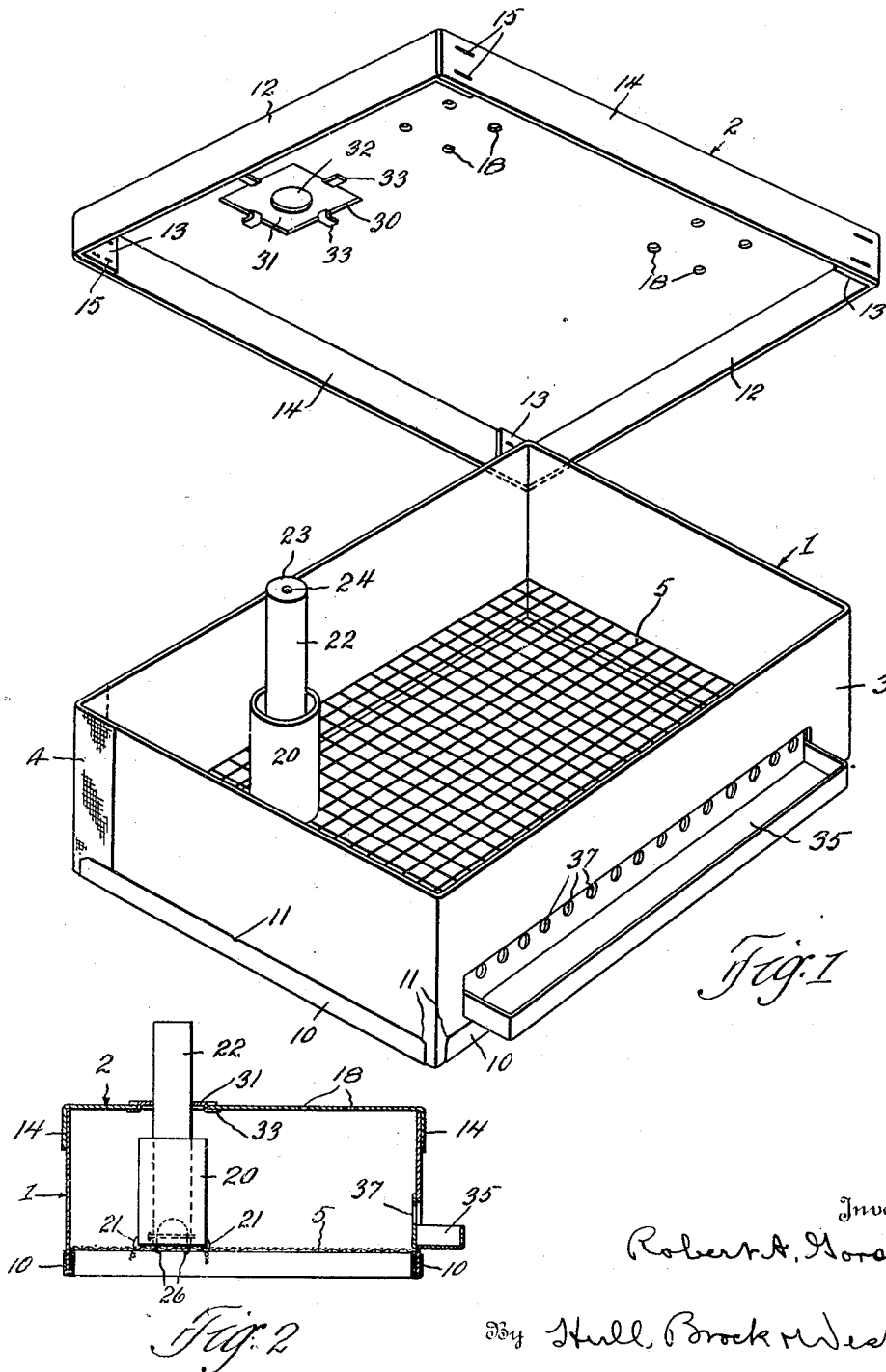
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SHIPPING BOX AND BROODER FOR BABY CHICKS

Filed Jan. 25, 1927

2 Sheets-Sheet 1



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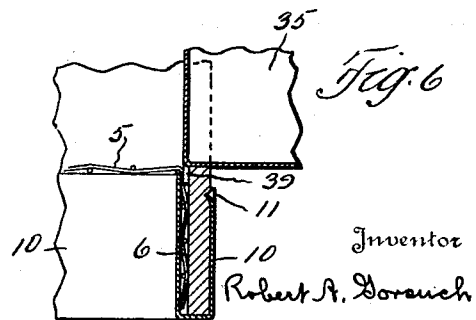
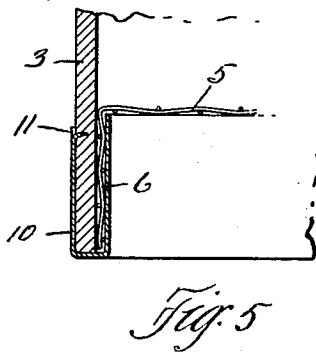
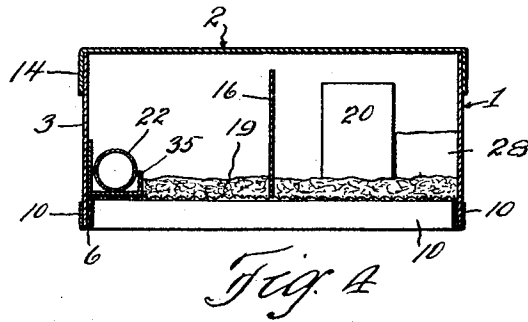
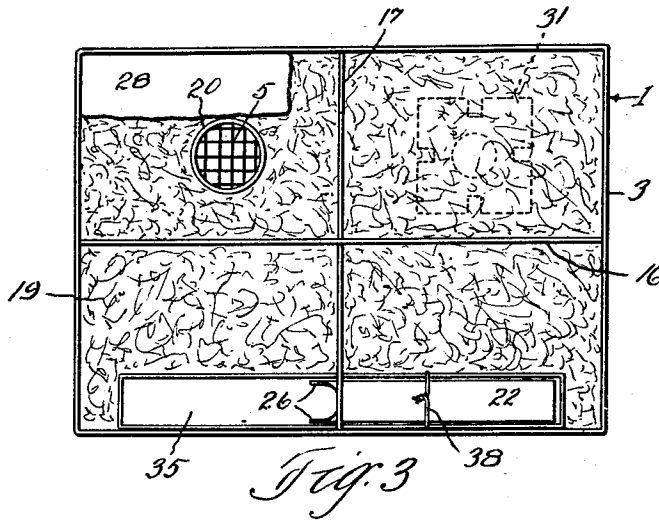
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UNITED STATES PATENT OFFICE

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SHIPPING BOX AND BROODER FOR BABY CHICKS

Application filed January 25, 1927. Serial No. 163,362.

This invention relates to an improved construction for combined shipping boxes and brooders for baby chicks; and it has for its objects to provide a simple, relatively inexpensive, and light, yet very substantial construction for devices of the above class, and one that may be transported by the manufacturer in a compact knocked-down condition and stored by the hatcher in like form, and conveniently assembled by the latter for the shipment of chicks, and readily converted by the user from a shipping box into a brooder for the care of the chicks during early growth, the device further possessing the essential feature of proper ventilation, while affording the necessary protection and comfort to the chicks.

A device similar to that herein disclosed is described and claimed in my former re-issue Letters Patent No. 16,518, dated January 4th, 1927, the present case covering certain refinements and additions in and to the earlier device.

The invention is illustrated in the accompanying drawings wherein Fig. 1 is a perspective view of the device arranged as a brooder and showing it with the cover lifted so as to reveal the interior; Fig. 2 is a transverse vertical section through the device as a brooder; Fig. 3 is a plan view of the device with the cover removed showing it arranged for the shipment of baby chicks; Fig. 4 is a vertical transverse section through the device with the cover applied thereto and in the same condition as it is shown in Fig. 3; Fig. 5 is an enlarged sectional detail showing the connection between the wire screen bottom and one of the side walls; and Fig. 6 is a similar detail showing the manner of attaching the feed trough.

The device comprises a body that is designated generally by the numeral 1, and a cover that is designated 2. The peripheral wall 3 of the body 1 is preferably constructed of a continuous strip of corrugated cardboard or the like and the ends of the strip are secured together as by a piece 4 of fabric or other suitable material that is glued or otherwise attached to the adjoining ends of the strip. The joint between the said ends constitutes one

corner of the body, while the strip is creased at properly spaced points to form the other corners. Before the bottom is applied to the box body, the opposed halves of the peripheral wall 3 between diagonally opposite corners may be brought together side by side and the wall thus flattened out in an obvious manner.

The bottom wall 5 is preferably constructed of wire screen of suitable mesh and the same is turned downwardly about its edges, as shown at 6, particularly in Figs. 5 and 6, and when the peripheral wall 3 of the body 1 is expanded from its flat condition into rectangular form so as to constitute a frame, the bottom 5 may be placed within said frame with its downwardly turned edge portion 6 adjacent the bottom edge portion of the wall 3. Sheet metal channels 10 are then applied to the adjacent edge portions of the wall 3 and bottom 5, as best illustrated in Figs. 5 and 6, and by suitable means are compressed so as to securely clamp the edge portion 6 of the bottom wall between the inner flanges of the channel members and the adjacent surface of the wall 3; and in order to secure the channel members to the box body, portions of the outer flanges of said channel members are depressed and embedded within the material of the wall 3, as indicated at 11.

The cover 2 is preferably made from a single sheet of corrugated cardboard or the like that is notched at its corners and creased parallel to its edges so that it may be readily folded into the shape shown in the drawings, the end flanges 12 being cut at their opposite ends to provide tabs 13 that are adapted to be inserted beneath the adjacent ends of the side flanges 14 and connected thereto by suitable fastening means 15, such as wire staples or the like.

As the device has so far been described, it constitutes a shipping box for baby chicks, the same preferably being temporarily divided into compartments by partitions 16 and 17 so as to divide the brood into relatively small groups to prevent overcrowding and possible suffocation during transportation. According to common practice, the cover 2, as well as the peripheral wall 3, may

be punched with any desired number and arrangement of ventilating openings, some such openings being indicated at 18 in Fig. 1. During shipment, the screen bottom 5 is

5 covered with a layer of excelsior or the like, designated 19 in Figs. 3 and 4, and the character of this material permits the passage of air upwardly through the foraminous bottom wall 5.

10 For brooding purposes, the outfit is equipped with a heater and a feeding trough, and these appurtenances are conveniently stored within the box during shipment. The heater comprises a drum 20 that is in the nature of a relatively short sheet metal sleeve

15 that may be secured to the screen bottom 5, as by wires 21, this preferably being done before shipment so as to insure its proper location within the box. Adapted to be arranged centrally within the drum 20 is a tubular casing 22 having a top wall 23 provided with a relatively small aperture 24. This casing 22 is adapted to be secured to the bottom 5 by

25 extending lugs 26 that project from the lower edge through openings in the bottom and turning said lugs laterally therebeneath, as indicated in Fig. 2. Charcoal sticks of a size easily accommodated within the casing 22 are intended as fuel for the heater, and this

30 fuel is desirably shipped with the outfit in a package designated 28 in Figs. 3 and 4. It may be explained that the cover 2 may be and preferably is marked directly above the drum 20 with an outline for an opening, and bears

35 instructions to cut such an opening in the cover in accordance with said outline. In pursuance of said instructions a square opening 30 is made in the cover, and adapted to be disposed over this opening is a metal plate

40 31 having a circular opening 32 for the accommodation of the upper end of the heater casing 22. The plate 31 has prongs 33 by means of which it is held in place, and during shipment the plate may be attached by said

45 prongs to the bottom wall 5, as indicated in dotted lines in Fig. 3.

As a means of administering food to the chicks during the brooding period, a trough 35 is included in the outfit, and the same is

50 preferably in the form of a long rectangular sheet metal box having one of its side walls extended upwardly a suitable distance above the plane of its top and punched with a series of holes 37. During shipment, this

55 trough (in which the casing 22 of the heater may be placed for convenience) is adapted to be secured by a wire 38 to the bottom wall 5, the partition 17 being notched for the accommodation of the trough and heater casing as will be readily understood. At the

60 lower edge of its perforated wall, the trough is provided with lugs 39 (Fig. 6).

When a shipment of chicks is received, the lid 2 is removed from the box, and the partitions 16 and 17 and the layer 19 of excelsior

or like material are taken out, as are also the package 28, plate 31, and trough 35 containing the heater casing 22. The heater casing, supplied with a stick of fuel, is lowered into the drum 20 and fastened to the bottom 5 in the manner previously described and the opening 30 is made in the cover 2 and the plate 31 secured in place over said opening. According to suitable markings on the box, or instructions accompanying the same, an elongated opening is cut in one of the side walls of the box through which is adapted to be inserted the perforated wall of the trough 35, and the lugs 39 of the trough are then forced downwardly between the adjacent edges of the screen bottom 5 and the wall 3. Food, and water in suitable vessels, may now be placed in the trough 35 so that the chicks by extending their heads through the openings 37 may feed and drink.

Having thus described my invention, what I claim is:

1. A device of the class set forth comprising a peripheral wall, a bottom wall having a downturned edge disposed adjacent the lower edge of the peripheral wall; a channel member embracing and connecting together said edges of the peripheral and bottom walls, the peripheral wall having an opening extending along one of its sides, and a feeding trough having a perforated wall arranged across said opening and provided with parts engaged between the peripheral wall below said opening and the adjacent downturned edge of the bottom wall.

2. A device of the class set forth comprising a peripheral wall; a wire screen bottom having a downturned edge disposed adjacent the lower edge of the peripheral wall, sheet metal channel members embracing and connecting together said edges of the peripheral and bottom walls, the peripheral wall having an opening extending along one of its sides, the lower edge of said opening being substantially in the plane of the bottom wall, and a feeding trough having a perforated wall arranged across said opening; said trough being provided with lugs arranged for engagement between the peripheral wall below said opening and the adjacent downturned edge of the bottom wall.

In testimony whereof, I hereunto affix my signature.

ROBERT A. GORSUCH.