Oct. 7, 1941. R. A. WALKER 2,258,344

COLLAPSIBLE COOP

Filed July 22, 1940 2 Sheets-Sheet 1

Fig 1

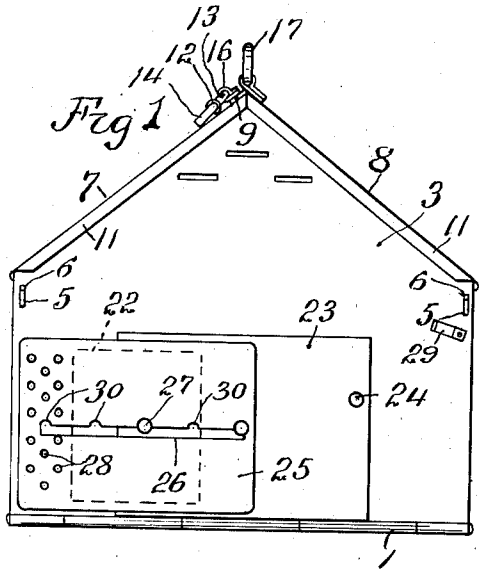


Fig 2

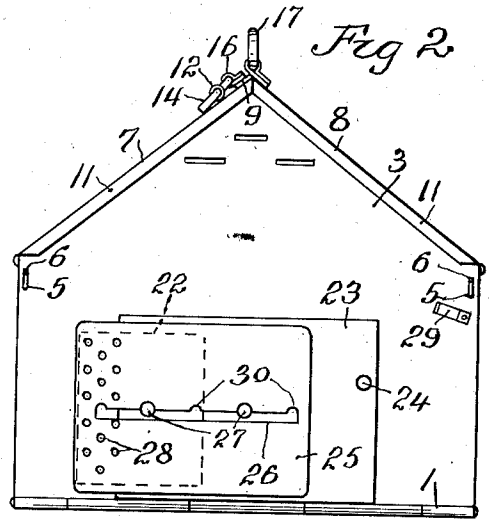


Fig 3

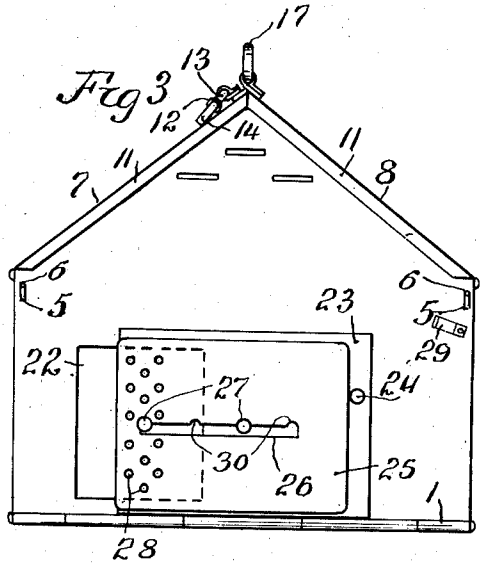
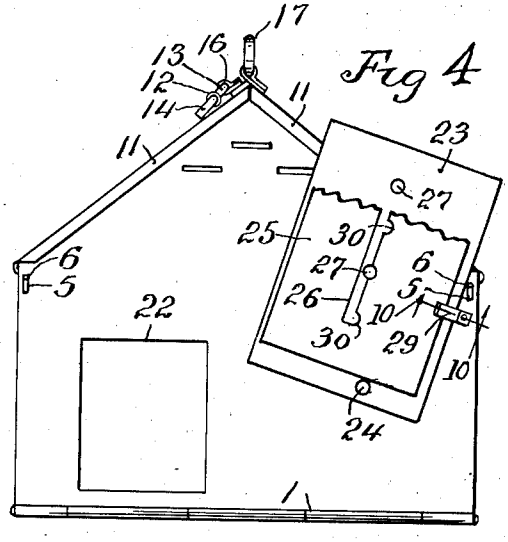


Fig 4



Richard A. Walker

Inventor

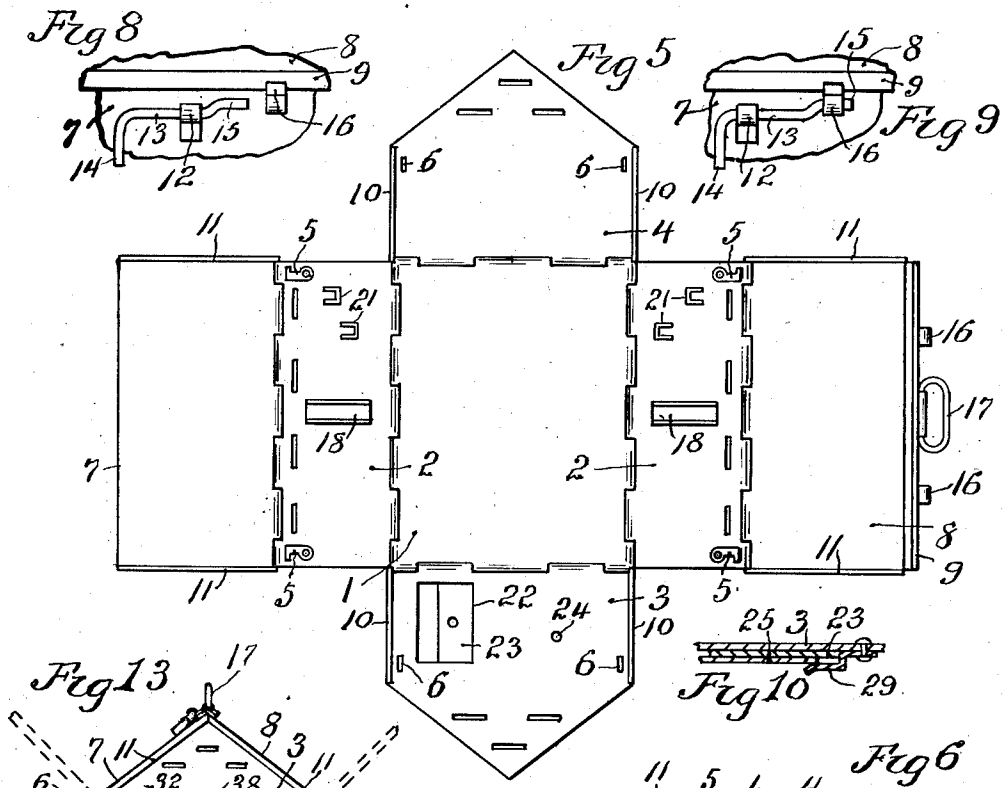
By Warren D. House

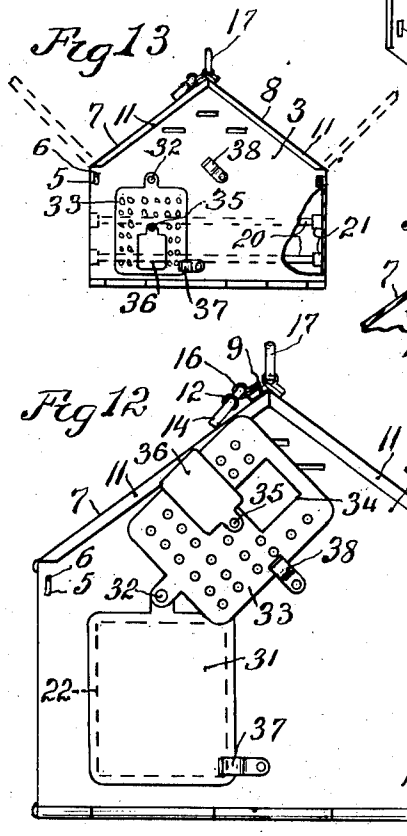
His Attorney

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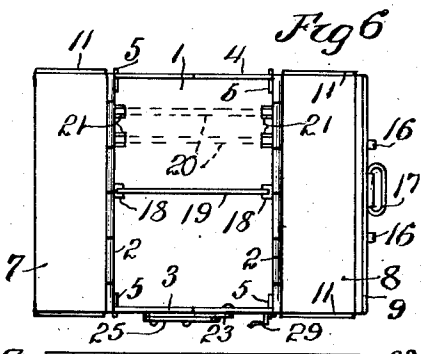
COLLAPSIBLE COOP

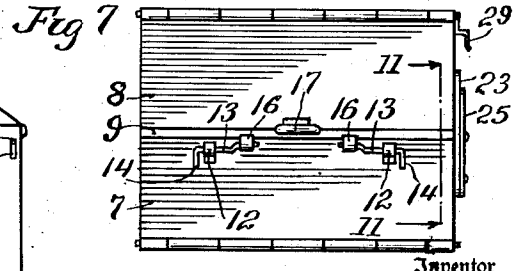
Filed July 22, 1940 2 Sheets-Sheet 2











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Patented Oct. 7, 1941

2,258,344

UNITED STATES PATENT OFFICE

2,258,344

COLLAPSIBLE COOP

Richard A. Walker, St. Joseph, Mo.

Application July 22, 1940, Serial No. 346,760

4 Claims. (Cl. 119—19)

My invention relates to improvements in collapsible coops.

One of the objects of my invention is to provide a novel collapsible coop, which can be easily and quickly assembled into operative condition, which is strong, durable, not likely to get out of order, which has novel means for connecting the parts for firmly holding them in their operative positions, which can be easily lifted and carried while in its operative arrangement, and which is easily and quickly collapsed in flat form and folded condition within a minimum of space, for storage or shipment.

A further object of my invention is the provision of a novel door arrangement well adapted for different conditions of use.

The novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawings, which illustrate my invention, Fig. 1 is a front elevation of the preferred form of my invention, showing the coop assembled in operative condition, with the two doors closing the doorway.

Fig. 2 is a view similar to Fig. 1, showing the imperforate door partly closing the doorway, and the perforate portion of the auxiliary door covering the uncovered portion of the doorway.

Fig. 3 is a view similar to Fig. 1, showing the imperforate door partly closing the doorway and the auxiliary door in the open position.

Fig. 4 is a view similar to Fig. 1, showing the imperforate door swung to the fully open position, the auxiliary door being partly broken away.

Fig. 5 is a plan view of the coop, shown in Figs. 1 to 4, collapsed to flat form and reduced in size.

Fig. 6 is a top view of the coop, shown in Figs. 1 and 5, with the walls shown assembled in operative condition, and the roof members swung to the horizontal open position, the parts being reduced in size.

Fig. 7 is a reduced top view of the coop shown in Figs. 1, 5 and 6, assembled in operative condition.

Fig. 8 is an enlarged top view of overlapping portions of the roof members, and showing one of the roof locking means with the locking pin in the unlocked position.

Fig. 9 is a view similar to Fig. 8, showing the locking pin in the locked position.

Fig. 10 is an enlarged fragmental cross section of the doors when in the raised open position, taken on the line 10—10 in Fig. 4.

Fig. 11 is a vertical fragmental sectional view of the upper portions of the roof members when in operative position, showing their overlapping arrangement, taken on the line 11—11 of Fig. 7.

Fig. 12 is a front elevation of my improved coop, having a modified door arrangement, one of the doors being shown closed and the others open.

Fig. 13 is a reduced view similar to Fig. 12, showing the doors all closed.

Similar characters of reference designate similar parts in the different views.

1 designates a horizontal flat rectangular floor member to opposite edges of which are hinged the lower edges of two side walls 2. To the other two edges of the floor member 1 are respectively hinged the lower edges of two end walls 3 and 4.

The side walls 2 and end walls 3 and 4 are adapted to be swung upwardly to the vertical positions, shown in Fig. 6. For releasably holding the walls in the upwardly extending position shown in Fig. 6, each side wall 2 has pivoted on its inner side, adjacent to its upper and end edges, two latches 5. Each end wall 3 and 4 has adjacent to its side edges and upper end two slots 6. The latches 5 are adapted to be extended respectively through the slots 6 adjacent thereto so as to engage the outer sides of the end walls.

Two roof members 7 and 8 have their lower edges hinged respectively to the upper edges of the side members 2 so as to be adapted to be swung to an upwardly converging position, shown in Figs. 1 to 4 and 12 and 13. The roof member 8 has at its upper edge a flange 9 which overlaps the upper edges of the roof member 7, as best shown in Fig. 11.

The upper end of each end wall 3 and 4 has upwardly converging edges upon which the roof members rest, as shown. The side edges of the end walls 3 and 4 have inwardly extending flanges 10 which overlap the outer sides of the side walls 2 adjacent thereto.

The side or end edges of the roof members 7 and 8 having flanges 11 which extend downwardly and overlap the outer sides of the end walls 3 and 4 adjacent thereto.

The floor member 1, walls 3 and 4 and roof members 7 and 8 are preferably of sheet metal, as galvanized iron or steel, or tin plate.

For locking together in their assembled condition the roof members 7 and 8, the roof member 7 has mounted on it near its upper edge two eyes 12 in which are respectively slidably fitted two locking pins 13, each having, at opposite sides of the eye 12 in which it is slidable, offset portions 14 and 15. The portions 14 serve as handles, and the offset portions 15 are adapted to respectively enter the two eyes 16 mounted on the flange 9 of the roof member 8, and thereby lock together the roof members. The locking pins 13 are each provided with the offset portions 14 and 15 to prevent the removal and loss of the locking pin.

The roof member 8 has fastened to its upper end portion a wire handle 17 by which the coop, when assembled, may be carried.

The inner sides of the side walls 2 have fastened to them two inwardly facing vertical chan-

nels 18, oppositely disposed, and adapted to receive therein the vertical end edges of a removable vertical partition plate 19, Figs. 5 and 6.

For supporting releasably the ends of two roost bars 20, the inner sides of the side walls 2 have each mounted on it two U shaped sockets 21. The pairs of sockets are disposed at different heights from the floor member 1, the sockets of each pair being disposed oppositely to each other to receive in their upper ends the ends of one of the roost bars 20.

The end wall 3 has a doorway 22. In the form of my invention shown in Figs. 1 to 4, 5, 6 and 7, there is provided an imperforate door 23 pivoted on a horizontal pin 24, at the right of the doorway 22, as viewed in Figs. 1 to 4, so as to be swung from and to a position in which it will leave an open portion at one side of the doorway, as shown in Fig. 3.

Longitudinally horizontal slidable on the door 23 when in the position, shown in Figs. 1, 2 and 3, is an auxiliary door 25 having through it a longitudinal slot 26 through which extend two headed pins 27 on which the auxiliary door 25 is slidable from the fully open position, shown in Fig. 3, to a position extending across the open portion of the doorway 22, shown in Fig. 2, and thence to the fully closed position, shown in Fig. 1.

The left end portion of the auxiliary door 25, as viewed in Figs. 1, 2 and 3, is perforated with a number of small holes 28, which in the position, shown in Fig. 2, register with the portion of the doorway left open when the imperforate door 23 is as shown in Fig. 1. In Fig. 1, the doorway 22 is wholly closed except for a portion of the slot 26. When the doors are in the position shown in Fig. 3, the chicks can pass in and out. By swinging the doors to the position shown in Fig. 4, the hen can pass in and out. In the position shown in Fig. 4, a clip 29 fastened to the end wall 3 at the right of the pivot pin 24, holds the doors in the upwardly inclined positions to which they have been swung.

The door 25 has notches 30 at the upper side of the slot 26 to receive the pins 27 for holding releasably the door 25 in the positions to which it is to be adjusted.

The modified arrangement of doors, shown in Figs. 12 and 13 comprise an imperforate door 31 pivoted to a pin 32 over the doorway 22 and adapted to swing to and from the closed position shown in Fig. 12. In front of the door 31 and pivoted on the pin 32 so as to swing to and from the closed position, shown in Fig. 13, is a perforate door 33, having a passage 34 for chicks therethrough. Pivoted on a pin 35 on the perforate door 33 is a small imperforate door 36 adapted to be swung to and from a position closing the passage 34.

A clip 37, mounted on the end wall 3 at the right of and near the lower end of the doorway 22, limits the counterclockwise swinging of the doors 31 and 33. Another clip 38, fastened to the end wall 3 at the right of and higher than the doorway 22, limits the clockwise swinging of the doors 31 and 33.

To let the chicks pass through the doorway 22, the door 31 is swung to the open position, and the door 33 is swung to the closed position, and the door 36 is swung to the open position.

Aside from the differences in the two door structures, the coop shown in Figs. 12 and 13 corresponds to that shown in Figs. 1 to 11.

To collapse the coop, the locking pins 13 are withdrawn from the eyes 16, and the latches 5 are withdrawn from the slots 6, after which the walls 2, 3 and 4 and roof members 7 and 8 may be swung to the flatwise positions shown in Fig. 5, and then folded upon each other, the form of hinge connections permitting such assemblage.

Other modifications of my invention within the scope of the appended claims may be made without departing from the spirit of my invention.

What I claim is:

1. In a coop having a wall provided with a doorway, an imperforate door pivoted to said wall so as to be swung to and from a position in which it will leave a portion of said doorway open, an auxiliary door having a longitudinal slot, and supporting means on said pivoted door extending through said slot and supporting said auxiliary door, when said pivoted door is in said position, so that said auxiliary door may be slid horizontally longitudinally to and from a position closing said open portion of said doorway and held from accidental movement from the position to which it is adjusted.

2. In a coop having a wall having a doorway, a door pivoted to said wall so as to be swung to and from a position in which it will leave a portion of said doorway open, an auxiliary door having a longitudinal slot and notches at the upper edge of the slot, and two longitudinally alined pins in said pivoted door extending through said slot and supporting said auxiliary door so that, when the pivoted door is in said position, said auxiliary door may be slid longitudinally horizontally to and from a position closing said open portion of said doorway, said pins being adapted to enter said notches for holding said auxiliary door in the position to which it may be moved.

3. In a coop having a wall having a doorway, an imperforate door movable to and from a position in which it will leave a side portion of said doorway open, an auxiliary door slidable on said imperforate door to and from a position in which it will close said open portion when said imperforate door is in the said position, and having a perforate portion which registers with said open portion of the doorway when said auxiliary door is in one position, said auxiliary door having a longitudinal slot disposed horizontally when said imperforate door is in said first named position and notches at the upper edge of said slot, and two pins mounted in said imperforate door and extending through said slot and on which said auxiliary door is slidable, said pins being adapted to enter said notches for releasably holding the auxiliary door in different positions to which it may be adjusted.

4. In a coop having a wall having a doorway, an imperforate door movable to and from a position in which it will leave a side portion of said doorway open, and an auxiliary door carried by and movable on said imperforate door horizontally to and from a position extending across said open side portion, and having a perforate portion which registers with said open portion when said auxiliary door is in one position.

RICHARD A. WALKER.