

A. J. BLOWERS.
BROODER.

APPLICATION FILED NOV. 19, 1908.

942,769.

Patented Dec. 7, 1909.

3 SHEETS—SHEET 1.

Fig. 1.

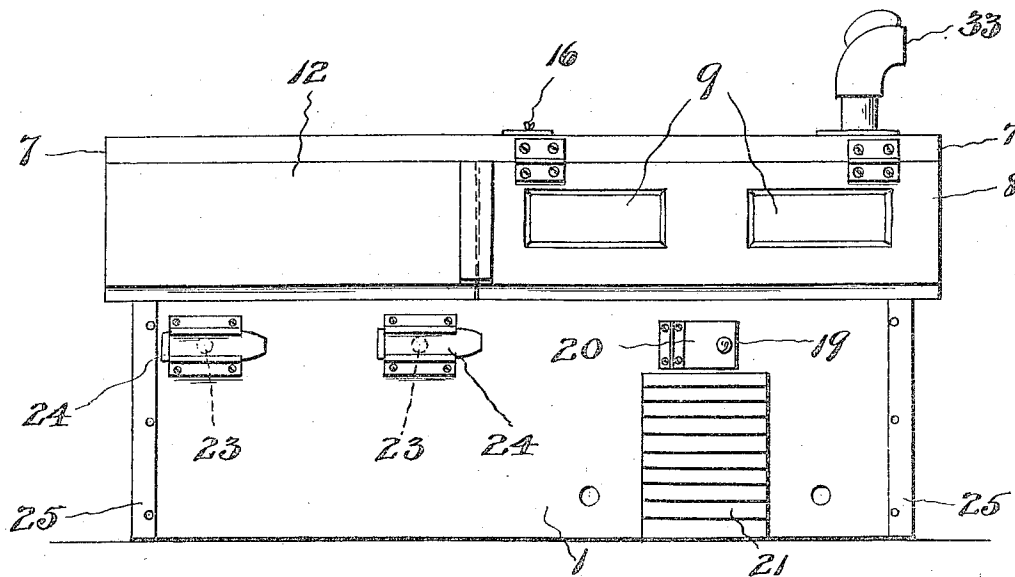
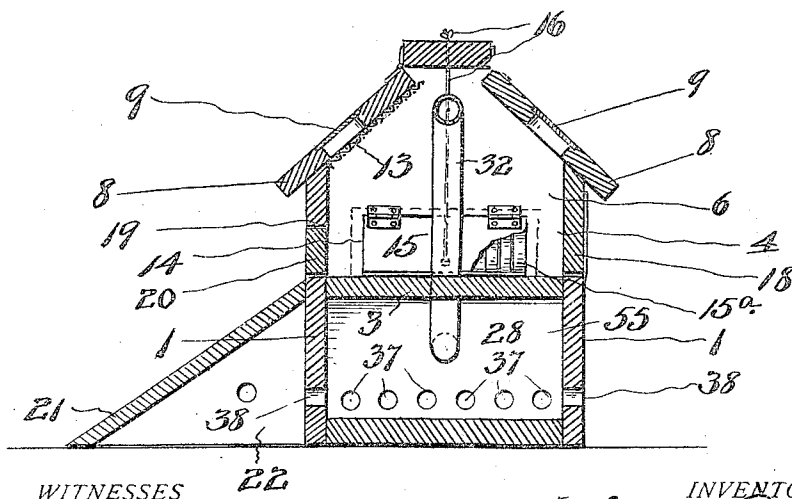


Fig. 2.



WITNESSES

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3 SHEETS—SHEET 2.

Fig. 4.

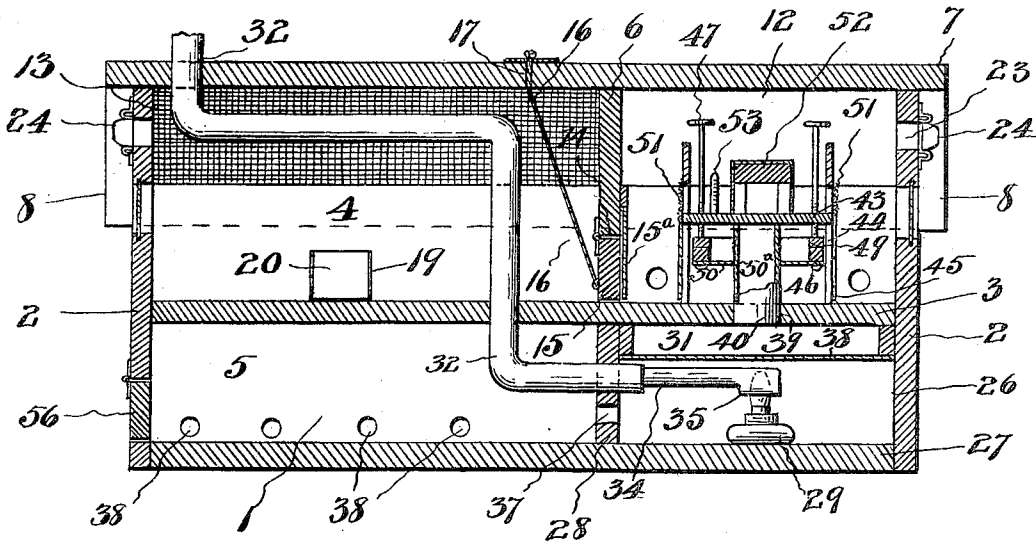
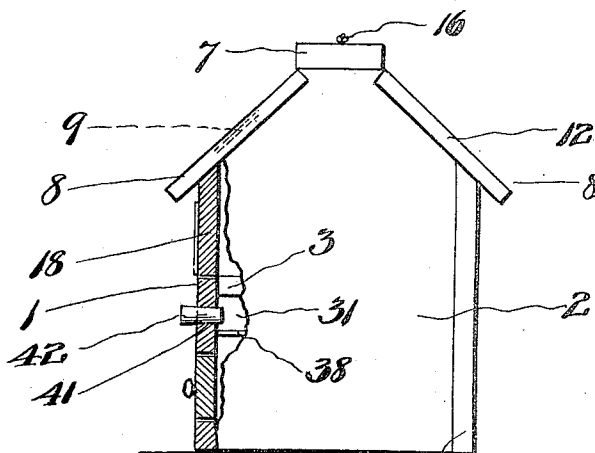


Fig. 3.



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3 SHEETS—SHEET 3.

Fig. 6.

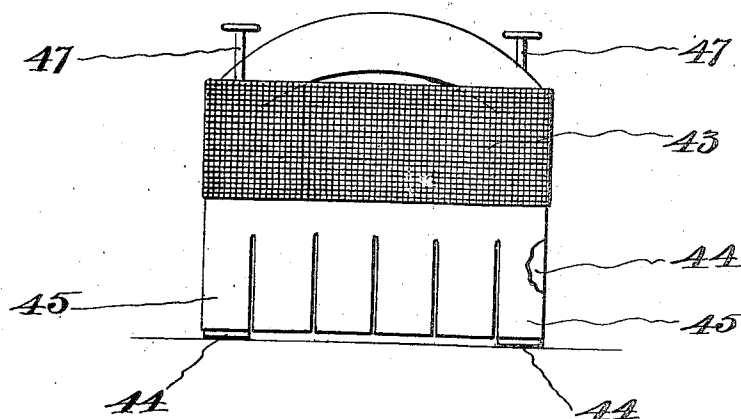


Fig. 5.

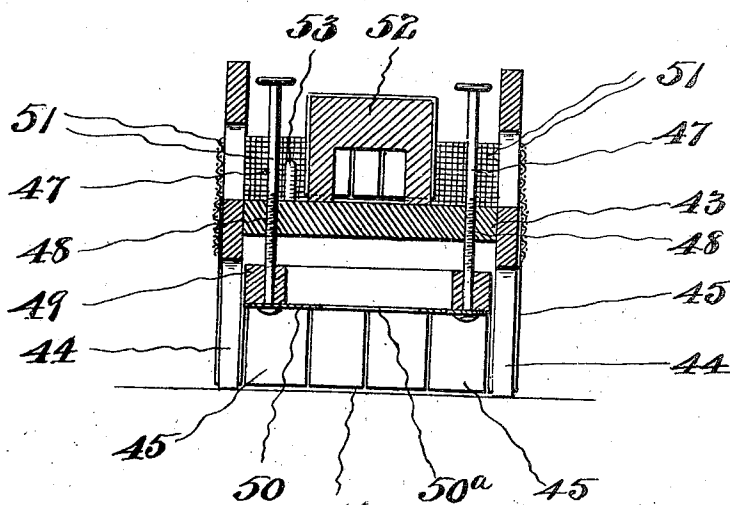
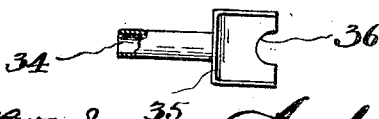


Fig. 7.



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UNITED STATES PATENT OFFICE.

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BROODER.

942,769.

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To all whom it may concern:

Be it known that I, ANDREW J. BLOWERS, a citizen of the United States, residing at Berne, in the county of Adams and State of Indiana, have invented certain new and useful Improvements in Brooders, of which the following is a specification.

My invention relates to brooders for raising young chickens and has for its object the improvement of the construction of the brooder chambers to the end that ready access may be had thereto to clean it, also improvement of the heating system, and improvements in the construction of the hovers by providing a separate hover for the young and weak chicks apart from the hover for the more vigorous ones, and also by forming the top portion of the hover for the more vigorous chicks adjustable so that after they settle down at night the top of the hover may be settled on top of the chicks in the same manner as the mother hen settles on her brood.

The construction and operation of my improved brooder will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a side view in elevation of my improved brooder. Fig. 2, a cross-section through the exercising chamber. Fig. 3, an end view partly broken away and showing the interior of the hover chamber. Fig. 4, a longitudinal sectional view. Fig. 5, an enlarged view in cross-section of the hover, Fig. 6, a view in elevation of the hover, and Fig. 7, a bottom plan view of the heat controlling device.

In the drawings similar reference characters indicate corresponding parts in the several views.

My improved brooder has the side walls 1 and end walls 2.

3 indicates the floor which is secured to the side and end walls above their lower edges so as to leave a space between the floor and the ground.

The space above the floor is divided into two chambers 4 and 5 by means of a partition 6, the chamber 4 being larger in area than chamber 5, as shown, and used as the exercising chamber by the chicks, while chamber 5 is the hover chamber.

The roof consists of the horizontal center board 7 to which are hinged the covers 8

over the exercising chamber 4 having glass or other transparent plates 9 secured therein.

10 indicates a cover hinged over one side of the hover chamber 5 with a sheet of glass or other transparent material 11 secured therein and the other side of the hover chamber covered by a board or other opaque material 12.

13 indicates a strip of wire screen fabric secured in one side of top of chamber 4 so that door 8 may be raised to air the chamber and prevent the chicks from getting out.

14 indicates an opening in partition 6 closed by the door 15 and 16 a rope or its equivalent secured to the door and run through a hole 17 in the center board 7 so that the door may be opened and closed from without.

15^a indicates a curtain covering opening 14 which is slashed as shown to permit the chicks passing therethrough when the door 15 is open.

18 indicates sliding doors in one of the side walls 1 to admit of cleaning the chambers.

19 indicates an opening in the side of chamber 4 closed by door 20 and 21 a runway leading from said opening to the ground which is used by the chicks when passing from or returning to the brooder, the under side of the runway being closed as shown at 22 to prevent the chicks getting under the runway when being driven into the brooder.

23 indicates air holes in each end and one side wall covered by slides 24 to ventilate the interior when necessary.

The corners of the brooder are covered by angle plates 25 to close the openings at the joints between the sides and ends and prevent the passage of air therethrough.

The space under the floor of the chamber 5, indicated at 26, floored as shown at 27, is separated from the balance of the space by means of a partition 28, and is adapted to contain a lamp 29 for heating the brooder.

30 indicates a metal plate over the lamp 29 and spaced apart from the underside of the floor of the hover chamber 5 so as to provide a heating chamber 31.

32 indicates the flue for the lamp 29 that passes out through partition 28, then up through the floor of chamber 4, then longi-

tudinally of said chamber, then out through board 7 and is provided with a revoluble hood 33.

34 indicates a length of tube slidably mounted in the end of flue 32 having a box-like casing 35 secured thereto with a semi-circular notch 36 cut out of its upper surface, this device constituting a regulator to determine the amount of the heat from the lamp that strikes the plate 30 to heat the hover chamber by the instrumentalities hereinafter described. The balance of the heat is deflected into the flue 32 and operates to heat the chamber 4.

37 indicates holes in the partition 28 and 38 holes in the side walls 1 to supply the lamp 29 with air and to cause a draft to carry off the products of combustion from the lamp.

39 indicates a hole in the center of the floor of the hover chamber and 40 a heat duct secured therein to permit the heated air in the heating chamber 31 to pass into the hover chamber 5.

41 indicates a hole in side 2 connected with chamber 31 having a plug 42 therein to control the draft in the chamber 31 and to assist in regulating the temperature of the hover chamber.

The hover consists of a table-like structure having a horizontal portion 43 secured to upright supports 44, said structure being seated over the duct 40 as shown.

45 indicates slashed curtains secured to the outer edges of the horizontal portion 43, the space 46 between the curtains 45 and heat duct 40 comprising the hover.

47 indicates screw rods secured in threaded holes 48 in the horizontal portion 43 and 49 a frame secured to said rods and having a piece of fabric 50 secured thereto and with

a hole 50^a therein to receive the duct 40. The purpose of this construction is to admit of lifting the frame 49 out of the way in the daytime but when the chickens have settled for the night the frame is lowered so as to comfortably settle on the chickens' backs as a hen settles on her brood, the height of the frame being regulated to the size of the chickens as they increase in size.

The top of horizontal portion 43 is inclosed by wire fencing 51 to form an inclosure where are kept the small and weak chicks until they get large and strong enough to be placed with the chicks on the main floor.

52 indicates the hover for the small chicks on top of horizontal portion 43.

53 indicates a thermometer mounted in an opening 54 in horizontal portion 43 and positioned so that it can be read through the transparent plate in cover 10 to enable the operator to know the temperature of the interior of the brooder without resorting to opening it.

The space 55 under the chamber 4 may be used for the storage of feed, fuel, tools, etc. and has a door 56 giving access thereto.

Having thus described my invention what I claim is—

In a brooder, a horizontal support, a hover under said support, a fence inclosing the upper side of said support, and a hover mounted on said support within said fenced inclosure.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

ANDREW J. BLOWERS.

Witnesses:

JOSEPH STUCKY,

ANDREW GOTTSCHALK.