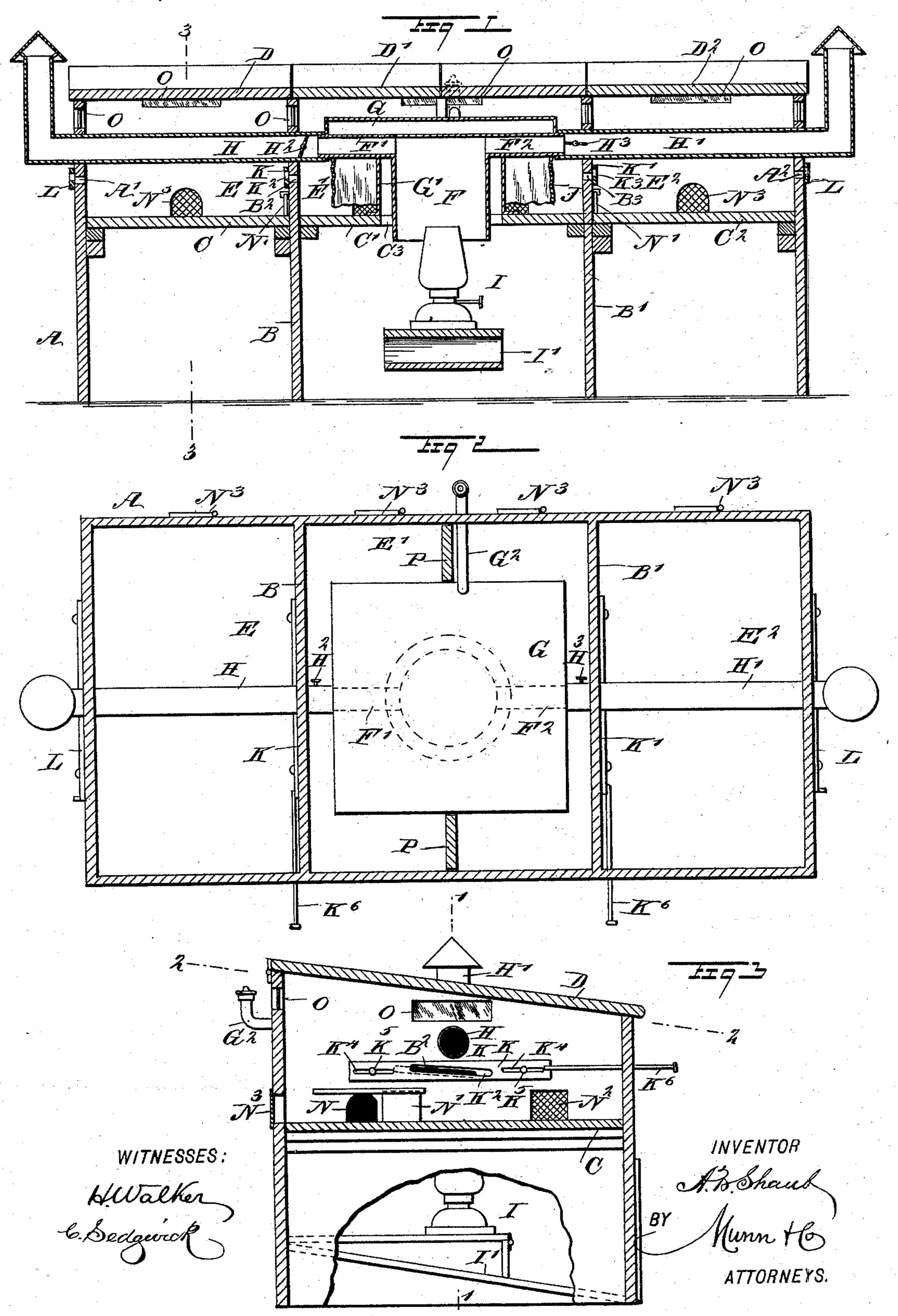
A. B. SHAUB.
BROODER.

No. 505,676.

Patented Sept. 26, 1893.



## UNITED STATES PATENT OFFICE.

AMBROSE B. SHAUB, OF BEACH CITY, OHIO.

## BROODER.

SPECIFICATION forming part of Letters Patent No. 505,676, dated September 26, 1893.

Application filed June 21, 1893. Serial No. 478,312. (No model.)

To all whom it may concern:

Be it known that I, AMBROSE BURNSIDE SHAUB, of Beach City, in the county of Stark and State of Ohio, have invented a new and 5 Improved Brooder, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved brooder, which is simple and durable in construction, very effective in 10 operation, and arranged to uniformly heat the several compartments containing the young chickens.

The invention consists of certain parts and details, and combinations of the same, as will 15 be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate 20 corresponding parts in all the figures.

Figure 1 is a longitudinal section of the improvement on the line 1-1 of Fig. 3. Fig. 2 is a sectional plan view of the same on the line 2-2 of Fig. 3; and Fig. 3 is a cross sec-25 tion of the same on the line 3-3 of Fig. 1.

The improved brooder is provided with a casing A, formed with the transverse partitions B and B', supporting with the ends of the casing A the bottoms C, C' and C2, mount-30 ed on cleats attached to the said ends and partitions, as plainly shown in Fig. 1. The top of the casing A is formed of a series of hinged doors D, D' and D2, which in conjunction with the partitions B and B', form within 35 the casing A, the compartments E, E' and E2, as will be readily understood by reference to the drawings.

In the bottom C' of the central compartment E', is arranged an opening C3, into which 40 extends a heating drum F, open at the lower end and having its top closed by the bottom of a water tank G, arranged within the said central compartment E'. From the upper end of the drum F extend in opposite direc-45 tions, the branch pipes F' and F2, connected with the inner ends of the longitudinally-extending pipes H and H', passing through the compartments E and E2 respectively, a suitable distance above the bottoms thereof, as 50 indicated in Fig. 1. The outer ends of the pipes H and H' are bent upwardly and provided with the usual hoods as shown in the said Fig. 1.

In the pipes H and H' near the branch pipes F' and F2, are arranged valves H2 and 55 H<sup>3</sup> respectively, adapted to be opened and closed by the operator when the hinged doors D' are open, to regulate the amount of air passing from the heating drum F to and through the pipes H and H'. The drum F is 60 heated by a lamp I having the upper end of its chimney extending into the lower part of the said drum, the said lamp being of ordinary construction, and supported on a suitable shelf I' supported in the front and rear walls 65 of the casing A, as indicated in Fig. 3. The tank G with the pipes F' and F2 and drum F, is supported by an annular rim G'extending downwardly from the tank Gand supported on the bottom C' of the middle compartment E'. 70 The rim G' is concentric with the heating drum F, so that an air space is formed between the two, it being understood that the drum F is somewhat less in diameter than the opening C<sup>3</sup> in the bottom C' to permit air to 75 surround the said drum. It keeps the latter from being over-heated. The water tank G is provided with a filling pipe G2 extending to the outside of the casing A at the rear side thereof, the said pipe also serving as an es- 80 cape for any steam that may be generated by the heat passing up the drum F.

In order to prevent the young chickens from coming in contact with the rim G', I provide a loose annular apron J extending down- 85 wardly from the tank G, to within a short distance of the bottom C', the said apron being of a suitable fabric and arranged concentric to the rim G'. In the partitions B and B' within the casing A, are arranged inclined 90 transversely - extending slots B<sup>2</sup> and B<sup>3</sup> respectively adapted to be opened or closed by slides K and K' respectively, having similar inclined slots K<sup>2</sup> and K<sup>3</sup> respectively, as indicated in Figs. 1 and 3. Each of the slides 95 K is formed with transverse slots K4 engaged by pins K<sup>5</sup> attached to the respective partitions B and B'. Each of the slides K and K' is also provided with a rod K<sup>6</sup> extending through the front of the casing A to the out- 100 side thereof to be under the control of the operator, the said rods serving as handles to

permit the operator to conveniently open and close the slides K and K' to admit more or less air from the middle compartment E' to the end compartments E and E<sup>2</sup>. A similar arrangement is made in the ends of the casing A, the said ends being provided for this purpose with inclined slots A' and A<sup>2</sup> similar to the slots B<sup>2</sup> and B<sup>3</sup> and over the said slots A' and A<sup>2</sup> operate slides L similar in construction to the slides K and arranged on the outer faces of the ends of the casing; see

Fig. 2.

In the partitions B and B' are arranged openings N adapted to be closed by sliding 15 doors N' to establish communication between the end and central compartments or to cut off communication, as desired. The lower ends of the openings N are on a line with the top surfaces of the bottoms of the compart-20 ments, so that young chickens can readily pass from one compartment to another when the doors N' are open. Screened doors N<sup>2</sup> are also arranged in the partitions B and B' to permit a ready circulation of air from one 25 compartment to the other. In the rear side of the casing A are doors N<sup>3</sup> to permit the chickens to pass into the yard or from the yard into the brooder in case the doors for the said openings are open. In the walls of 30 the casing A, as well as in the partitions B' are arranged small windows O to give sufficient light for the several compartments, the said windows being arranged near the top of the casing, as indicated in the drawings.

scribed, the young chickens can readily pass from one compartment to another or from the outside of the casing into the yard, and a proper ventilation and heating of the compartments is readily obtained, it being understood that the heat passes downward onto

the chickens on the floors in imitation of the heat usually given to the chickens by the mother hen. If desired, the central compartment may be divided again by partitions P,

as shown in Fig. 2, and the several compartments can be disconnected one from the other, by closing the corresponding doors, so as to permit a separation of different broods of chickens and other fowls.

Having thus fully described my invention, I claim as new and desire to secure by Letters

Patent—

1. A brooder comprising a casing provided with partitions to form several compartments, a heating drum in the central cempartment,

and provided with air distributing pipes extending through the compartments to heat the same from above, and a water tank or receptacle also in the center compartment and 60 closing the upper end of the heating drum, substantially as shown and described.

2. A brooder comprising a casing provided with partitions to form several compartments, a heating drum in the central compartment 65 and provided with air distributing pipes extending through the compartments to heat the same from above, a water tank or receptacle also in the center compartment and closing the upper end of the heating drum, and 70 a screen depending from the said water tank in the central compartment, substantially as shown and described.

3. A brooder comprising a casing provided with partitions to form several compartments, 75 a heating drum in the central compartment and provided with air distributing pipes extending through the compartments to heat the same from above, a water tank or receptacle also in the center compartment and closing the upper end of the heating drum, and air regulating devices in the said partitions and in the ends of the casing to uniformly heat the said compartments, substantially as shown and described.

4. A brooder, comprising a casing having transverse partitions and removable bottoms and hinged top doors, a tank supported in the central compartment formed by the said partitions, an air drum depending from the said 90 tank through an aperture in the bottom of the central compartment, branch pipes leading from the said drum, and air pipes leading from the said branch pipes to the end compartments, substantially as shown and 95 described.

5. A brooder, comprising a casing having transverse partitions and removable bottoms and hinged top doors, a tank supported in the central compartment formed by the said partitions, an air drum depending from the said tank through an aperture in the bottom of the central compartment, branch pipes leading from the said drum, air pipes leading from the said branch pipes to the end compartments, and doors in the said partitions and the rear wall of the said casing; substantially as shown and described.

AMBROSE B. SHAUB.

Witnesses:

J. B. JOHNSTON, E. J. SCHLAFLY.