Sept. 25, 1934. L. HAWKINS 1,974,867

BROODER

Filed May 29, 1931 2 Sheets-Sheet 1

Fig. 1.

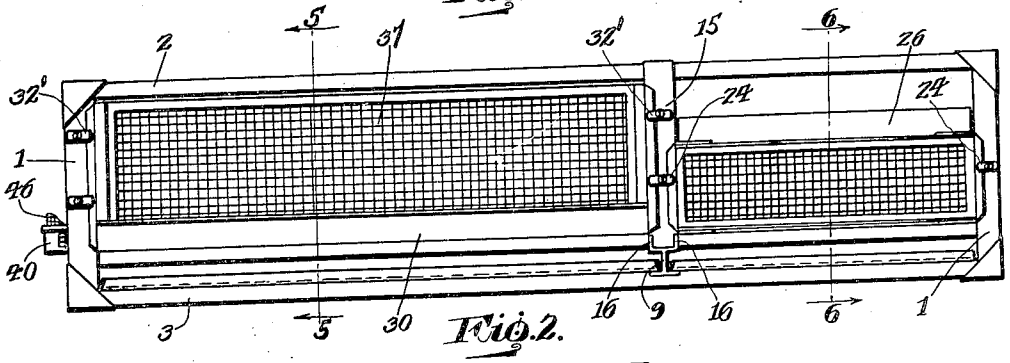


Fig. 2.

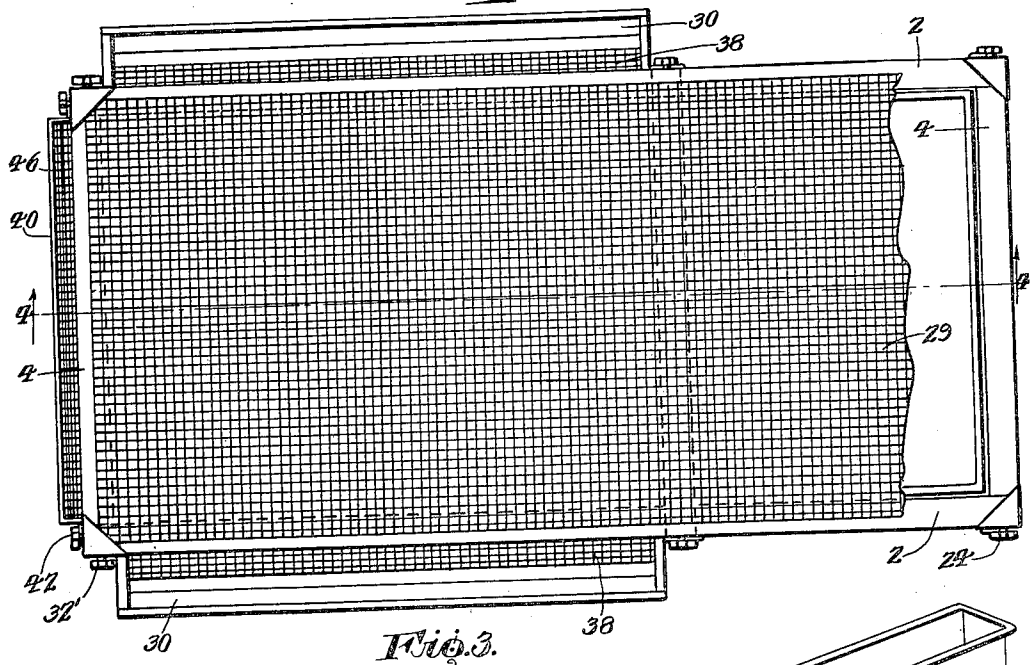
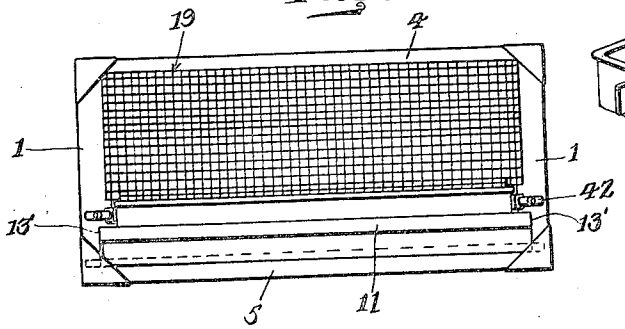


Fig. 3.



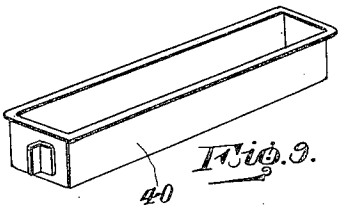


Fig. 9.

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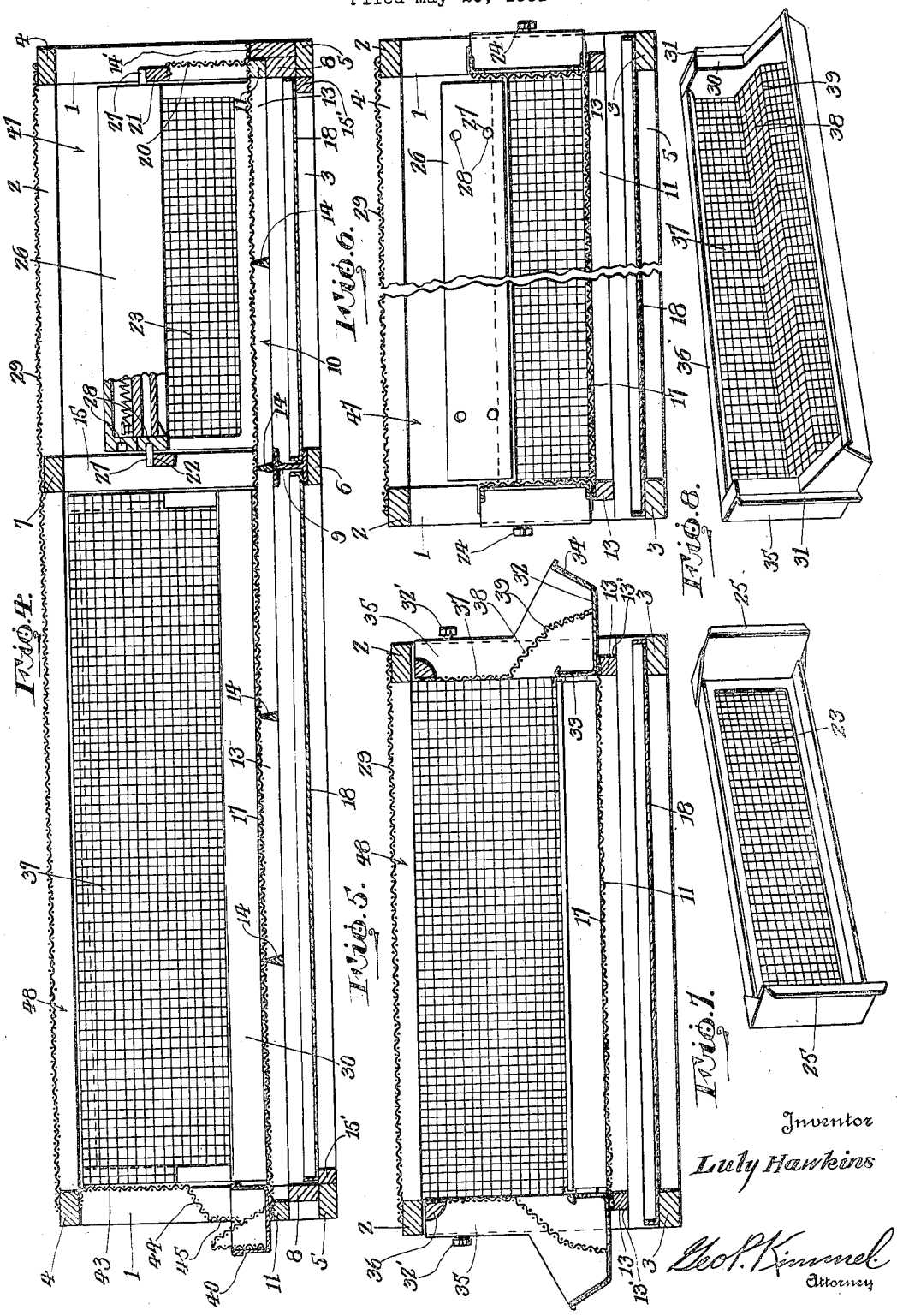


Fig. 6.

Fig. 8.

Fig. 4.

Fig. 5.

Fig. 7.

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UNITED STATES PATENT OFFICE

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BROODER

Luty Hawkins, Mount Vernon, Ill.

Application May 29, 1931, Serial No. 541,018

3 Claims. (Cl. 119—33)

This invention relates to a brooder of the sectional type and has for its primary object to provide, in a manner as hereinafter set forth, a brooder of such class by means of which a maximum number of chicks may be cared for with a minimum amount of labor.

A further object of the invention is to provide a brooder wherein the chicks may water and feed on the inside of the brooder without interference, and wherein the water and feed for the chicks may be supplied from the outside of the brooder.

A further object of the invention is to provide a brooder wherein the water and feed troughs and dropping pan may be readily removed for the purpose of cleaning the same.

In the drawings:

Figure 1 is a side elevation of a brooder section in accordance with this invention.

Figure 2 is a top plan thereof.

Figure 3 is an end elevation thereof.

Figure 4 is a vertical section taken on the line 4—4 of Figure 2.

Figure 5 is an enlarged vertical section taken on the line 5—5 of Figure 1.

Figure 6 is an enlarged vertical section taken on the line 6—6 of Figure 1 and with the heater not shown in section.

Figure 7 is an enlarged perspective of one of the removable doors of the section.

Figure 8 is an enlarged perspective of one of the feed troughs of the section.

Figure 9 is a perspective of the water trough of the section.

A brooder section in accordance with this invention includes a plurality of upright corner posts 1, a pair of upper side members 2, a pair of lower side members 3, a pair of upper end members 4, and a pair of lower end members 5. The side members 2 and 3, and the end members 4 and 5 are rigidly connected with the upright posts 1. The side members 3 are further connected by means of a cross piece 6 extending therebetween, and the side members 2 are connected together by means of a cross piece 7 extending therebetween. The cross pieces 7 and 6 are arranged in vertical alignment. Seated on the end members 5 are a pair of stringers 8, and seated on the cross piece 6 is a supporting member 9 preferably of I-beam construction.

Seated on each of the stringers 8 is a removable frame 10 including end pieces 11 and side pieces 13. The side pieces 13 are connected together by means of a plurality of cross pieces 14. Connected to and depending from the cross piece 7 are a pair of upright posts 15, the lower ends of which rest on end portions of the supporting member 9 and are secured in position by means of upstanding ears 16 formed on the supporting member 9.

Secured to and extending across the frame 10 is a mesh wall which forms the bottom wall of the brooder section. The frame is removable from one end of the section, at which end the side pieces 13 are slidable through notches 13' in the posts 1. At the opposite end of the section, the end piece 11 of the frame 10 abuts a stringer 14' seated on an end member 5 and projecting above the stringers 8. Slidably mounted beneath the wall 17, on each side of the supporting member 9, is a dropping pan indicated at 18, the pans seating on the lower flanges of the I-beam 9 and on cleats 15' secured to the end members 5. The section is provided at one end thereof with a mesh wall 19 which extends from the upper cross member 4 to a point in spaced relation to the cross member 11 therebelow. The opposite end of the section is provided with a mesh wall 20 which extends upwardly from the cross piece 11 at such end of the section to a cross piece 21 extending between and secured to the upright posts 1 adjacent thereto.

Secured to and extending between the upright posts 15 is a cross piece 22 which is in horizontal alignment with the cross piece 21. The section is provided at each side thereof with a removable mesh wall section 23 which extends between an upright post 15 and one of the upright posts 1, the removable wall section 23 being secured in position by pivoted buttons 24 which hold flanges 25 formed on the wall section against the upright posts 15 and 1. Adjustably supported on the cross pieces 21 and 22 is a heating element 26 which is provided at its ends with a plurality of pins 27 resting on the upper faces of the cross pieces 21 and 22. The heating element 26 is provided in its ends with recesses 28 at varying heights to selectively receive the pins 27 in order that the height of the heating element 26 may be adjusted with respect to the bottom wall 17. The section is provided with a permanent mesh top wall 29 which extends across and is secured to the end members 4 and cross piece 7.

Extending between the upright post 15 and one of the upright posts 1 at each side of the section is a combined wall forming and feeder element 30 which is provided at the ends thereof with flanges 31 which are maintained in engagement with the upright posts by means of

pivoted buttons 32'. Each of the elements 30 rests upon one of the side members 13.

Each element 30 includes a bottom wall 32 seated on a side member 13, an inner wall 33 extending upwardly from the bottom wall, an upwardly and outwardly inclined forward wall 34, a pair of side walls 35 extending from the bottom wall to a point adjacent an upper and side member 2, and a connecting strip 36 extending between the side walls 35 at the upper ends of the latter thereby providing a frame with a trough like lower portion. Connected with the strip 36 and extending downwardly therefrom to a point in spaced relation to the inner wall 33 is a mesh wall portion 37 which merges into a downwardly and outwardly inclined portion 38 formed with an angle 39 and having its lower edge seated on the bottom wall 32 in spaced relation to the inner wall 33 and outer wall 34 whereby the trough portion of the element is divided into inner and outer compartments. The outer wall 34 is projected a material distance from the side of the section in order that feed may be introduced into the trough without removing the same from the section. The chicks within the section have access to the feed within the trough through the space between the inner wall 33 and the downwardly and outwardly inclined mesh wall portion 38.

Seated on the end piece 11 at the opposite end of the section from the mesh wall 20 is a removable water trough 40 which is provided at its ends with brackets 41 for engagement by pivoted buttons 42 to maintain the trough in position against the upright posts 1 adjacent thereto. The mesh wall 19 depending from the upper end members 4 includes a portion 43 which merges in spaced relation to the trough 40 in a downwardly and outwardly inclined portion 44 terminating in a vertical portion 45 projecting into the trough. Disposed within the trough 40 and extending lengthwise thereof is an angular mesh partition 46 which extends across the vertical plane of the portion 45 at an inclination and adjacent the latter. The mesh wall portion 45 and partition 46 coact to divide the trough 40 into an inner and outer compartment. The trough 40 projects a material distance from the end of the section in order that water may be admitted thereto without removing the trough, and the chicks within the section may have access to the water within through the space between the upper edge of the later and the downwardly and outwardly inclined mesh wall portion 44.

In general it may be stated that the brooder section constitutes a brooder chamber 47 at one end of the section, and a feeding chamber 48 at the opposite end of the section, the chambers 47 and 48 being in communication throughout substantially the entire area of the section in order that the chicks may pass freely from one chamber to the other.

It is thought that the many advantages of a brooder in accordance with this invention will be readily apparent, and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the size, shape and arrangement of parts may be made, so long as such changes fall within the scope of the invention as defined in the appended claims.

What I claim is:—

1. In a brooder, a structure forming a chamber having the walls thereof including a frame and a reticulated panel at the inner side of the frame, and a trough seated upon the bottom of the frame of one wall, the panel carried by the said wall frame upon which the trough is seated having its lower portion extended outwardly beyond the outer side of said frame and depending into said trough in spaced relation to the front of the later.

2. In a brooder, a structure forming a chamber having one of the walls thereof including a frame and a reticulated panel at the inner side thereof, trough forming means extended outwardly from the lower portion of such frame, and said panel having its lower portion extended outwardly beyond the outer side of said frame and depending into said means to the bottom of the latter to divide it into an outer and an inner compartment, the lower portion of said panel being formed of a pair of parts at an angle to each other and to the trough and frame.

3. In a brooder, a structure forming a chamber having one of the walls thereof including a reticulated panel having an upper and a lower part, said upper part arranged at the upper portion of the inner face of said wall and its lower part extending beyond said wall and forwardly of said face, trough forming means extended outwardly from the lower portion of such wall, and said panel of said wall having its lower portion extended outwardly and depending into said means to the bottom of the latter to divide it into an outer and an inner compartment, the inner of said compartments opening into said chamber.

4. In a brooder, a structure forming a chamber, one of the walls of said chamber being formed with an upstanding reticulated panel and an outwardly directed trough forming means at its lower end, said panel having an intermediate part extended outwardly with respect to said structure and a lower part extended downwardly into said means, that part of the panel extended into said means being spaced completely from the front of the latter.

5. In a brooder, a structure forming a chamber, one of the walls of said chamber being provided with a reticulated panel of angle shape in vertical section and a trough forming means, said panel including a vertically disposed upper portion and a lower portion extended outwardly from and disposed at an angle with respect to said upper portion, the trough forming means having its rear portion positioned within and seated upon the lower portion of said wall, said trough forming means being extended outwardly from the lower portion of said wall, the said lower portion of said panel depending into said trough forming means adjacent the front of the latter, the said vertical portion of the panel being arranged at the inner side of said wall, and the said lower portion of said panel being extended through the said wall.

6. In a brooder, a structure forming a chamber having a removable wall, and means for releasably attaching said wall in position, said wall being formed with a reticulated panel having a vertically disposed upper portion and an outwardly directed downwardly disposed lower portion, said wall being provided at its lower portion with an outwardly directed trough forming means, and the lower portion of said panel depending into said trough forming means adjacent the front of the latter.

7. In a brooder, the combination with a structure providing a chamber, said structure having an open side, of a combined wall and trough

forming element mounted in said open side, said element including a reticulated panel constituting a wall and outwardly directed open-top container-forming means at its bottom to constitute a trough, said element being of the same contour as said open side, said element seating upon the bottom and opposing in close proximity the sides and top walls of said opening, said panel including a vertically disposed upper portion and an outwardly directed lower portion extended beyond said structure and depending into said means adjacent the front, said means extended outwardly beyond said structure.

8. In a brooder, the combination with a structure providing a chamber, said structure having an open side, of a combined wall and trough forming element mounted in said open side, said element including a reticulated panel constituting a wall and outwardly directed open top container forming means at its bottom to constitute a trough, said element being of the same contour as said open side, said element seating upon the bottom and opposing in close proximity the sides and top walls of said opening, said panel including a vertically disposed upper portion and an outwardly directed lower portion extended beyond said structure and depending into said means adjacent the front, said means extended outwardly beyond said structure, and spaced means carried by said structure for overlapping the outer face of said element for detachably securing the latter in position.

LUTY HAWKINS.