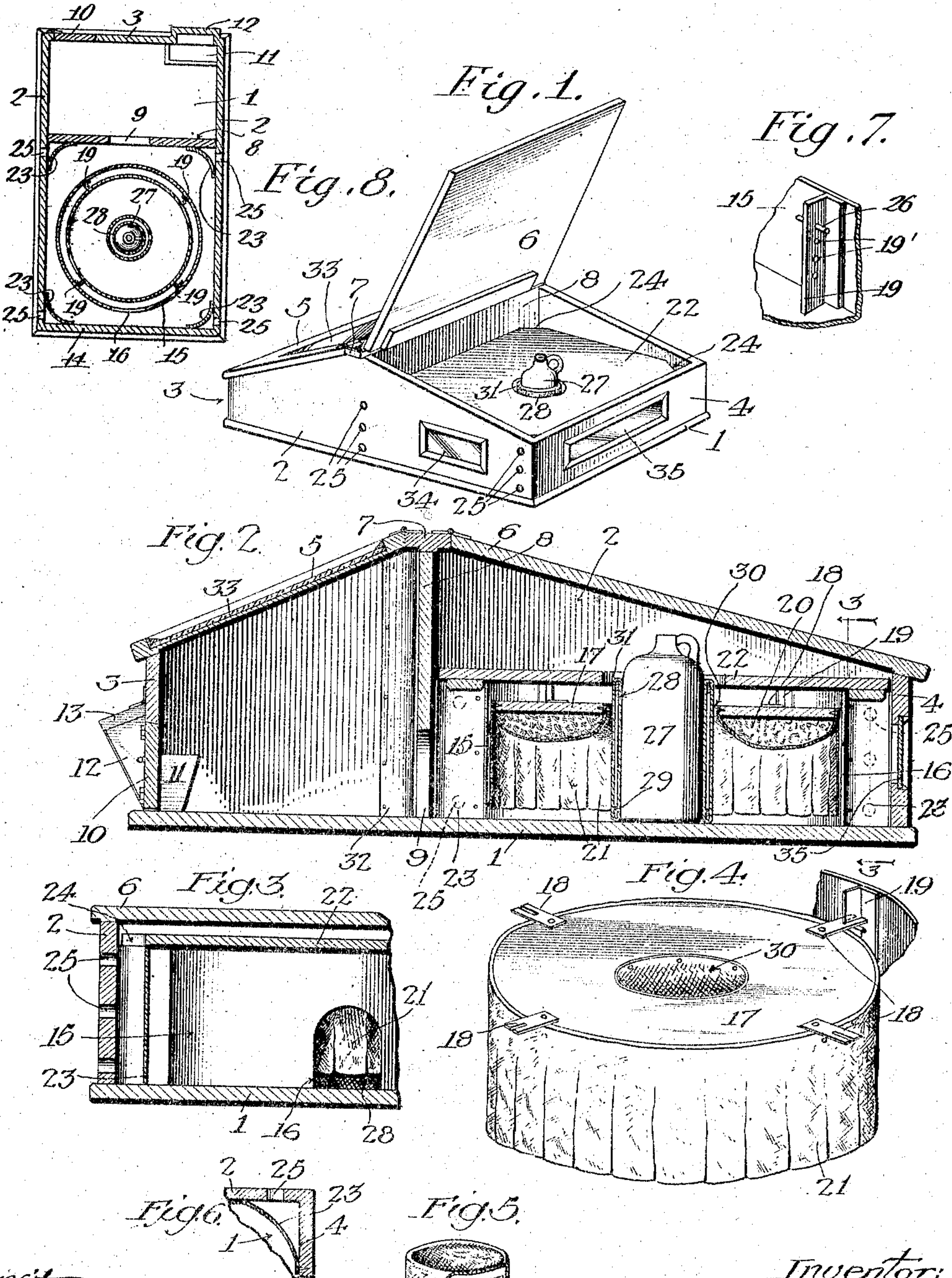


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967,528.

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Witnesses:
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UNITED STATES PATENT OFFICE.

CESLOS E. LA POINTE, OF LOS ANGELES, CALIFORNIA.

FIRELESS BROODER.

967,528.

Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed February 16, 1910. Serial No. 544,306.

To all whom it may concern:

Be it known that I, CESLOS E. LA POINTE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Fireless Brooder, of which the following is a specification.

This invention relates to brooders in which the use of fire heat or lamps is avoided and the main object of the invention is to provide a brooder of this character in which heat retaining means are provided for supplying a limited quantity of heat, so that the natural heat of the chicks is not altogether depended upon.

Further objects of the invention relate to improved hover means and to the general construction, whereby the manipulation, inspection and cleaning of the brooder is facilitated.

The accompanying drawings illustrate the invention and referring thereto:—Figure 1 is a perspective of the brooder with one of the covers open to show the interior. Fig. 2 is a vertical section from front to back. Fig. 3 is a transverse section on the line x^3-x^3 in Fig. 2. Fig. 4 is a perspective of the hover. Fig. 5 is a perspective, partly broken away, of a tubular center member for the hover. Fig. 6 is a horizontal section of the corner portion of the brooder, showing the ventilating means. Fig. 7 is a perspective of the means for adjustably supporting the top member for the hover. Fig. 8 is a horizontal section through the brooder.

The brooder comprises a case formed with a bottom 1, sides 2, front 3 and back 4, and also provided with a front cover 5 and rear cover 6, said covers being hinged to a middle rail 7 extending from side to side of the brooder at the top thereof and said covers being respectively forwardly and rearwardly inclined from this rail in the manner of a roof. A partition wall 8 extending beneath this top rail 7 from top to bottom of the case divides the case into forward and rear portions or chambers, said partition wall being provided in its lower portion with an opening or door 9 for the passage of the chicks between said chambers. The front wall 3 of the case is provided with an opening for entry of the chicks into the brooder or their exit to the brooder yard, said opening having a suitable closure or door 10. A feed trough 11 is provided at the front of the case having a feed chute 12 extending

to the outside of the case and provided with a cover 13.

In the rear compartment or chamber of the brooder there is provided a hover consisting of a cylindrical box or wall 15 having an opening 16 for entry of the chicks, said box resting on the floor 1 and being provided with a top member 17 preferably adjustable on the side or wall of box 15, for example, by means of forks 18 on the top 17 engaging with vertical guideways 19 on the wall 15, said forks resting on pins 26 inserted through perforations 19' in the vertical guide-ways 19, see Fig. 7. Said cover member is provided with padding 20 on its underface and with a circumferential curtain 21 depending therefrom, these portions being of suitable soft fabric adapted to serve as a heat retaining means and as a hover means for the chicks.

A plate or false top 22 extends over the hover to further retain the heat and control the circulation within the hover, said top consisting of a board fitting the inside of the rear chamber of the case and resting on corner members 23, said top board 22 being cut away as shown at 24 at the corners and the corner members 23 being made of sheet metal or otherwise, in such manner as to provide vertical channels or passages in the corners of the said chamber of the case, openings 25 being provided in the side walls of the case at said passages for communication of air thereinto from the outside of the case.

The top board 22 has a central opening through which the air which passes from the channels aforesaid into the space above the top board 22 may pass downwardly to the space below said top board and into the hover box 15.

Heat retaining means are provided for supplying heat in addition to heat furnished by the bodily heat of the chicks, said means consisting preferably of a jar or vessel 27 placed centrally in the rear compartment of the case and resting on the bottom 1 thereof, a protecting sheath or tube 28 being provided consisting, for example, of a sleeve of porous fabric, namely, cloth or felt over a skeleton 29, said sheath surrounding the vessel 27 and the top member 17 of the hover box having a central opening 30 to receive said sheath. Top plate 22 has a central opening 31 somewhat larger than the vessel 27.

The corner members 23 are preferably rounded so as to be concave on their inner faces, thereby avoiding any sharp corners into which the chicks could huddle, and a similar rounded corner piece or member 32 is provided in the rear corners of the front chamber, other corners of the said chamber being otherwise occupied.

A window 33 may be provided in the hinged cover 5 of the front chamber and side and rear windows 34, 35 may be provided in the walls of the rear chamber.

In using the brooder, the vessel 27 will be filled with warm or hot water and inserted within the tubular sheath 28, which is placed within the central opening in the hover. Heat from the water in the said vessel is gradually communicated to the air in the rear compartment of the brooder, the sheath 28 preventing excessive heat at any point of the hover and the insulating padding 20 and curtain means 21 serving to retain an even warmth through the hover. Fresh air entering through the openings 25 passes upwardly within the corner pieces 23 and over the top member 22 and then down through the space or opening 31 in the top member 22, thereby supplying fresh air to the hover portion of the brooder in a gradual or distributed manner avoiding drafts and cold currents. By the provision of a cylindrical hover box and the rounding of the corners of the chamber of the case, I effectually prevent the huddling of the chicks into a corner and thereby avoid a serious source of loss.

What I claim is:—

1. In a fireless brooder, a case provided with a compartment having a passage in the wall thereof, a cylindrical wall within said compartment and provided with a passage at one side, a hover member adjustably supported within said cylindrical wall and provided with padding on its under surface and with a peripheral curtain, a heat retaining means placed centrally of said hover member, said hover member being provided with an opening to receive said means, a protecting tube of poorly conducting porous fabric surrounding said body, and a skeleton means for supporting said tube.

2. In a fireless brooder, a case provided with a compartment having a passage in the wall thereof, a cylindrical wall within said compartment and provided with a passage in the side farthest away from the passage in the wall of the compartment, said cylindrical wall being separate from the outer wall of the compartment at all parts thereof to leave a passage completely around said cylindrical wall, a hover member adjustably supported within said cylindrical wall and provided with padding on its under surface and with a peripheral curtain, a heat retaining body placed centrally of said hover member, said hover member being provided

with an opening to receive said body, and a plate extending horizontally in said compartment over said cylindrical wall, and over the space between the cylindrical wall and the wall of the compartment.

3. In a fireless brooder, a case provided with a compartment having a passage in the wall thereof, a cylindrical wall within said compartment and provided with a passage in the side farthest away from the passage in the wall of the compartment, said cylindrical wall being separate from the outer wall of the compartment at all parts thereof to leave a passage completely around said cylindrical wall, a hover member adjustably supported within said cylindrical wall and provided with padding on its under surface and with a peripheral curtain, a heat retaining body placed centrally of said hover member, said hover member being provided with an opening to receive said body, a plate extending horizontally in said compartment over said cylindrical wall, and over the space between the cylindrical wall and the wall of the compartment, said plate being formed with an opening for the reception of the heat retaining body, said opening being sufficiently large to leave an open space around said heat retaining body for ventilation of the space below the plate, and means for establishing ventilating communication from the outside of the compartment to the space above said plate.

4. In a fireless brooder, a case provided with a compartment having a passage in the wall thereof, a cylindrical wall within said compartment and provided with a passage at one side, a hover member adjustably supported within said cylindrical wall and provided with padding on its under surface and with a peripheral curtain, a heat retaining body placed centrally of said hover member, said hover member being provided with an opening to receive said body, a plate extending horizontally in said compartment over said cylindrical wall, said compartment being provided with corner pieces forming vertical channels at the respective corners, and said plate being cut away at the corners to provide openings from said channels to the space above said plate, and said plate being further provided with a central opening around said heat retaining body, the said compartment being provided with openings in its walls for communication of air from the outside of the case to the said vertical passages.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 10th day of February, 1910.

CESLOS E. LA POINTE.

In presence of—

P. H. SHELTON,
FRANK L. A. GRAHAM.