

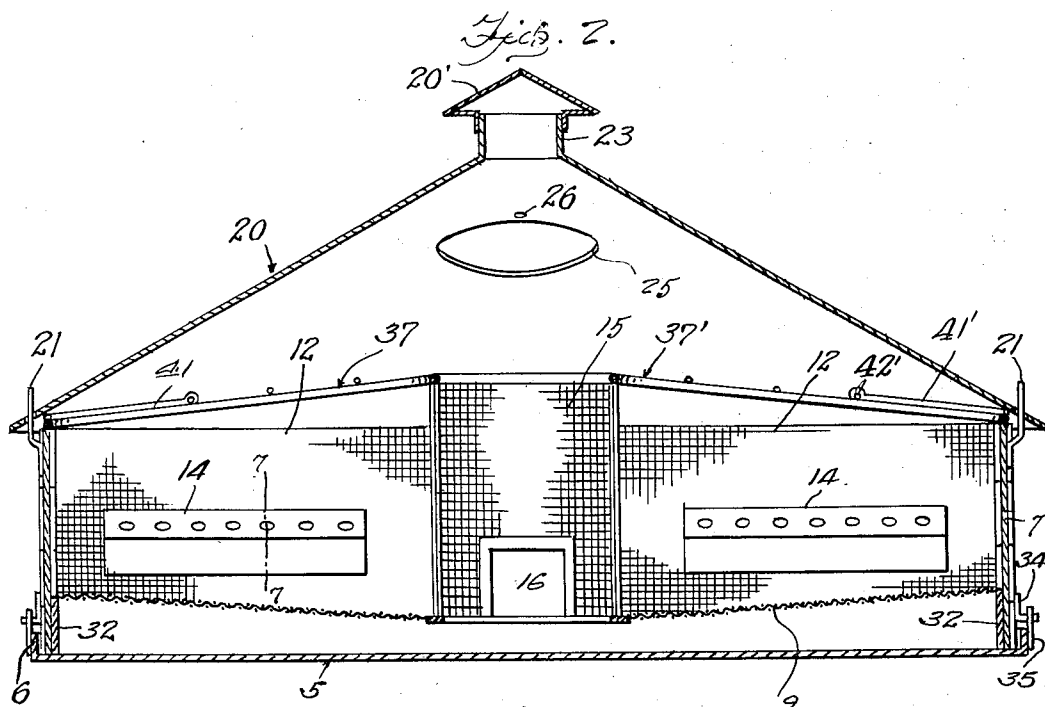
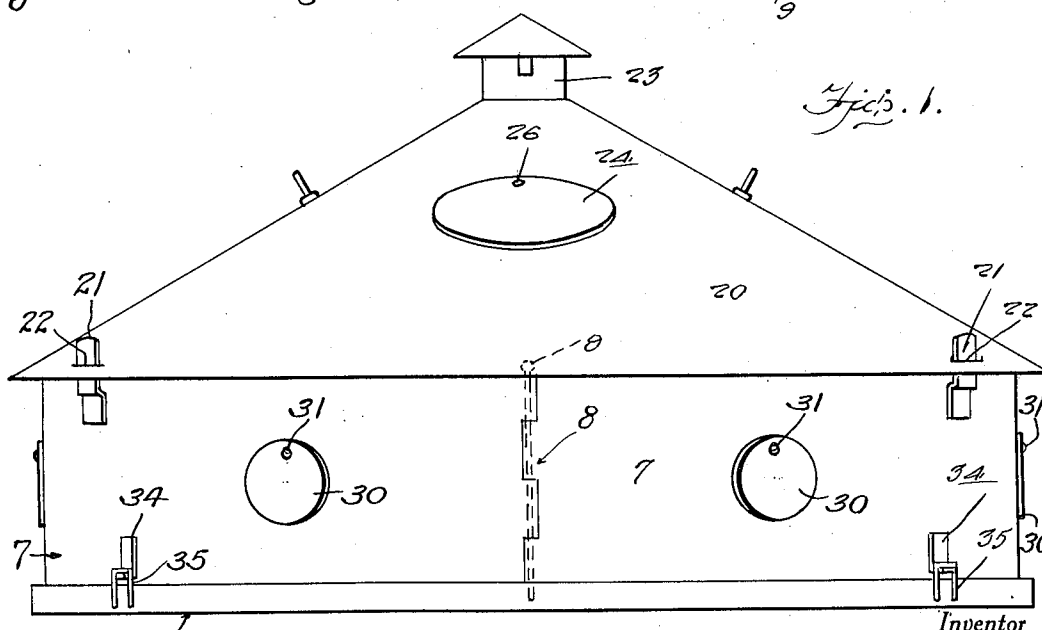
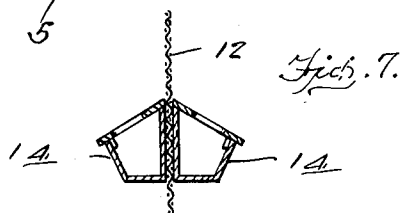
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E. P. FOGLAND

2,019,216

BROODER

Original Filed Sept. 27, 1929 3 Sheets-Sheet 1



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BROODER

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Fig. 3.

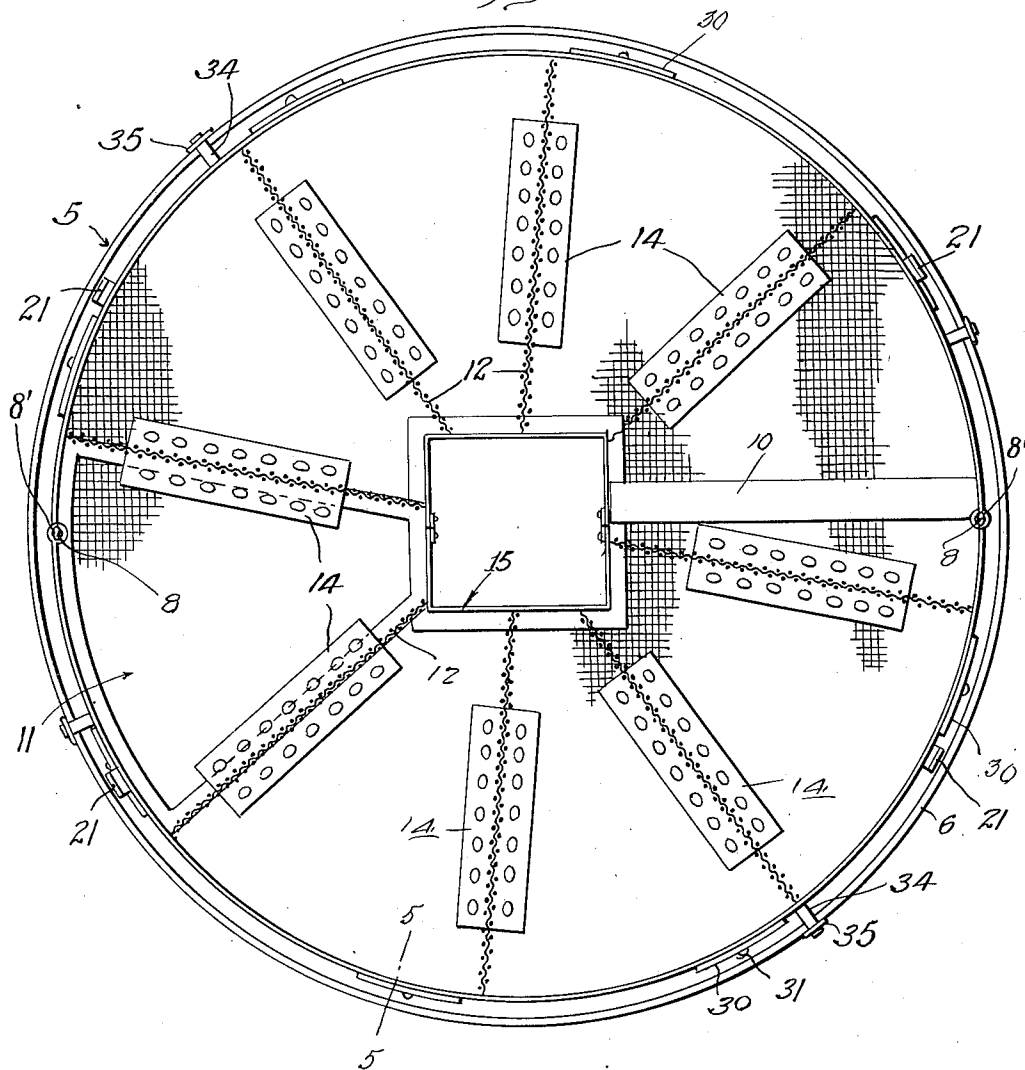
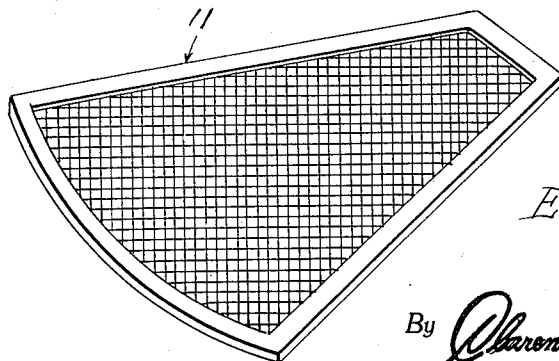


Fig. 6.



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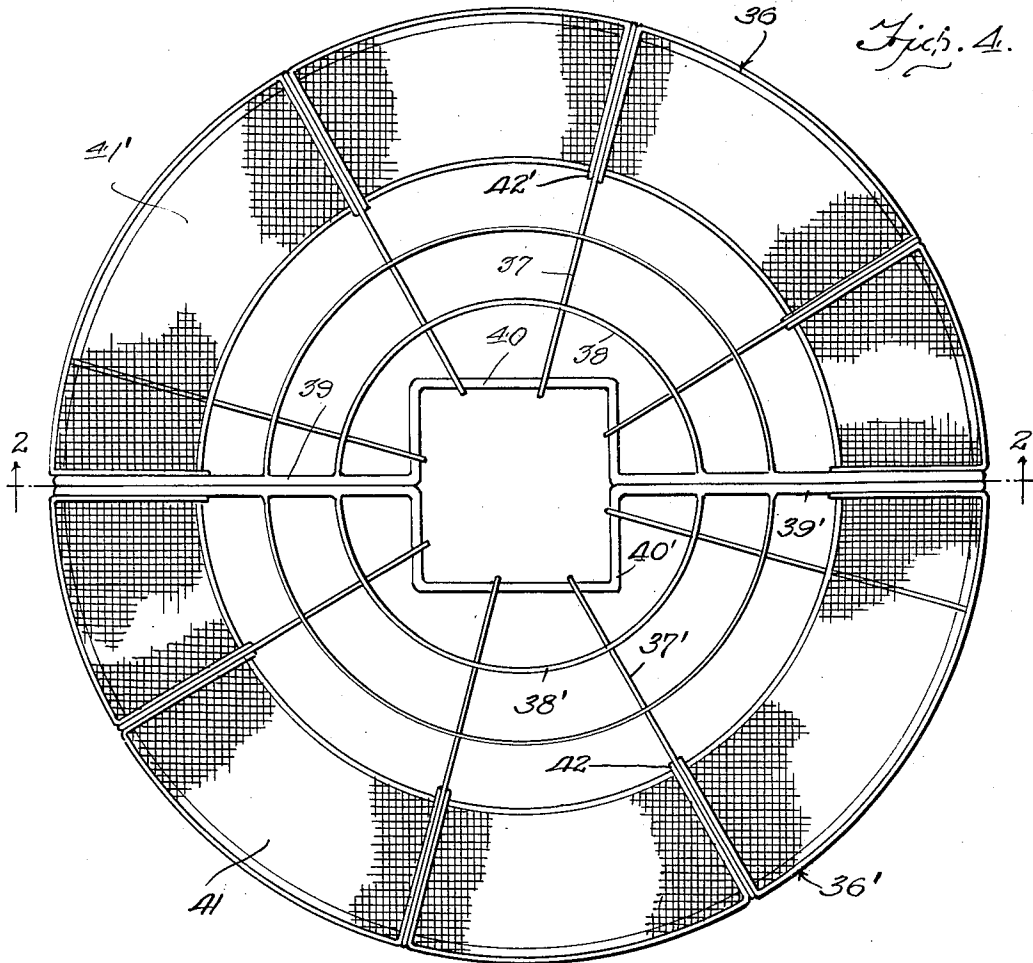
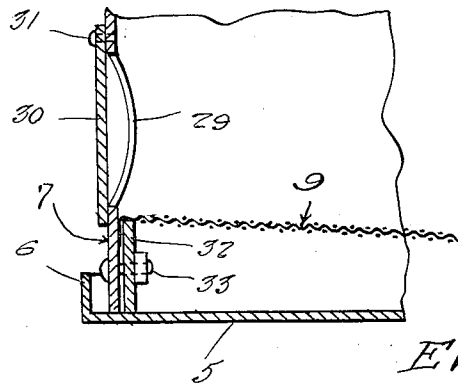
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BROODER

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BROODER

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395,617, September 27, 1929. This application
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10 Claims. (Cl. 119—32)

The present invention relates to improvements in brooders.

An important object of the invention is to provide in a device of this character means for preventing crowding of the baby chicks about the brooder stove.

Another important object of the invention is to provide a device of this nature which is of knock down construction capable of easy assembly and disassembly and in which the various parts are readily accessible.

Another very important object of the invention resides in the provision of a device of this nature which is exceedingly simple in its construction, inexpensive to manufacture, strong and durable, thoroughly efficient and reliable in use, compact and convenient in its arrangement of parts, and otherwise well adapted to the purpose for which it is designed.

In the drawings:

Figure 1 is a side elevation of the brooder embodying the features of my invention,

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

Figure 3 is a top plan view with the roof or canopy removed, and showing the top frame removed,

Figure 4 is a top plan view of the top frame per se,

Figure 5 is an enlarged detail section taken substantially on the line 5—5 of Figure 3,

Figure 6 is a perspective view of a removable segment of the dropping screen, and

Figure 7 is a detail sectional view taken approximately on the line 7—7 of Figure 2.

Referring to the drawings in detail it will be seen that the numeral 5 denotes a circular bottom pan having at its periphery an upstanding annular flange 6. A circular wall 7 is formed of a pair of sections resting on and rising from the bottom of the pan 5, the sections being connected together by hinge structures 8, the hinge pin 8 of either hinge structure being removable to permit the sections to be swung away from each other. Holes 29 in the wall 7 covered by covers 30 pivoted as indicated at 31 provide for access to the individual compartments in the interior of the brooder.

A dropping screen 9 is supported inside the lower portion of the wall 7 and is formed of two main sections the edges of which have overlapping relationship by reason of the addition of a plate 10 on one of the main sections which overlaps the adjacent edge of the other main section. The remaining edges of the main sec-

tions of the screen 9 are in spaced relation when the main sections are assembled. The space is adapted to be closed by a screen segment 11.

Screen partitions 12 rise from the dropping screen 9 and radiate from the center of the structure, having their radially inward ends attached to the cage 15 and their radially outward ends attached to the respective arcuate wall sections of the wall 7. On each partition 12 is a pair of feeding troughs 14, one on each side thereof. A central screen cage 15 rises from the screen 9 and is open at the top and bottom, and in one side has an opening 16 so that access may be had to the burner which is to be located in this cage simply by removing the segment 11 whose inner end is located adjacent to the opening 16.

The screen 9 is preferably secured to the side wall 7 by means of plates 32 bolted as indicated at 33 to the side wall 7. The side wall 7 is preferably engaged with the pan 5 by means of hook shaped elements 34 thereon which engage keepers 35 on the rim of the pan.

In order to prevent the chicks from flying out of the compartments between the partitions 12, a top frame is provided formed of a pair of sections 36, 36' consisting of equally circumferentially spaced radial members 37, 37' half-rings 38, 38' and cross members 39, 39' the central portions of which are offset as indicated at 40 and 40'.

Screen panels 41, 41' are mounted between adjacent radial members 37 and 37' of the frame and have the inner ends of their sides radially inwardly extended and journaled on the outer half-rings 38, 38' at 42, 42' so that access may be had to the different compartments when the hood is removed, simply by swinging the selected panels 41, 41' upwardly. The inward ends of the side members of these panels are journaled on the outer half-rings 38, 38'.

Resting on the circumference of the top frame is a hollow conical hood or canopy 20 which is provided at its apex with a hooded ventilator 20' and at one side of the ventilator with a hand opening 25 covered by a plate 24 hinged on a pin as indicated at 26. Fingers 21 rising from the upper part of the wall enter slots 22 in the edge of the canopy 20 to hold the same in place.

I claim:

1. A brooder of the type described comprising a shallow circular pan having an upstanding rim, a pair of arcuate walls having eyes at their opposite ends, pins removably projecting through said eyes to hold the walls together to form a

knock down cylinder, said cylinder being disposed to rest upon the pan within the rim thereof, an arcuate strip secured to the lower part of the interior surface of each of said arcuate walls, a segmental screen secured at its radially outward edge to each of said arcuate strips and arranged to slant downwardly and inwardly from said strips, the radially inward edges of said segmental screens defining an opening, reticulated walls forming a cage rising from the edges of the said opening, a frame comprising a plurality of equally circumferentially spaced radial bars having their inward ends supported from the top of said cage and their radially outward ends supported from the top of said cylinder, said radial bars being braced by a plurality of concentric arcuate bars spaced outwardly from said cage, a canopy in the form of a hollow substantially conical body adapted to rest upon said frame and overhang the top of said cylinder, and a plurality of radially outwardly and upwardly offset flat tongues on said cylinder engaging through slits near the radially outward edge of said substantially conical body to securely hold the canopy in place.

2. A brooder of the type described comprising a shallow circular pan having an upstanding rim, a pair of arcuate walls having eyes at their opposite ends, pins removably projecting through said eyes to hold the walls together to form a knock down cylinder, said cylinder being disposed to rest upon the pan within the rim thereof, an arcuate strip secured adjacent the lower part of the interior surface of each of said arcuate walls, a segmental screen secured at its radially outward edge to each of said arcuate strips and arranged to slant downwardly and inwardly from said strips, the radially inward edges of said segmental screens defining an opening; reticulated walls forming a cage rising from the edges of the said opening, a frame comprising a plurality of equally circumferentially spaced radial bars having their inward ends supported from the top of said cage and their radially outward ends supported from the top of said cylinder, said radial bars being braced by a plurality of concentric arcuate bars spaced outwardly from said cage, a canopy in the form of a hollow substantially conical body adapted to rest upon said frame and overhang the top of said cylinder, and a plurality of radially outwardly and upwardly offset flat tongues on said cylinder engaging through slits near the radially outward edge of said substantially conical body to securely hold the canopy in place, two side edges of said segmental screens being circumferentially spaced to provide a segmental opening, and a removable segment closing said segmental opening and permitting access to said cage through an entrance provided in said cage.

3. A brooder of the type described comprising a shallow circular pan having an upstanding rim, a pair of arcuate walls having eyes at their opposite ends, pins removably projecting through said eyes to hold the walls together to form a knock down cylinder, said cylinder being disposed to rest upon the pan within the rim thereof, an arcuate strip secured to the lower part of the interior surface of each of said arcuate walls, a segmental screen secured at its radially outward edge to each of said strips and arranged to slant downwardly and radially inwardly from said strips, the radially inward edges of said segmental screens defining a central opening; reticulated walls forming a cage rising from the edges of the said central opening, a frame comprising a plurality of equally and circumferentially spaced radial bars

having their radially inward ends supported from the top of said cage and having their radially outward ends supported from the top of said cylinder, said bars being braced by a plurality of arcuate bars concentrically spaced outwardly from said cage, a canopy in the form of a hollow substantially conical body resting upon said frame and overhanging the top of said cylinder, a plurality of radially outwardly and upwardly offset flat tongues on said cylinder engaging through slits provided near the outward edge of said canopy, to securely hold the canopy in place, and means removably attaching the pan to the cylinder comprising strips secured at intervals on the outside of said cylinder each having a radially outwardly directed tongue, and a plurality of upright U-shaped keepers secured to and rising from the rim of the pan, and with which said tongues engage.

4. A brooder of the type described comprising a shallow circular pan having an upstanding rim, a pair of arcuate walls having eyes at their opposite ends, pins removably projecting through said eyes to hold the walls together to form a knock down cylinder, said cylinder being disposed to rest upon the pan within the rim thereof, an arcuate strip secured adjacent a lower part of the interior surface of each of said arcuate walls, a segmental screen secured at its radially outward edge to each of said strips and arranged to slant downwardly and radially inwardly from said strips, the radially inward edges of said segmental screens defining a central opening; reticulated walls forming a cage rising from the edges of said central opening, a frame comprising equally circumferentially spaced radial bars having their inner ends supported from the top of said cage and their radially outward ends supported from the top of said cylinder, said bars being braced by a plurality of arcuate bars spaced concentrically outwardly from said cage, a canopy in the form of a hollow substantially conical body resting upon said frame and overhanging the top of said cylinder, a plurality of radially outwardly and upwardly offset flat tongues rising from said cylinder and engaging slits provided near the outer edge of said canopy and removably holding the canopy in place and a plurality of reticulated partitions rising from said segmental screen and attached at their radially inward ends to the walls of said cage, and at their radially outward ends to respective ones of said arcuate walls.

5. A brooder of the type described comprising a shallow circular pan having an upstanding rim, a pair of arcuate walls having eyes at their opposite ends, pins removably projecting through said eyes to hold the walls together to form a knock down cylinder, said cylinder being disposed to rest upon the pan within the rim thereof, an arcuate strip secured to the lower part of the interior surface of each of said arcuate walls, a segmental screen secured at its radially outward edge to each of said strips and arranged to slant downwardly and radially inwardly from said strips, the radially inward edges of said segmental screens defining a central opening; reticulated walls forming a cage rising from the edges of said central opening, a frame comprising a plurality of equally circumferentially spaced radial bars having their radially inward ends supported from the top of said cage and their radially outward ends supported from the top of the arcuate walls, said radial bars being braced by a plurality of arcuate bars spaced concentrically outwardly from said cage, a canopy in the

form of a hollow substantially conical body removably resting upon said frame and overhanging the top of said cylinder, a plurality of radially outwardly and upwardly offset flat tongues rising from said cylinder and engaging slits provided near the outer edge of said canopy to hold the canopy in place, and a reticulated panel between two adjacent ones of said radial bars, the radially inward end of said panel being hinged to one of said arcuate bars whereby the panel may be swung upwardly to afford access to the interior of said cylinder.

6. A brooder comprising a pan having an upstanding rim, a hollow cylinder resting on said pan within said rim, means removably connecting said rim and said cylinder, a screen across the lower part of said cylinder and secured to the sides thereof, said screen being provided with a segmental opening and a central opening, a reticulated cage rising from the edges of said central opening and having an entrance adjacent said segmental opening, a removable reticulated segment closing said segmental opening, and vertical radially arranged reticulated partitions rising from said screen and connected at opposite ends to said cage and to said cylinder.

7. A brooder comprising a circular pan having an upstanding rim, a curved wall forming a cylinder rising from said pan within said rim, a screen stretched across the lower part of said cylinder and provided with a central opening, reticulated walls rising from the edges of said central opening and defining a cage, circumferentially spaced reticulated radial walls stretched between said cage and the wall of said cylinder and having their lower edges connected to said screen, and a frame resting on the upper edge of said cylinder, said frame having reticulated panels located over the compartments defined by adjacent ones of said radial walls.

8. A brooder comprising a circular pan having an upstanding rim, a curved wall forming a cylinder rising from said pan within said rim, a screen stretched across the lower part of said cylinder and provided with a central opening, reticulated walls rising from the edges of said central opening and defining a cage, circumferentially spaced reticulated radial walls stretched between said cage and the wall of said cylinder

and having their lower edges connected to said screen, a frame resting on the upper edge of said cylinder, said frame having reticulated panels located over the compartments defined by adjacent ones of said radial walls, and a substantially conical canopy removably resting on said frame and overhanging the upper edge of said cylinder, and means connecting said canopy and said cylinder and holding said canopy removably in place.

9. A brooder comprising a circular pan having an upstanding rim, a curved wall forming a cylinder rising from said pan within said rim, a screen stretched across the lower part of said cylinder and provided with a central opening, reticulated walls rising from the edges of said central opening and defining a cage, circumferentially spaced reticulated radial walls stretched between said cage and the wall of said cylinder and having their lower edges connected to said screen, and a frame resting on the upper edge of said cylinder, said frame having reticulated panels located over the compartments defined by adjacent ones of said radial walls, some of said reticulated panels being hinged to a radially inward portion of said frame whereby the radially outward end of the panels may be raised to afford access to its respective compartment.

10. A brooder comprising a circular pan having an upstanding rim, a curved wall forming a cylinder rising from said pan within said rim, a screen stretched across the lower part of said cylinder and provided with a central opening, reticulated walls rising from the edges of said central opening and defining a cage, circumferentially spaced reticulated radial walls stretched between said cage and the wall of said cylinder and having their lower edges connected to said screen, and a frame resting on the upper edge of said cylinder, said frame having reticulated panels located over the compartments defined by adjacent ones of said radial walls, said frame being composed of a pair of semi-circular sections having their radially inward edge supported from the top of said cage and their radially outward edge supported from the top of said cylinder.

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