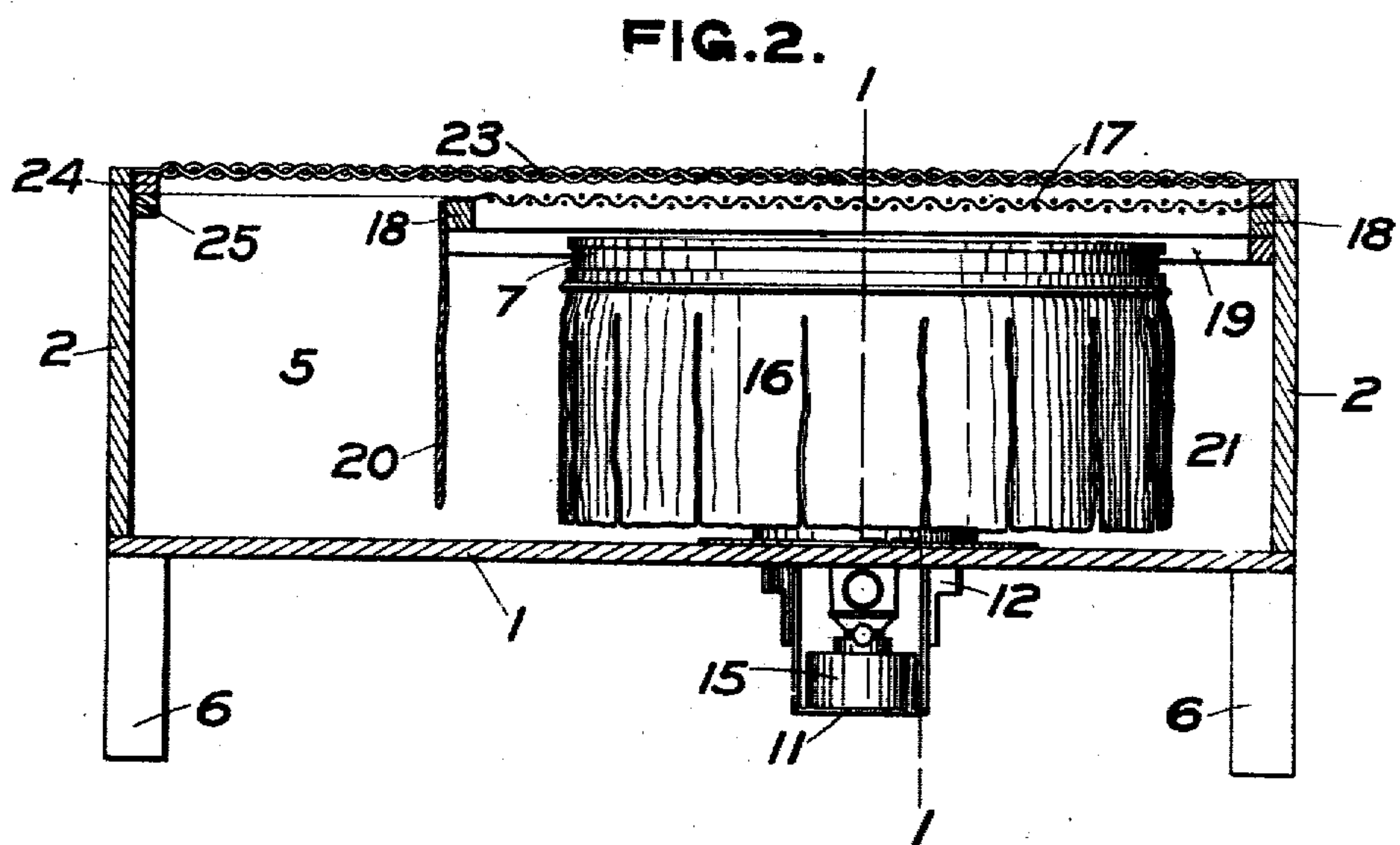
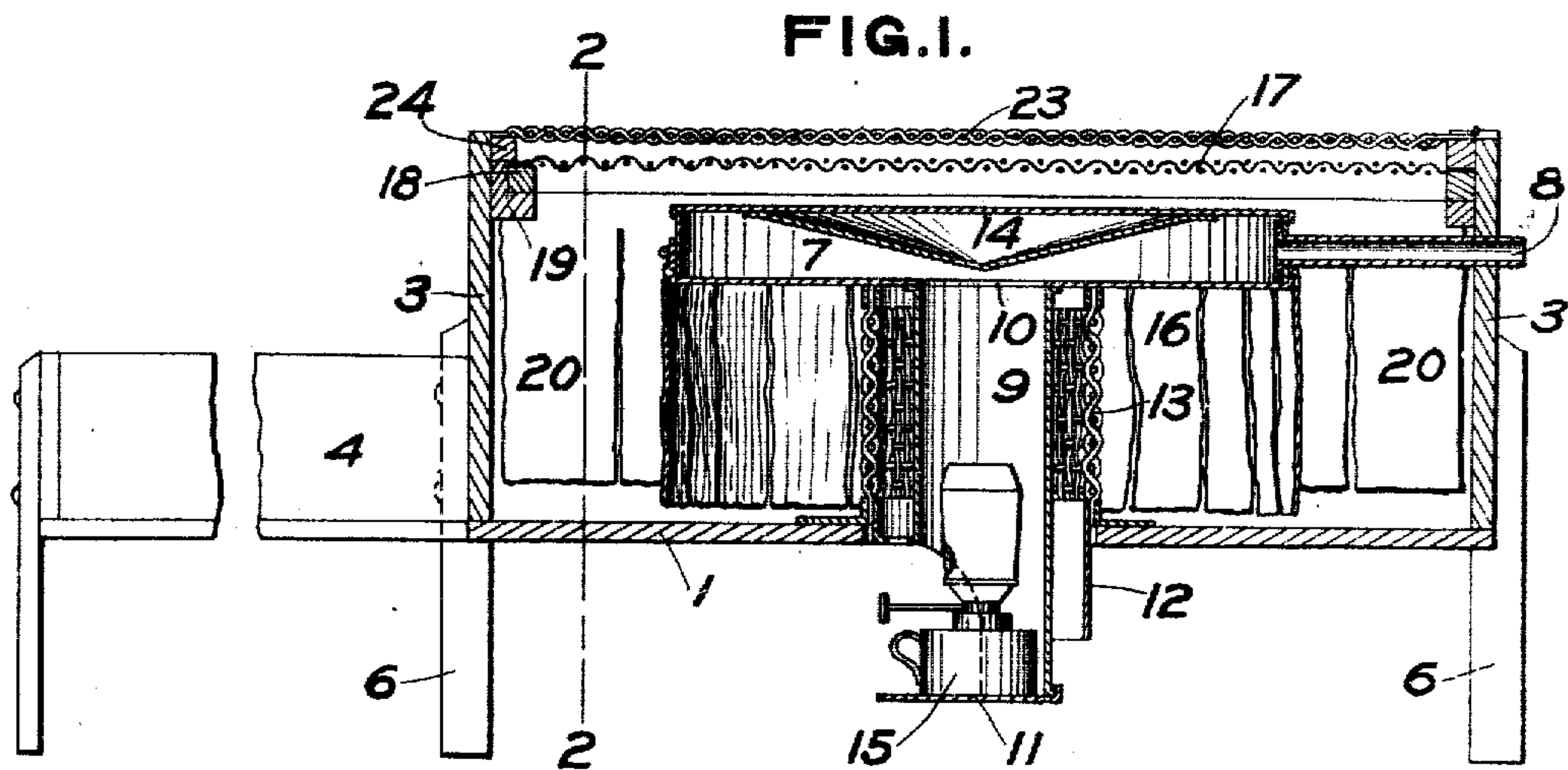


F. C. HARE.

BROODER.

APPLICATION FILED FEB. 6, 1905.

2 SHEETS--SHEET 1.



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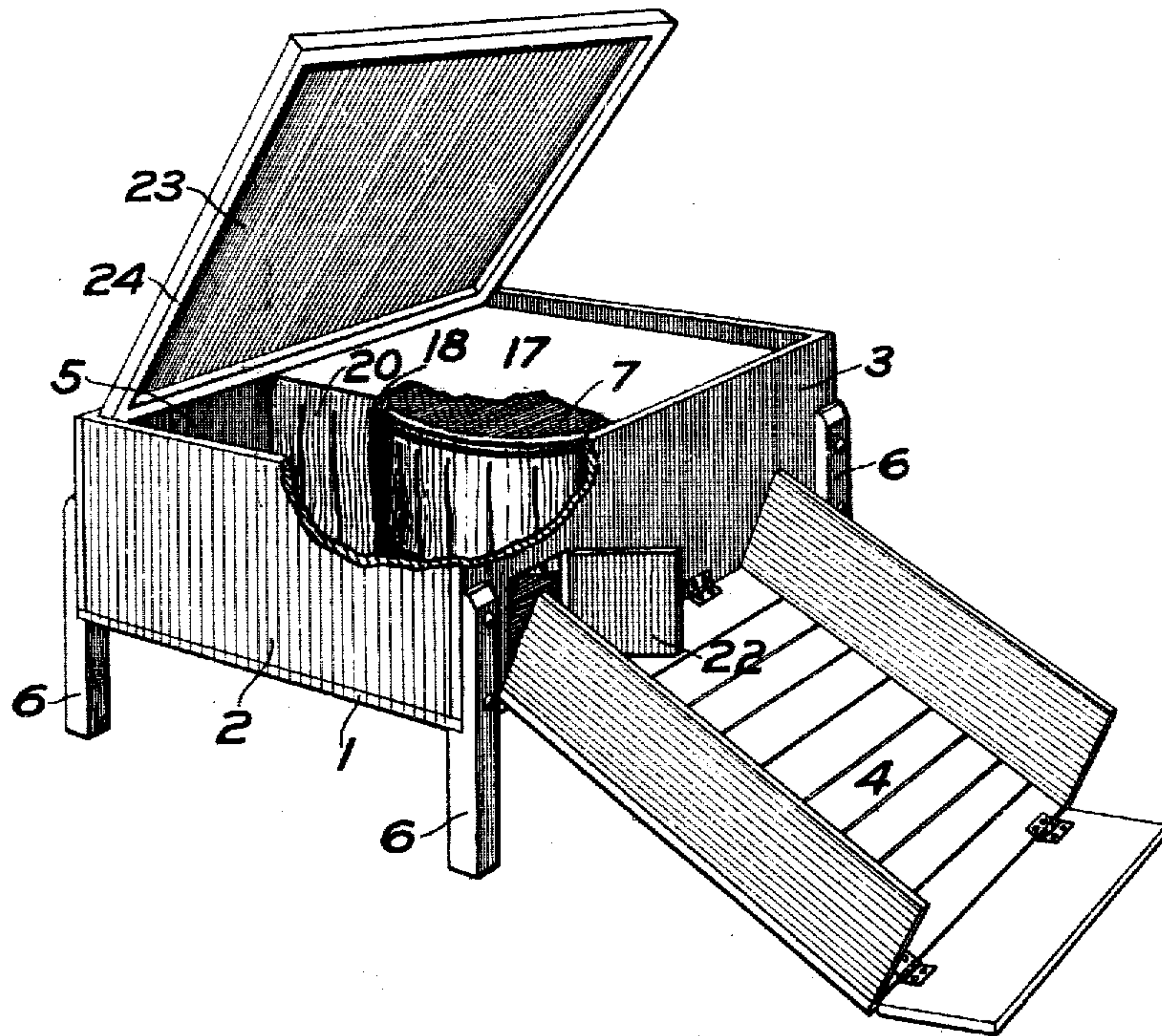
PATENTED MAR. 6, 1906.

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2 SHEETS--SHEET 2.

FIG.3.



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Opportunities

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UNITED STATES PATENT OFFICE.

FRANKLIN C. HARE, OF BUFFALO, NEW YORK, ASSIGNOR TO CYPHERS
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OF NEW YORK.

BROODER.

No. 814,041.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed February 6, 1905. Serial No. 244,335.

To all whom it may concern:

Be it known that I, FRANKLIN C. HARE, late a subject of the King of Great Britain, but who have received my first naturalization papers for citizenship of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Brooders, of which the following is a specification.

This invention relates to brooders; and it consists in the arrangements hereinafter set forth.

In the drawings, Figure 1 is a longitudinal section of a brooder embodying this invention on the line 1 1 of Fig. 2. Fig. 2 is a cross-section of the same brooder, taken on the line 2 2 of Fig. 1; and Fig. 3 is a perspective view of a brooder embodying this invention, showing the cover raised and parts broken away to exhibit internal construction.

The brooder is composed of a box having the bottom 1, the sides 2 2, and the ends 3 3. A run 4 may be added and may be hinged to the brooder-box 5, so as to take the two positions shown in Figs. 1 and 3. The brooder is preferably raised on legs 6. The brooder-chamber contains a heater, preferably consisting of a drum 7, having a chimney 8 leading outside the heater and supported upon a tube 9, which opens by the perforation 10 into the center of the bottom of the drum 7, and also by means of a shelf 11 supports a lamp. Outside the tube 9 is a second tube 12, which takes fresh air from outside the brooder-chamber, heats it by contact with the outside of the tube 9, and discharges it into the brooder-chamber through a perforated wall, consisting in the present case of fabric 13 of either wire, burlap, or similarly-operating material. The drum 7 has an inverted cone 14, whose apex points downward and rests over the center of the perforation 10. The heated air rising from the lamp 15 rises through the tube 9, strikes the apex of the cone 14 and is distributed through the drum 7, so that said drum constitutes a heat-radiating means. The drum is set sufficiently high from the floor 1 to permit the chicks to gather under the drum, and from the periphery of the drum hangs a split curtain 16, through which the chicks may enter and under which the heat is greater than out-

side. The heated air, however, being constantly brought in through the tube 12, is continuously freshly fed to the chicks and passes out through the slitted curtain 16 or under it into the brooder-chamber proper. This brooder-chamber has a top or ceiling 17 of a porous fabric, such as muslin or canvas, which is fastened to a frame 18, which rests on cleats 19, fastened to the interior of the walls of the brooder-box, and may be removed easily therefrom. The fabric or ceiling 17 makes a ceiling at one end of the box, and by a curtain 20, usually split, attached to the frame 18, a compartment 21 is created in a selected portion of the brooder-box, which is inclosed by the bottom and three walls of the box and by the fabric or ceiling 17 and the curtain 20. Under the ceiling 17, as above suggested, is placed the heater above described. The heated air in the chamber 21 rises constantly through the ceiling 17, but is not permitted to pass through it with any great speed, so that there is a constant outlet of the air from the chamber 21, which is principally supplied from the fresh air led in between the tubes 9 and 12 of the heater. The chicks may gather under the heater itself and beneath the curtain 16, where they will receive the greatest heat, or they may move out from the curtain 16 and into the chamber 21, where they will receive less heat, but more room, or they may move out from behind the curtain 20 and into the front of the brooder and may pass out through the door 22 into the run 4.

The brooder-box is provided with means for allowing the air that would pass outward through the ceiling 17 to be led out of the brooder. This may be done by perforations, which in the present embodiment of this invention are the pores in a canvas or fabric top 23 for the whole brooder-box. This top of fabric 23 is fastened to a frame 24, which may rest upon cleats 25, fastened on the inner walls of the brooder-box, or in any other suitable way, and may be hinged to the brooder-box, as indicated in Fig. 3. The vitiated air which has passed through the porous ceiling 17 passes on outward through the porous top 23, and the ventilation of the brooder is thus completed.

What I claim is—

1. In a brooder, a brooder-box having air-

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outlet, a brooder-chamber within said brooder-box having a porous ceiling, and a heater in said brooder-chamber having means for delivering warmed fresh air into said chamber.

5 2. In a brooder, a brooder box having air-outlet, a brooder-chamber within said brooder-box having a porous ceiling and a heater in said brooder-chamber having a curtain constituting a hover and having means for delivering warmed fresh air within said curtain
10 and thence into said chamber.

3. In a brooder, a brooder-box having a porous top, a brooder-chamber within said brooder-box having a porous ceiling, and a
15 heater in said brooder-chamber having means for delivering warmed fresh air into said chamber.

In a brooder, a brooder-box having a porous top, a brooder-chamber within said
20 brooder-box having a porous ceiling, and a heater in said brooder-chamber having a curtain constituting a hover and having means

for delivering warmed fresh air within said curtain and thence into said chamber.

5. In a brooder, a brooder-box having a
25 porous top, a brooder-chamber within said brooder-box having a porous ceiling and a curtain constituting one side thereof, and a heater in said brooder-chamber having means for delivering warmed fresh air into said
30 chamber.

6. In a brooder, a brooder-box having a porous top, a brooder-chamber within said brooder-box having a porous ceiling and a
35 curtain constituting one side thereof, and a heater in said brooder-chamber having a curtain constituting a hover and having means for delivering warmed fresh air within said curtain and thence into said chamber.

FRANKLIN C. HARE.

Witnesses:

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