L. R. OAKES.

POULTRY BROODER.

APPLICATION FILED JAN. 16, 1915.

1,167,013.

Patented Jan. 4, 1916.

Fig. 1.

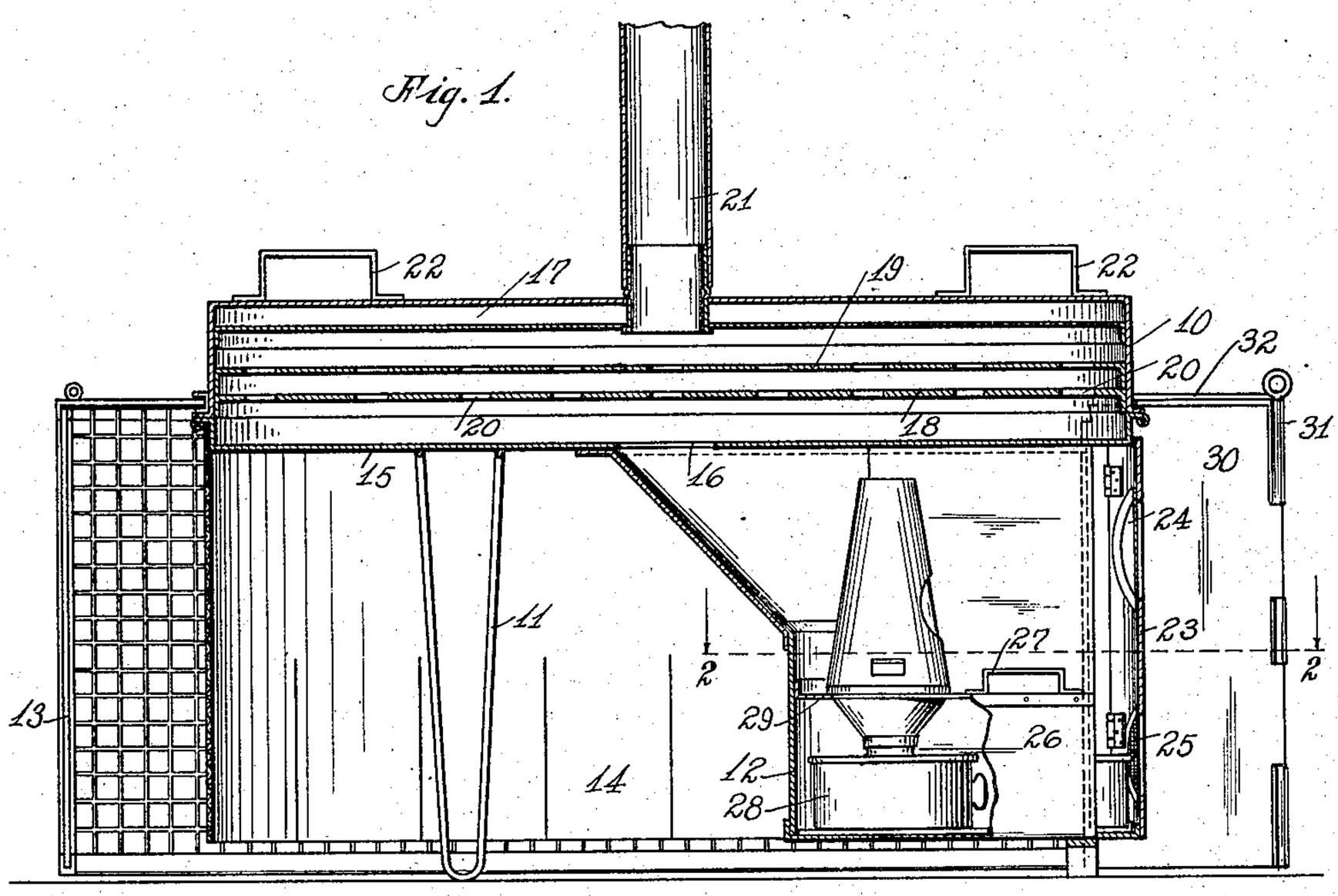


Fig. 3.

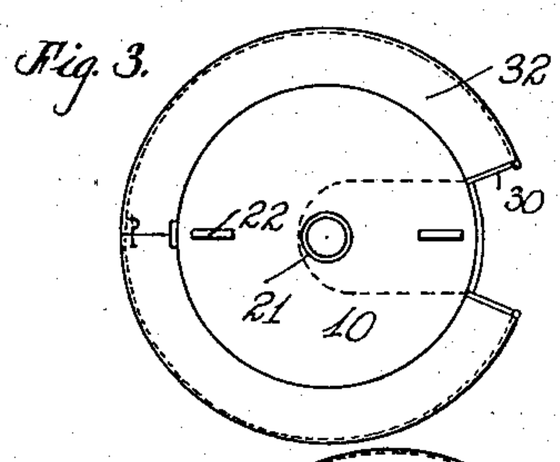


Fig. 4.

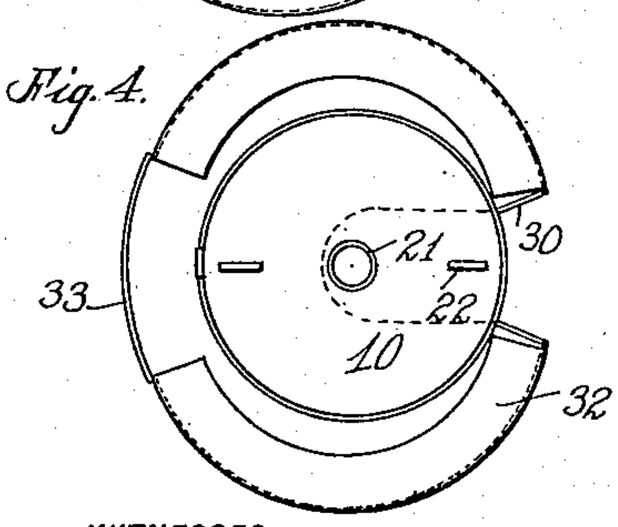
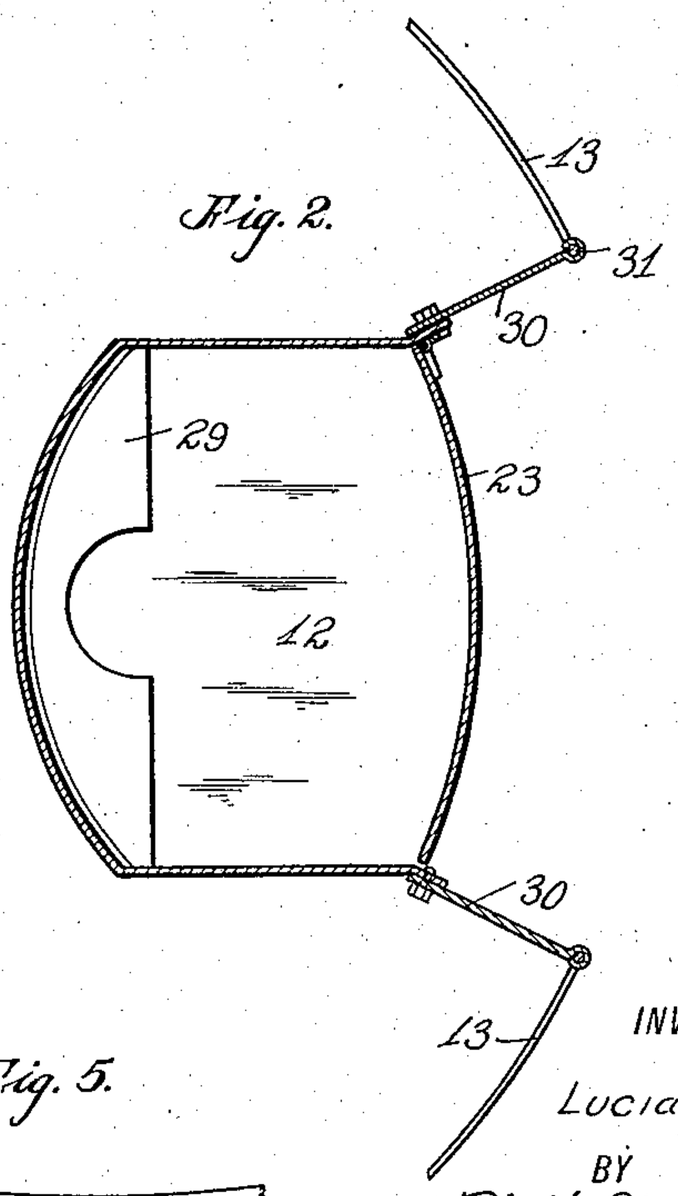


Fig. 2.



WITNESSES:

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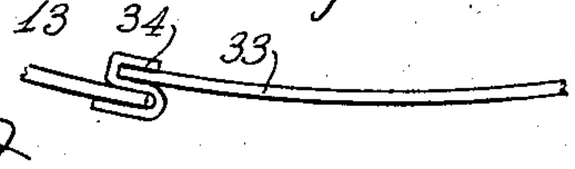
Fig. 5.



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POULTRY-BROODER.

1,167,013. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed January 16, 1915. Serial No. 2,629.

To all whom it may concern:

Be it known that I, LUCIAN R. OAKES, a citizen of the United States, and a resident of Tipton, county of Tipton, and State of Indiana, have invented a certain new and useful Poultry-Brooder; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

The object of this invention is to provide a brooder with a more suitable means for distributing heat than has been used heretofore. This is accomplished by means of a metal radiation disk supported above a hover, and heating chamber which extends into said hover, containing a lamp or other suitable means of supplying heat.

The heating chamber incloses an air passage adapted to compel the air to pass through the lamp or heating means and come into direct contact with the bottom of the radiation disk, and thereby convey the heat by conduction through the metal disk to radiate directly over the hover.

Another feature of the invention consists of an expandible wall around the hover for confining the chicks, thereby protecting them from rats and the like when it is closed and for giving them more freedom when it is expanded.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims:

In the drawings, Figure 1 is a vertical section through the middle of the hover. Fig. 2 is a section on line 2—2, Fig. 1. Fig. 3 is a plan view looking down on the hover, showing expandible wall closed. Fig. 4, same as Fig. 3 showing expandible wall open. Fig. 5 is an enlarged view of a section of the expandible wall and joint therein.

The brooder is composed of a radiation disk 15 resting on two legs 11, of which only one is shown herein and upon a heating chamber 12 in which a lamp or other suitable heating means is placed, and a screen wall 13 surrounding said brooder. Above the radiation disk there is an inverted pan or drum 10 resting thereon which has a plurality of perforated disks 18 and 19 for the purpose of forming dead air spaces to lessen the escape of heat. The top of the pan or drum is composed of a sealed air chamber 17 for insulating purposes and attached to this are two handles 22 by which the brooder may be lifted and carried about. There is a flue 21 opening out of the dead air chambers in the drum which make a draft through the lamp and heating chamber and the air passage 16, which is an opening in the radiation disk from the heating chamber to the drum. This passage 16 is off to one side from the lamp thereby causing the heat to circulate throughout the heating chamber before escaping through said passage. The heating chamber 12 is directly under said radiation disk and extends into the hover but takes up only a portion of the surface of said disk as is shown in Figs. 3 and 4. There is a door 23 opening into said heating chamber which has a transparent portion 24 and a screen portion 25. Said screen portion is connected directly with a box like air conduit 26 having a handle 27 for removing it. There is a lamp 28 inclosed in said heating chamber and resting within said conduit 26. Said lamp is entirely surrounded by said conduit 26 and a plate 29 attached to the wall of said chamber by which means the air drawn through said chamber is compelled to pass through the screen 25 and conduit 26 through the lamp chimney 128 and the hot air thereby is thrown into direct contact with the radiation disk immediately above said chimney.

The radiation disk being of metal the heat from the chimney is conveyed by conduction throughout the entire disk, the larger portion of which extends directly over the hover, and is then radiated downward thus applying warmth thereto. The construction above the radiation disk acts simply as a packing to retard the loss of heat from the upper side of said disk. Attached to the outer wall of said heating chamber there is a partition 30 having a semi-circular screened wall 13 hinged at 31 to said partition. Between said wall and the hover there is a horizontal cover 32 which, with the surrounding wall completely incloses said hover. The removable screen portion 33 having an S-shaped joint 34 may be inserted between the two halves of the wall so as to enlarge the area contained therein when so desired.

The walls 13 may be closed and fastened

during the night time so as to completely inclose the hover and protect the chicks from rats and the like, but in the day time or when desired they may be opened and an additional portion 33 interposed between them so as to enlarge the area inclosed and allow more space for the chicks to run.

The invention is:

1. A brooder, including a hover, a heating chamber extending in said hover, means for heating said chamber, and a radiating plate extending directly over both hover and heating chamber, having a passageway communicating with said heating chamber to one side of said heating means, said passageway having suitable communication with a vertical flue above it, to induce a draft through said heating chamber and heating means.

2. A brooder, including a hover, a heating chamber extending in said hover, two semi-circular movable walls surrounding said hover and hinged to said heating chamber, and a member insertible between said walls for enlarging the area contained therein when said walls are parted.

In witness whereof, I have hereunto affixed my signature in the presence of the witnesses herein named.

LUCIAN R. OAKES.

Witnesses:
JOHN P. KEMP,
CHARLES KEMP.