H. F. FREISE.

EGG CANDLER.

APPLICATION FILED JUNE 28, 1911.

1,006,200.

Patented Oct. 17, 1911.

2 SHEETS—SHEET 1.

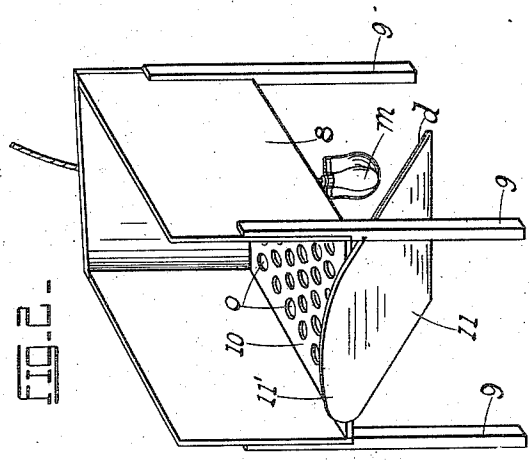

FIG. 2.

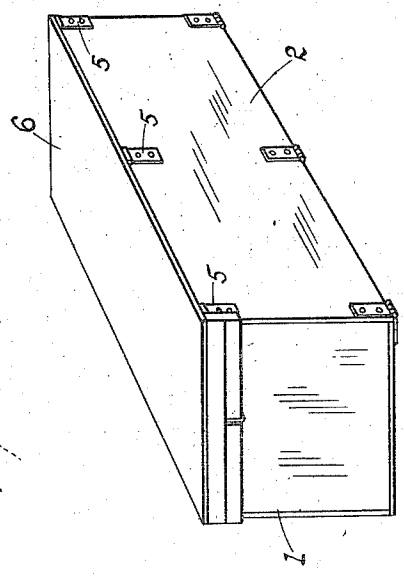

FIG. 4.

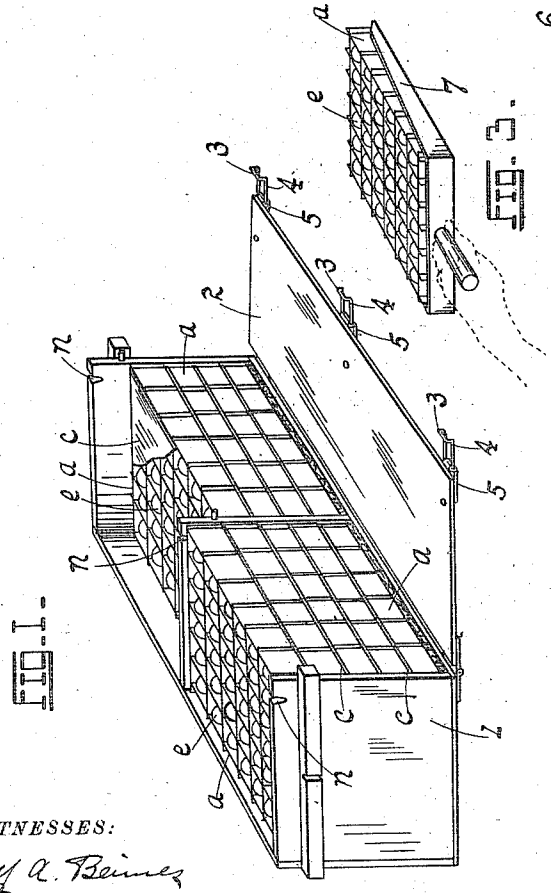

FIG. 3.

FIG. 1.

WITNESSES:

Harry A. Beines

Fannie E. Heke

INVENTOR.

Henry F. Freise.

BY Ernest Hoover

ATTORNEY.

H. F. FREISE.

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2 SHEETS—SHEET 2.

FIG. 5.

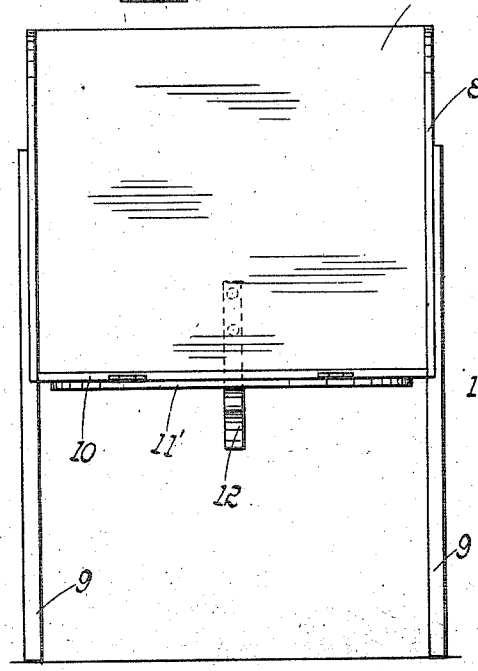
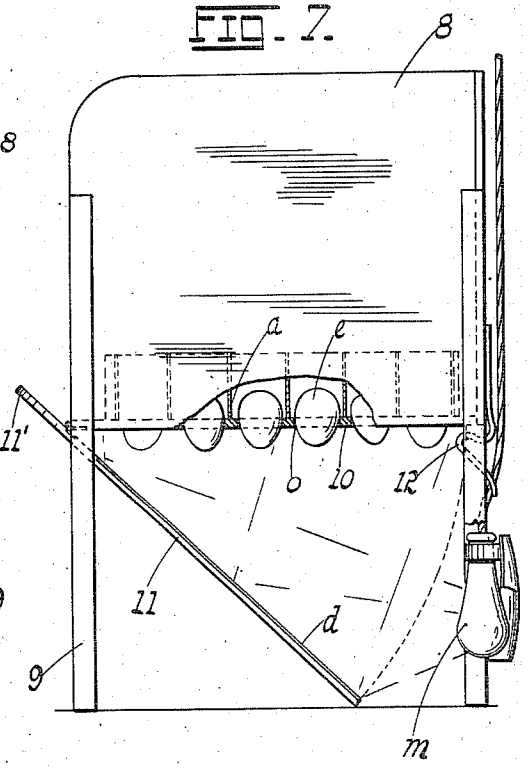


FIG. 7.



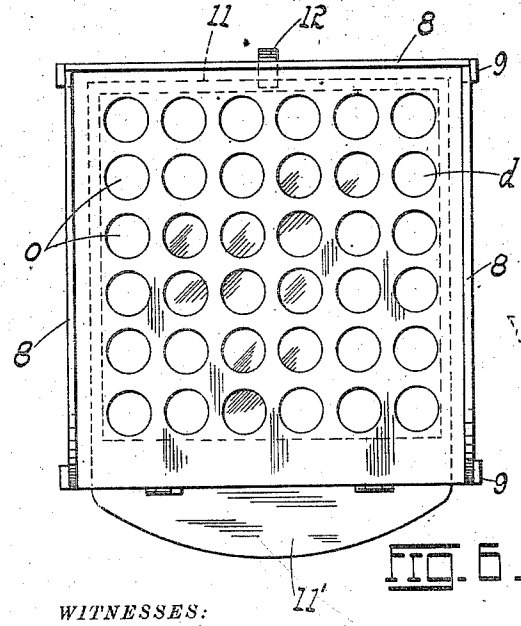


FIG. 6.

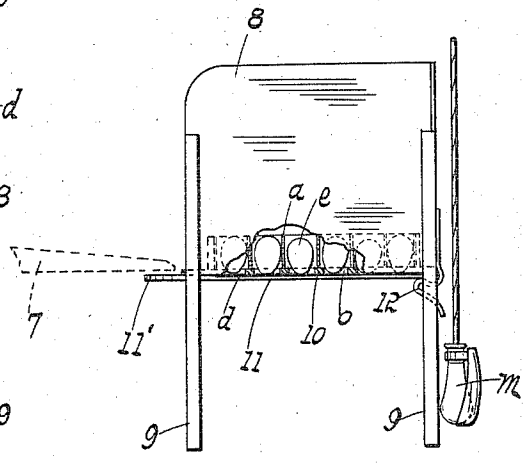


FIG. 8.

WITNESSES:

Harry A. Beinz

Fannie E. Heber

INVENTOR.

Henry F. Freise.

BY Ernest Haven

ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY F. FREISE, OF OLD MONROE, MISSOURI.

EGG-CANDLER.

1,006,200. Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed June 28, 1911. Serial No. 635,812.

To all whom it may concern:

Be it known that I, HENRY F. FREISE, citizen of the United States, residing at Old Monroe, in the county of Lincoln and State of Missouri, have invented certain new and useful Improvements in Egg-Candlers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in egg candlers; and it consists in the novel details of construction more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a perspective of an open shipping-box or egg-case showing the manner of applying my invention; Fig. 2 is a perspective view of the candler ready for operation; Fig. 3 is a perspective of a single filler and eggs removed from the case; Fig. 4 is a perspective view showing the case closed; Fig. 5 is a front elevation of the candler when not in service; Fig. 6 is a top plan of Fig. 5; Fig. 7 is a side elevation of the candler in service, parts being broken away; and Fig. 8 is a view similar to Fig. 7 showing the supporting wing or plate swung into position to permit the removal of the candled eggs.

The object of my invention is to construct a candler which can operate on a maximum number of eggs at one time, this number representing the contents of a single filler in which eggs are usually deposited preparatory to shipment in the case in which the fillers are packed.

A further object is to provide a candler which will effectively exclude all light except that intended for candling purposes; one which shall be simple in construction, readily manipulated; and one possessing further and other advantages better apparent from a detailed description of the invention, which is as follows:—

Referring to the drawings, 1 represents a shipping case provided with a door 2 hinged at the bottom of the case, said door when dropped allowing free access to the contents of the case (Fig. 1). The upper edges of the end walls of the case and any intermediate partition walls are provided with notches *n* to receive the terminal bends 3 of the latches 4 hinged to the straps 5 carried by the free edge of the door 2, the top 6 being nailed in place after the bends 3 have been swung into their respective notches *n*. In this way the door 2 can not open while the case is in transit. The fillers *a* in which the eggs *e* are placed are separated by layers or sheets of cardboard *c*, the sheet *c* permitting an entire filler with its egg contents to be picked up by a scoop 7 in the hand of the operator (Fig. 3) the sheet *c* forming a floor or surface over which the edge of the scoop may be passed under the filler and eggs deposited therein, the scoop picking up the filler and eggs as shown in Fig. 3. This filler full of eggs is now ready to be deposited into the candler proper, which may be described as follows: The candler comprises a box 8 open in front and raised above the floor by means of legs 9, the box having a perforated bottom 10 for the support of the eggs deposited thereon. Hinged to the front edge of the member 10 (which may be termed a fixed bottom) is a wing or apron 11 having a front projection 11′ extending in front of the box whereby the wing may be manipulated. When swung upwardly against the fixed bottom 10 the eggs *e* normally projecting below the bottom 10 during the candling operation (Fig. 7) are picked up by said wing, the eggs now resting on the member 11. The inner face of the drop bottom or wing 11 is provided with a glass or equivalent reflecting layer *d* to reflect the light rays from the lamp *m* well against the bottoms of the eggs. In its raised position the drop-bottom or wing 11 is automatically locked by a spring latch 12 the fixed end of which is secured to the back wall of the candler-box. To drop the wing (which falls when released from the latch) the operator retracts the latch as quite obvious from the drawings, the lamp *m* being so positioned as to come outside the range of sweep of the rear edge of the member 11.

The operation will now be readily understood from the description. Assuming that a filler-full of eggs has been picked up by the scoop 7 (Fig. 3), the operator passes the scoop with its contents into the box 8, and by deftly withdrawing the scoop, he deposits the filler *a* with its eggs *e* on the bottom 10, the openings *o* of said bottom allowing the eggs to rest on the drop-bottom 11 (Fig. 8). By now releasing the drop-member 11 (Figs. 2, 7) the eggs will settle down their full depth in the openings *o*, a considerable portion of each egg projecting below said bottom 10. In actual practice,

the member 11 may first be dropped (Figs. 2, 7) and the filler *a* with its eggs deposited directly on the perforated bottom 10, the imperforate member 11 being left down during the candling of the eggs. The practice of first dropping the member 11 is perhaps the one to be preferred. The open front and top of the box 8 permits an inspection of the eggs while subjected to the light of the lamp *m*, and any bad eggs may be removed. The walls of the filler compartments serve to assist in excluding surrounding light from the several eggs, so that the action of the lamp light is intensified. After the eggs of any given filler *a* have been candled, the operator by depressing the front extension 11′ of the drop-member 11 raises the member up against the bottom 10 (Fig. 8) whereupon it automatically locks under the action of the spring latch 12. The swinging of the drop member 11 against the bottom 10 raises the eggs high enough to permit the passage of the edge of the scoop 7 under them without injury to the eggs, the curvature of the egg thus raised allowing the edge of the scoop to dislodge it and pick the egg up; at the same time the scoop picks up the filler *a*, and we now have a scoop-full of candled eggs (similar in appearance to Fig. 3) ready to be deposited in a case similar to that shown (Figs. 1, 4), and packed for shipment.

Having described my invention, what I claim is:—

1. An egg-candler comprising a box open at the top, and provided with a fixed perforated bottom, means for illuminating the space beneath said bottom, and a movable bottom adapted to be brought into proximity to the fixed bottom and to lift the eggs.

2. An egg-candler comprising a box having an open top and front and provided with a perforated bottom adapted to accommodate a filler of eggs, the openings in said bottom allowing a material portion of each egg to protrude below the bottom, a swinging imperforate drop-wing hinged along the front edge of the perforated bottom, and adapted to close against the under face of the bottom and raise the eggs supported thereby, means for illuminating the space below the eggs supported on the bottom, and a latch for automatically locking the drop-wing when swung to its raised position.

3. In an egg-candler, a box provided with a perforated bottom provided with openings of sufficient size to allow for an exposure of a maximum area of the eggs below the bottom, and a number for raising the eggs sufficiently to allow for their removal by a scoop passed along the top surface of the bottom.

4. In an egg-candler, a box provided with a perforated bottom, means for illuminating the space below the bottom, and a drop-wing hinged to engage the under surface of the bottom and clearing the illuminating means in its sweep to and from the bottom.

5. In an egg-candler, a box provided with a perforated bottom, means for illuminating the space below said bottom, and a drop-wing hinged to engage the bottom portions of the eggs projecting through the perforations of the bottom and partially lift the eggs, the upper face of the wing being provided with a reflecting surface.

6. In an egg-candler, a box having a perforated bottom, a drop apron hinged along the front edge of the bottom and adapted to close against the bottom, the apron having a section on one side of the hinge-axis projecting beyond the front of the box, whereby it may be manipulated by the operator.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY F. FREISE.

Witnesses;
EMIL STAREK,
FANNIE E. WEBER.