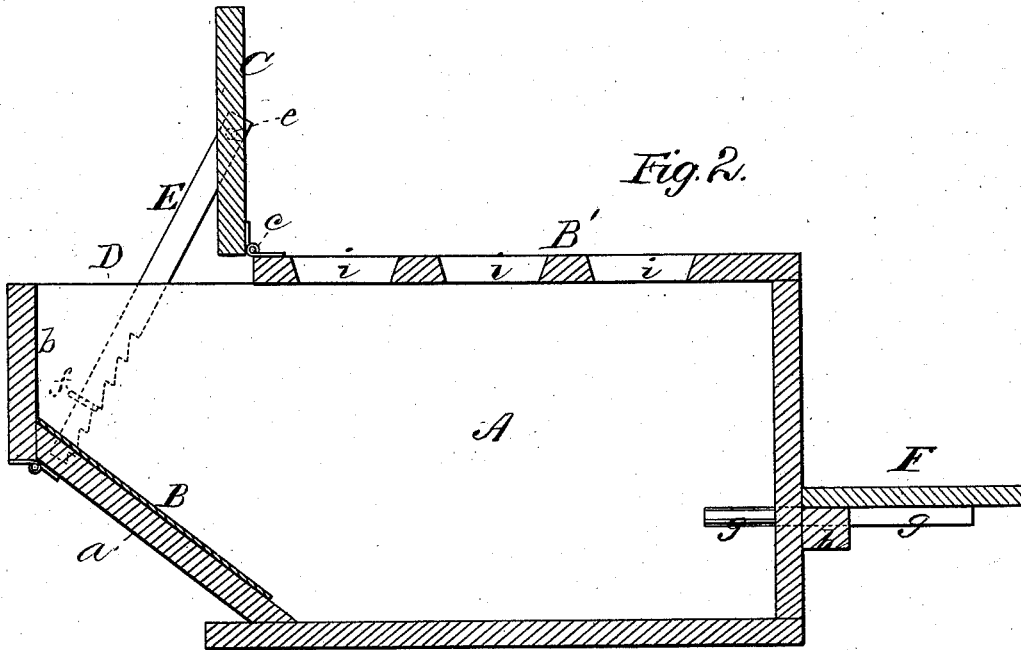
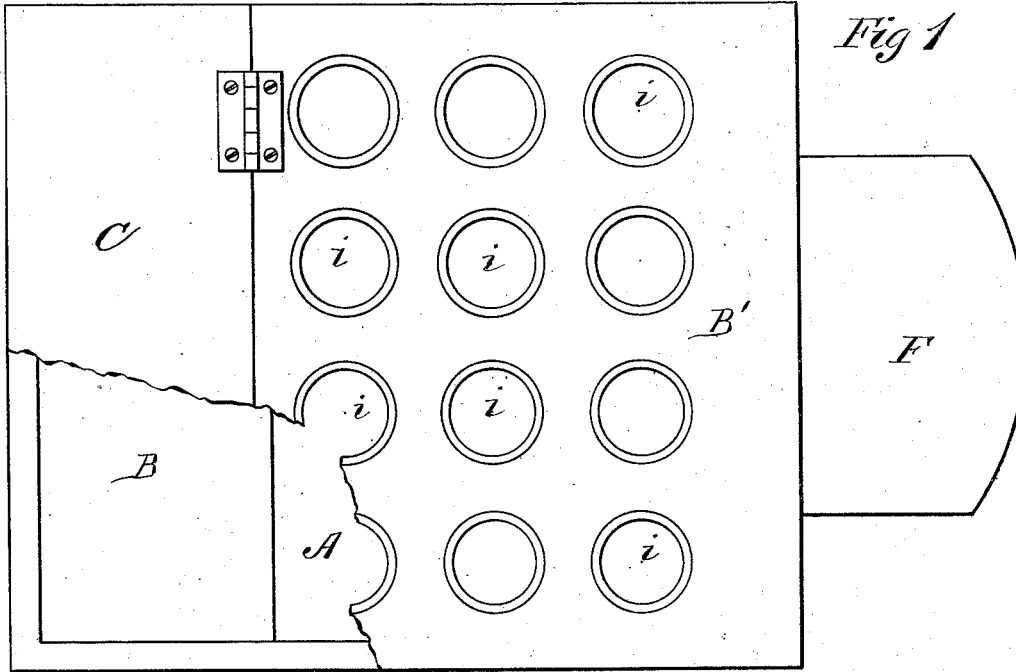


W. W. DUNBAR.
EGG-TESTERS.

No. 194,505.

Patented Aug. 21, 1877.



WITNESSES:
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UNITED STATES PATENT OFFICE.

W. WALLACE DUNBAR, OF ATLANTA, ILLINOIS.

IMPROVEMENT IN EGG-TESTERS.

Specification forming part of Letters Patent No. 194,505, dated August 21, 1877; application filed August 14, 1877.

To all whom it may concern:

Be it known that I, W. WALLACE DUNBAR, of Atlanta, in the county of Logan and State of Illinois, have invented a new and valuable Improvement in Egg-Detectors; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a top view of my improved egg-detector with the screen-lid broken away and showing the reflecting-mirror; and Fig. 2 is a longitudinal vertical section of the same.

This invention has relation to improvements in devices for testing the soundness and freshness of eggs, wherein light is passed through the eggs, and the shadow caused thereby is thrown upon a mirror or other reflecting surface.

The nature of my invention will be fully apparent from the annexed specification, and the claims appended thereto.

In the annexed drawings, the letter A designates an oblong box of any suitable material, having at one end an inclined bottom portion, *a*, upon which is snugly seated the reflecting-mirror B, which is thus adequately supported, and in great measure prevented from being broken. The mirror B is passed into the box and secured on its seat by means of grooves formed in the sides of the box by throwing down the hinged or removable end *b* thereof. By removing or lowering this end the parts of the mirror, should it be casually broken, may be readily drawn out of the seat-grooves. The top of this box is partly covered in by a table or top, B', having numerous perforations formed therein, in which the eggs are seated. This lid extends to, or nearly to, the lower edge of the inclined portion *a* of the box, the first row of perforations *i* being set back of said edge, so that should an egg fall through the mirror or reflector upon the said incline *a* it will not be broken.

In practice, I shall preferably use three rows of holes *i*, cut through the top B' aforesaid, the said holes being of different sizes, and larger at the top than at the bottom.

The portion of the box directly over the mirror is covered, when the device is not in use, by a lid, C, hinged at *c* to the contiguous edge of the top B', the said mirror being protected thereby; but when the eggs are seated in the holes *i* in the act of testing them, the lid is thrown open, as shown in Fig. 2, and serves to cut off the light from the inspection-opening D of the tester, and to render the shadow of the eggs more distinct. Were this lid not used, nearly as much light would get into the box through the opening D as through the eggs seated in the perforations *i*, and the shadow cast upon the mirror by the eggs would be very indistinct, if not totally invisible.

The lid C is adjustable, for the purpose of regulating the supply of light admitted through opening D, by means of a ratchet-bar, E, pivoted at *e* to the edge of the said lid, and extending through a staple, *f*, on the side of the box.

I do not confine myself to this particular adjusting device, as there are many equivalents, well known to those skilled in the art, which can be as effectively employed.

F represents a platform or stage removably applied to the end of the box next the light, upon which a lamp is designed to be placed at night so as to test eggs during the absence of the sun. This stage has two projecting spaced arms, *g*, that are inserted in corresponding holes in the box, and is prevented from sagging by means of a horizontal ledge, *h*, upon which the said stage rests.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an egg-tester having the egg-seats *i*, an inspection-opening, D, and an inclined mirror below said opening, of the adjustable screen-lid C, between said seats and opening, substantially as specified.

2. The combination, with an egg-tester

having the egg-seats *i*, inclined mirror B, inspection-opening D, and screen-lid C, between said seats and opening, of the removable lamp-stage F, substantially as specified.

3. In an egg-tester, the adjustable guard-lid C, between the egg-seats and inspection-opening, as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

W. WALLACE DUNBAR.

Witnesses:

WALTER C. MASI,
GEORGE C. POULTON.