

1,047,336.

Fig. 1.

Fig. 2.

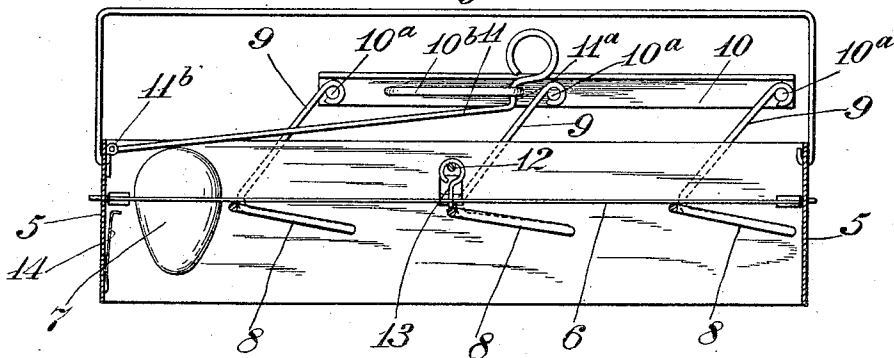
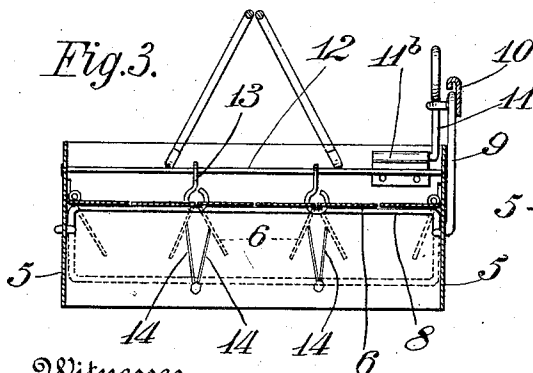


Fig.3.



Witnesses
Benjamin Finckel
Donald W. Kling.

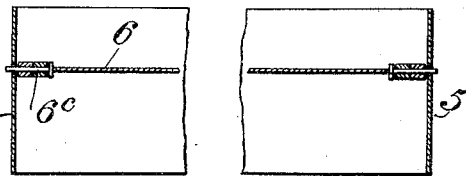


Fig. 4.

Inventor
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by *Israel Finckel*
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UNITED STATES PATENT OFFICE.

HENRY C. TIMMS, OF COLUMBUS, OHIO.

EGG-TESTING DEVICE.

1,047,336.

Specification of Letters Patent.

Patented Dec. 17, 1912.

Application filed June 3, 1912. Serial No. 701,212.

To all whom it may concern:

Be it known that I, HENRY C. TIMMS, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Egg-Testing Devices, of which the following is a specification.

The object of this invention is to make improvements in the details of construction of such an egg tester or "candling" device as is shown in the Letters Patent of the United States issued to me August 24, 1897, No. 588,736.

The invention is embodied in the features herein shown and described and then pointed out in the claims.

In the accompanying drawings forming part hereof—Figure 1 is a top plan view of a candling device containing my said improvements. Fig. 2 is a longitudinal vertical sectional view on the line $x-x$ Fig. 1 looking upward. Fig. 3 is a transverse vertical sectional view on the line $y-y$ Fig. 1 looking to the left. Fig. 4 is a longitudinal sectional view on the axis of the hinges between a pair of the egg holding slats to show details of construction of such hinges.

In the views 5 designates the frame which is of sheet metal bent and secured together to form the vertical walls of the tray and resembling the vertical walls of a shallow box. Extending longitudinally within the frame and supported in the ends thereof are parallel slats 6 each formed in one of its edges with a plurality of semi-circular recesses 6^a. These slats are thin flexible strips preferably of sheet steel and they are hinged or pivoted with reference to the frame so as to rock on their unrecessed edges and with their recessed edges adjacent to each other, the intermediate ones being connected in pairs, so that when the slats are turned to lie in the same horizontal plane several circular openings are formed in which eggs are adapted to be supported as illustrated at 7, Fig. 2.

The hinge for connecting the members of a pair of the egg-supporting slats, where they are connected in pairs, 6 consists of two leaves 6^b and a headed pin 6^c. The slats are each notched out at both ends as seen at 6^d to make room for the edges of the hinges and the head of the pin. The pin 6^c is made long enough to leave a projecting end to enter a perforation in the end wall of the tray. The

hinge leaves are attached by riveting them to the slats, as indicated, after the pin 6^c has been inserted through the eyes of the hinge leaves. By reason of this construction the slats are locked from separation or from longitudinal movement with reference to each other after the hinge leaves have been riveted to the slats. Because the slats are very flexible they can be bent for putting them into place in the tray frame or for removing them.

When the egg-holding slats are arranged in horizontal position they are supported by three rock shafts 8 of stiff wire disposed transversely of the egg-supporting slats and journaled at their ends in perforations of the sides of the frame. Each rock shaft is provided with a rectangular bend extending from one side of the tray to the other and adapted to swing downward to permit the egg-supporting slats to drop and discharge the eggs, and each rock shaft is provided with an upwardly-extending arm 9. The upwardly extending arms 9 are formed of the wire so as to be parallel to each other and to lie at the outer side of the tray frame on the same side thereof. These arms 9 are hingedly connected with a single straight bar 10, said bar being provided with pins 10^a to receive eyes at the upper ends of the arms 9 as best seen in Fig. 2. By means of the bar 10 all the rock shafts 8 can be raised or lowered in unison.

11 designates a keeper or latch for the bar 10, said keeper being formed of wire bent with a shoulder 11^a and hinged to the tray frame at 11^b to engage the end of an elongated loop 10^b on the bar 10 when the bar 10 has been moved to position to hold the rock shafts 8 up in egg-slat supporting position. The elongated loop 10^b also serves as a guide and keeper for the latch 11.

The slats are made very flexible so that when the tray is dumped they will yield to permit the passage of the larger sizes of eggs. To support these flexible slats at their middles and at the same time permit the members of a pair of them to spread with reference to an adjacent slat I provide a transverse bar 12 secured between the sides of the tray above the slats and on said bar 12 hang double loops 13 one part of which engages the slats while the other engages the bar. It will be observed that these double loops are free to slide back and forth on the bar 12 with the spring of the slats.

In practice such an egg tester is first filled with eggs and then placed over an illuminated chamber for the purpose of disclosing whether any of them are decayed or otherwise unmarketable. Upon releasing the latch 11 and depressing the bar 10 all the eggs in the tray can be released at once as for example into the filler of the case.

The tester can, of course, be built to test a larger or smaller number of eggs as may be desired and the forms of the parts can be changed without departing from the gist of the invention.

14 are springs for preventing the slats 6 from falling to vertical position or so that they will be left in position to be successfully raised by the operation of the rock shafts 8.

What I claim is:

1. In an egg tester, in combination, a pair of egg supporting slats and means for uniting them comprising a pair of hinge leaves, and a headed pin, said pin also forming a

supporting member for one end of the pair of slats.

2. In an egg tester, in combination, a tray frame, a pair of flexible egg-supporting slats hingedly supported at opposite ends in said frame, means for supporting the slats at points between their ends, said means being adapted to permit the flexing of the slats in a horizontal direction.

3. In an egg tester, in combination, a tray frame, a pair of flexible egg-supporting slats hingedly supported at opposite ends in said frame, means for supporting the slats at points between their ends adapted to permit flexing of the slats in a horizontal direction consisting of the transverse bar supported in the frame and loops slidably suspended on the bar and engaging the slats.

HENRY C. TIMMS.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."