S. A. EBERLE.

EGG TESTER.

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1,135,101.

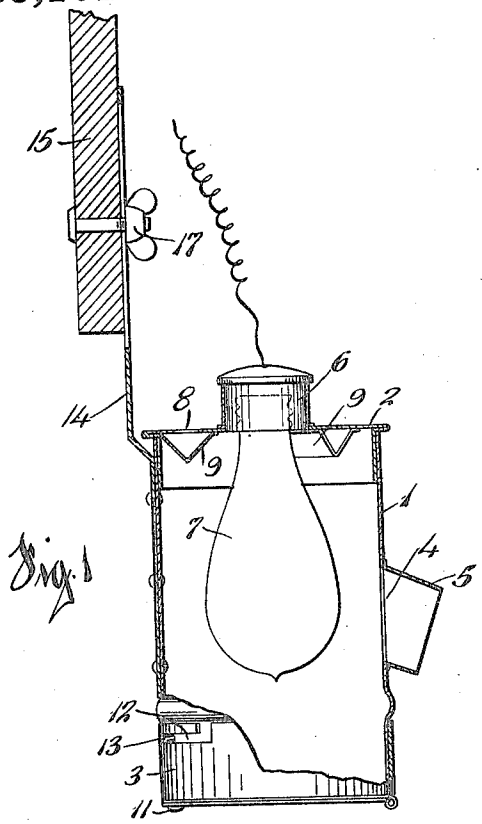


Fig. 1

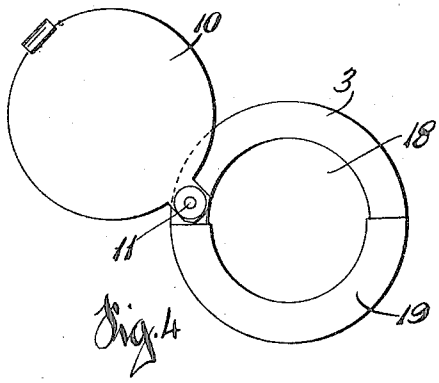
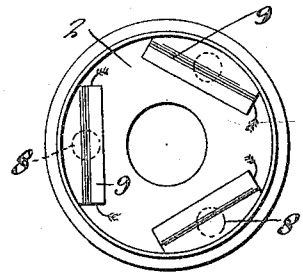


Fig. 4

Fig. 3



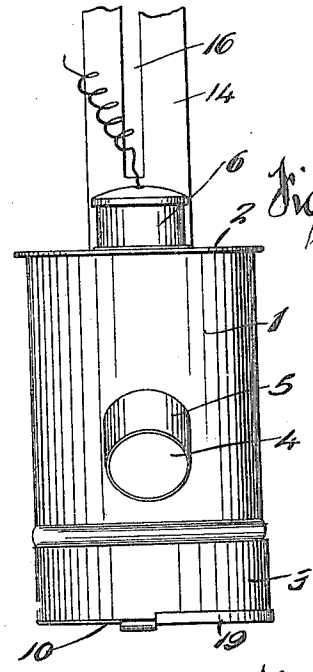


Fig. 2

Witnesses

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UNITED STATES PATENT OFFICE.

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EGG-TESTER.

1,135,101. Specification of Letters Patent. Patented Apr. 13, 1915.

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To all whom it may concern:

Be it known that I, SAMUEL A. EBERLE, a citizen of the United States, and a resident of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Egg-Testers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to devices for testing eggs in which the egg is exposed to the rays of a bright light in a dark room, and as the egg is partially transparent the expert operator can determine in this way the qualities and character of the egg.

A number of operators are usually employed in the testing or handling of eggs all in the same dark room, and it is extremely desirable, therefore, that the room shall be absolutely dark and the rays of light directed only through the egg under examination. Devices are in use for holding the light employed. Of late years, an electric light bulb, with an opening over which the egg can be held has been used; but with a number of operators in one dark room, when one operator is not using his light, the rays shine out through the opening into the room and thus tend to light the room. Then with a simple opening through the casing, some of the rays of light are apt to be deflected upwardly from the egg and to shine in the eyes of the operator, to his obvious disadvantage.

The operator has his case of eggs in front of him with the egg tester suspended above the case, and it is therefore desirable at times that the light should be directed down onto the box to enable the operator to see into the case for the selection of the eggs, or for distributing into the proper compartment the eggs that have been tested.

It is the object of my invention to provide a simple, cheap and effective casing for the electric light, which shall effectually cut off all rays of light except through the testing opening, which can be readily opened for replacing the light when needed, which can also be opened to direct the rays of light downwardly into the box or case of eggs under examination, and which shall readily and easily be adjusted for height and which shall not become overheated when in use.

My invention consists of that certain novel arrangement and construction of parts whereby the above results are accomplished, as will be hereinafter particularly pointed out and claimed.

In the drawings, Figure 1 is a central vertical section of my improved device. Fig. 2 is a front elevation of the same. Fig. 3 is a plan view taken from the inside of the top. Fig. 4 is a bottom plan view of the bottom cover.

In constructing my device, I provide a casing 1 preferably cylindrical in shape, with a flanged top cover 2 and a flanged bottom cover 3. In the side of the casing, I form an opening 4 with a short open tube 5 extending in a downward direction. The top cover is provided with a central socket 6 for the reception of the screwthreaded end of an electric light bulb 7, to be secured therein. The top cover is also provided with a series of holes 8, preferably three in number, as indicated by the dotted lines in Fig. 3, for ventilation. In order that no light shall pass out through these ventilation openings, each opening is covered with a V-shaped cover 9, open at the ends, so as to allow for ventilation, as indicated by the arrows in Fig. 3. The bottom cover 3 is provided with a slide plate 10, pivoted to the bottom at 11, so that the bottom can be opened or closed as desired without removing the cover. This cover is locked to the casing by a bayonet-lock construction, comprising preferably a plurality of L-slots 12, cut in the flange of the cover and arranged to engage a corresponding number of studs 13 on the casing. To secure the bottom cover, the studs 13 are entered through the open portion of the L-slots and the cover given a slight turn to bring the studs into the horizontal portion of the slots.

For suspending the tester and adjusting it for any desired height, I secure to the casing 1 by rivets or otherwise, the bracket arm 14. For securing the tester to a stationary support 15, I preferably form a slot 16 in the arm 14 and secure the same by one or more thumb nuts 17.

The casing for the electric light bulb is made of such a size that the full force of the rays from the bulb will be directed through the opening 4 and tube 5, and the eggs will be held for testing against the open end of the tube. The tube is provided and inclined downwardly in order that the rays of light shall be confined and not shine in the eyes

of the operator or those working with him. The bottom cover is made removable in order that the electric light bulb may be conveniently secured in the socket 6. The slide plate or shield 10 which covers the opening 18 in the bottom is provided to enable the operator to direct the light downwardly into the case of eggs whenever light is needed. The bottom opening is somewhat contracted so as to prevent the rays of light extending beyond the case in use by the operator. In order to hold the slide in locked position, I form a flange 19 on the bottom cover, under which the slide is pushed to lock it in place.

The provision for ventilation is of special importance with the use of forty to sixty candle-power lamps. With a casing without proper ventilation, the heat would become so great as to even melt the solder on the casing. It is also to be noted that the V-shaped covers are of importance in that the radiation of the heat is more effective than with other shapes.

With this construction of egg tester, a number of the testers may be used in the same dark room simultaneously by a number of egg inspectors, and the rays of light from the testers are confined exactly as needed, with no liability of rays from one tester lighting up the dark room and distracting fellow workmen.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In an egg tester, the combination of a casing provided with a top and a bottom cover to inclose the casing, and having a tubular opening at its middle portion, with the tube extending downwardly, an electric light bulb secured in said casing, the top cover having ventilator openings with V-shaped guards therefor, and with the bottom cover cut away at its middle portion and a slide plate to close the opening.

2. In an egg tester, the combination of a casing provided with a top and a bottom cover to inclose the casing, and having a tubular opening at its middle portion, with the tube extending downwardly, an electric light bulb secured in said casing, with the bottom cover cut away at its middle portion, with a pivoted slide to close the opening and a bayonet-lock device for locking the bottom cover on the casing.

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