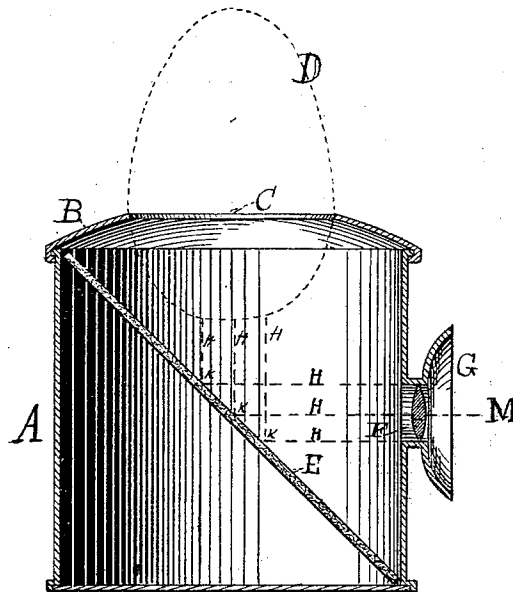


H. MITSCH.
Egg-Testers.

No. 148,572.

Patented March 17, 1874.

Fig. 1



Attest

John E. Hobbs.
Jessie H. Twigg.

Inventor

Henry Mitsch
by Fisher & Duncan
his Atty.

UNITED STATES PATENT OFFICE.

HENRY MITSCH, OF CINCINNATI, OHIO.

IMPROVEMENT IN EGG-TESTERS.

Specification forming part of Letters Patent No. **148,572**, dated March 17, 1874; application filed October 13, 1873.

To all whom it may concern:

Be it known that I, HENRY MITSCH, of Cincinnati, Hamilton county, State of Ohio, have made an Invention in Devices for Testing the Quality of Eggs, of which the following is a specification:

My invention relates to a device for testing the quality of eggs; and consists of a small cylindrical tin box or casing, wherein is a reflector so arranged as to reflect to the eye through a magnifying-lens the rays of light which pass through the egg, while excluding all others. To accomplish this purpose, I have a casing of tin, cylindrical in shape, forming a chamber, across the interior of which a reflector, consisting of a piece of looking-glass or other reflecting substance, is diagonally placed. The top of the casing has a circular opening, of sufficient size to partly admit a hen's egg. In the side of the casing, opposite the reflector, is another circular opening, intended for the eye of the observer. To this opening last named is fitted an eye-guard, in which is inserted a magnifying-lens. The guard serves to exclude from the eye all rays of light other than those which come from the reflecting-mirror, while the magnifying power of the lens enables any speck in the egg to be seen with greater distinctness.

In the drawing, A represents the cylindrical casing. B represents the top, which is here convex, but which may be flat or concave, if desired. C is the circular opening in the top, where the egg is placed when being tested. D is the egg in position for testing, though it

may be inverted, if desired. E is the reflector; F, the opening in the side of the casing opposite the reflector; and G, the eye-guard, in which is inserted the magnifying-lens. H H H represent rays of light.

The operation of this device is neat and simple. The egg being placed in position, and the eye of the observer applied to the guard, all light is excluded from the interior of the casing, except such as passes through the egg. The rays which pass through this strike the reflector at K K K, and are reflected at right angles to the line of incidence, and, being collected and magnified by the lens, come to the eye of the observer at M. The result is, that the whole interior of the egg is readily seen, and any dark spots can be easily detected. By this means all imperfect eggs can be determined before breaking with perfect accuracy.

I do not claim as my invention the method of testing eggs by passing rays of light through them, and bringing them afterward to the eye; but

What I do claim is—

As an article of manufacture, an improved egg-tester consisting of the cylindrical tin box A, with top opening C, side opening F, eye-guard G, with magnifying-lens therein, and reflector E, for the purpose of testing a single egg at a time, constructed substantially as hereinbefore described.

HENRY MITSCH.

Witnesses:

ISAAC FERRIS,
J. ARMSTRONG.