

No. 651,069.

Patented June 5, 1900.

W. F. DUNN.
EGG TESTER.

(Application filed Sept. 12, 1898.)

(No Model.)

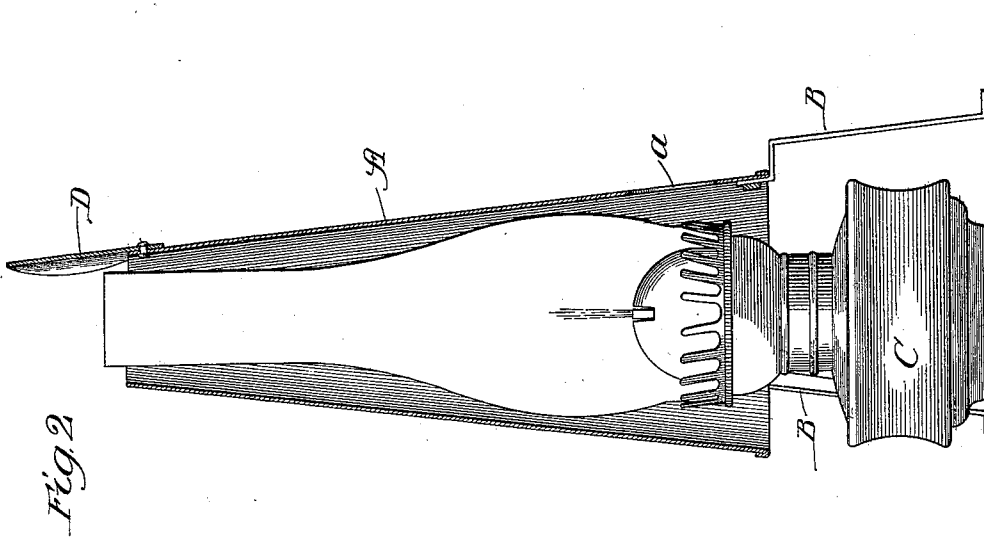


Fig. 2

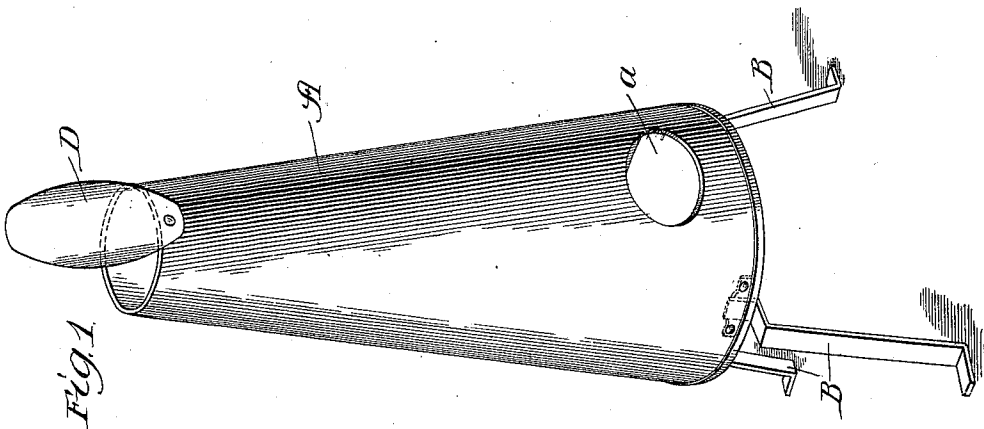


Fig. 1

Witnesses:
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UNITED STATES PATENT OFFICE.

WALLACE F. DUNN, OF LA PORTE, INDIANA.

EGG-TESTER.

SPECIFICATION forming part of Letters Patent No. 651,069, dated June 5, 1900.

Application filed September 12, 1898. Serial No. 690,714. (No model.)

To all whom it may concern:

Be it known that I, WALLACE F. DUNN, a citizen of the United States, residing at La Porte, Indiana, have invented certain new and useful Improvements in Egg-Testers, of which the following is a specification.

The object of my invention is to make a device by which the rays of light from a lamp may be so concentrated and utilized as that they will enable one to read with ease and facility an egg against which the light is focused or directed, so as to determine its quality and condition; and my invention consists in the features and details of construction herein-
after described and claimed.

In the drawings, Figure 1 represents a perspective view of my improved egg-tester, and Fig. 2 a longitudinal section of the same.

In making my improved egg-tester I construct a shade A from a piece of tin or other suitable metal bent into the form of a hollow frustum of a cone. The edges of the tin are suitably connected or united together in any desired way, so as to make a secure joint or fastening. I provide this shade, which is in the form of a hollow frustum of a cone and which for convenience I shall term the "body" of the tester, with a testing-hole *a* at one side near its lower or larger end. This hole is made of a convenient size to place an egg against it when it is desired to examine and determine its condition. The body of the tester is also preferably mounted on legs B, so as to raise it a convenient height or distance above the bench or table on which it is placed in use and permit the free ingress of air into the body of the tester at its lower end, so that it can pass up therethrough. The body of the tester is intended to be placed over a lamp C, which furnishes the light or illumination by which the eggs are tested. The body of the tester is held at such height as that preferably the flame of the lamp is practically above the hole *a*, so that in looking into the tester through the hole the flame of the lamp will not readily appear, but rather the lower portion of the burner. The chimney of the lamp extends up through the body of the tester to the top or above. The interior surface of the body of the tester being made of tin is bright and acts as a reflector; but in order to concentrate the rays of light

from the lamp and throw them down or back into the body of the tester, so as to secure a high degree of light or illumination at the testing-hole, I arrange on the body of the tester at the side containing the opening an upward extension D of a less width than the full diameter of the upper end of the shade and which affords on the side on which it is placed a continuation in effect of the inclined surface of the body of the tester. This piece operates as a reflector for concentrating and reflecting the rays of light at one point, so as to cause them to be again thrown down into the body of the tester. This produces an extremely-bright illumination at the testing-hole, so that by placing an egg before the hole its condition can readily be read and determined. I prefer also to have the exterior surface of the body of the tester and of the reflector painted or japanned black, as by so doing the eyes of the operator will be better protected and more satisfactory results secured.

I claim—

1. The combination of a shade in the form of a hollow frustum of a cone provided with a testing-opening adjacent to its lower end on one side, and a reflector projecting upwardly from and of a less width than the upper end of the shade and having a reflecting-face continuing in the converging lines of the cone on the side containing and in line with the testing-opening and operating to concentrate the rays of light at one point and reflect them back into the interior of the shade and increase the light effect at the testing-opening, substantially as described.

2. The combination of a shade in the form of a hollow frustum of a cone provided with a testing-opening adjacent to its lower end on one side, a light-producing device inclosed by the shade, and a reflector of less width than and projecting upwardly from the upper end of the shade and having a reflecting-face continuing in the converging lines of the cone on the side containing and in line with the testing-opening and operating to concentrate the rays of light at one point and reflect them back into the interior of the shade and increase the light effect at the testing-opening, substantially as described.

3. The combination of a shade in the form of a hollow frustum of a cone provided with

a testing-opening adjacent to its lower end
on one side and with legs holding its lower
end a desired distance above a support and
permitting the free ingress of air, a light-
5 producing device inclosed by the shade, and
a reflector of a less width than and project-
ing upwardly from the upper end of the
shade and having a reflecting-face continu-
ing in the converging lines of the cone on the
10 side containing and in line with the testing-

opening and operating to concentrate the
rays of light at one point and reflect them
back into the interior of the shade and in-
crease the light effect at the testing-opening,
substantially as described.

WALLACE F. DUNN.

Witnesses:

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