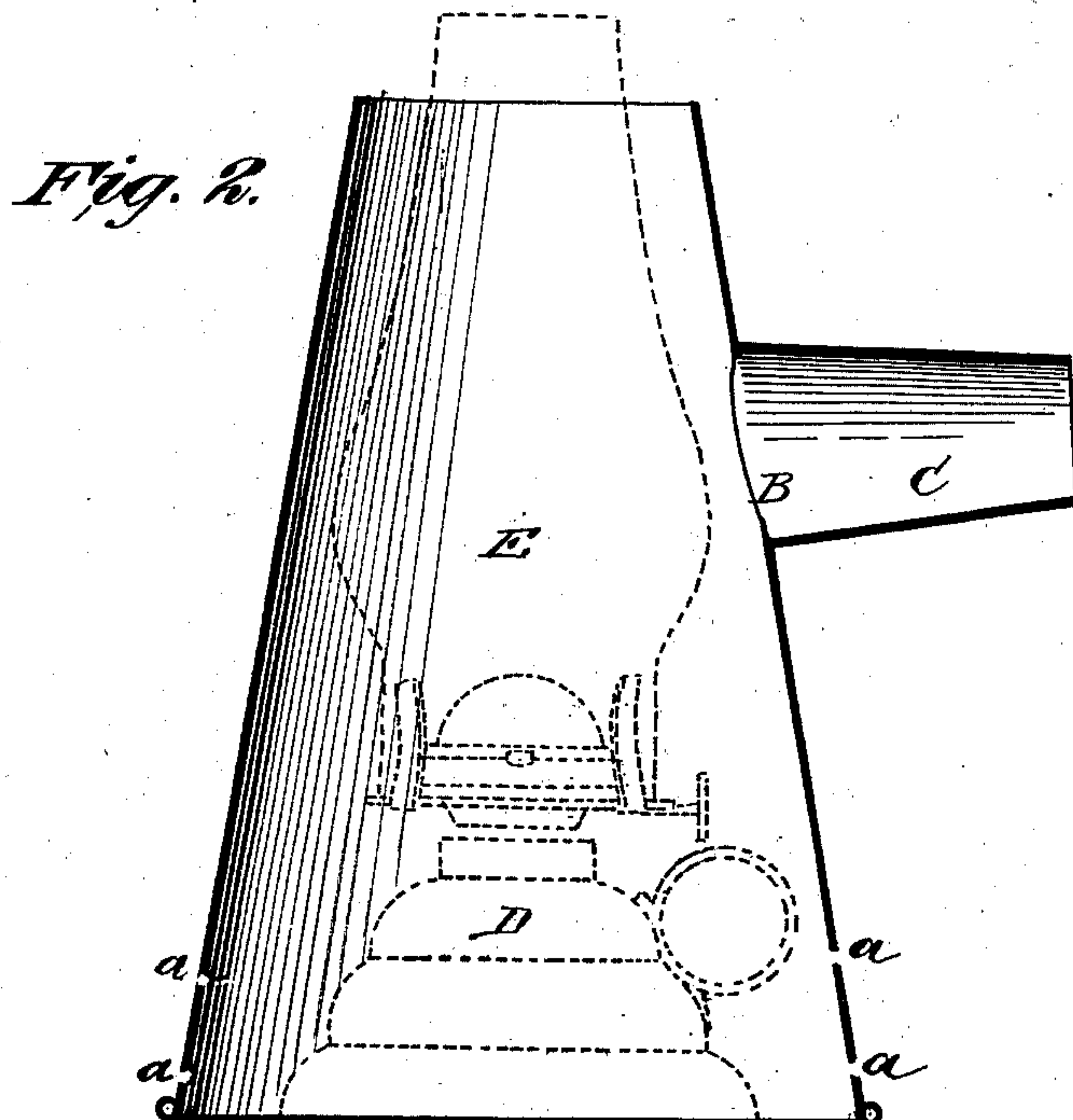
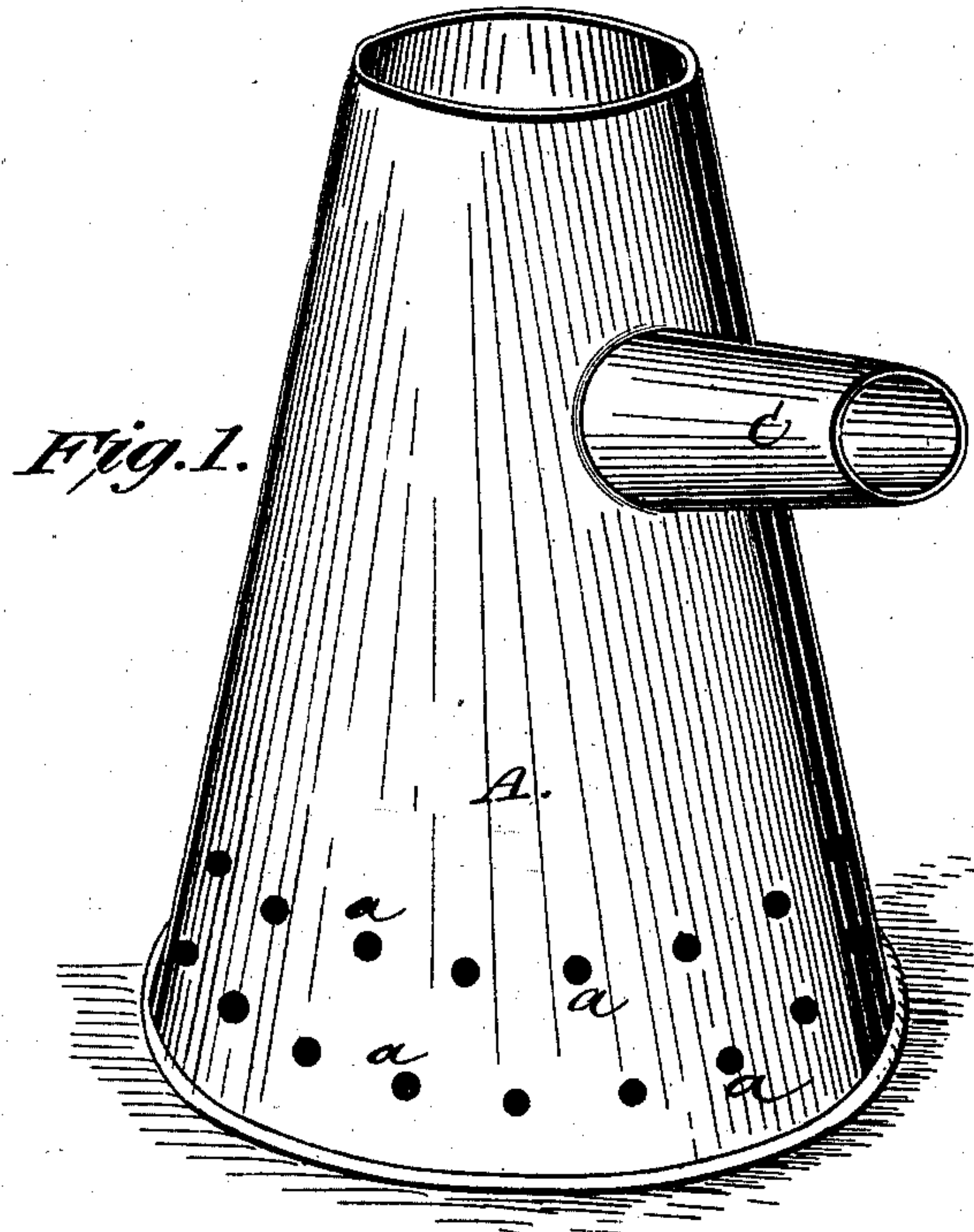


(No Model.)

J. F. P. McMULLEN.  
Egg Tester.

No. 238,142.

Patented Feb. 22, 1881.



Witnesses:  
*Fred. G. Dietrich*  
*Albert H. Krause*

Inventor:  
*John Francis P. McMullen*  
by *Louis Bagger & Co.*  
*Attorneys*



# UNITED STATES PATENT OFFICE.

JOHN F. P. McMULLEN, OF WELLSVILLE, NEW YORK.

## EGG-TESTER.

SPECIFICATION forming part of Letters Patent No. 238,142, dated February 22, 1881.

Application filed April 20, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. P. McMULLEN, of Wellsville, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Egg-Testers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved egg-tester; and Fig. 2 is a vertical sectional view of the same, showing the lamp in position.

Similar letters of reference indicate corresponding parts in both figures.

My invention contemplates improvements in egg-testers of that class which consist of a casing or inclosure adapted to receive and inclose a lamp or other light, said casing being provided with a laterally-projecting tube or elbow, in front of which the eggs to be inspected are placed, one by one; and my improvement consists in constructing said casing of metal in the shape of a cone having an open top and bottom, and provided at one side with an aperture and projecting tube, and at its bottom with a series of air-holes. By this construction the outer casing or cone acts in the double capacity of an inclosure for the lamp and a reflector for its flame, so as to reflect the light into the projecting inspection-tube; and as the whole apparatus is made of sheet metal and in one piece, it may readily be transported from place to place without injury, and is at all times ready and handy for use.

In the annexed drawings, A is a sheet-metal cone with open top and bottom, and large enough to admit of the insertion into it of a small lamp, D, provided with a glass chimney, E, as usual. The lower end of cone A has one or more series of apertures, *a*, while its upper part opposite the lamp-chimney is cut away to form a larger aperture, which opens into a tube, C, secured upon and projecting at right angles from the cone, with its outer end contracted, as clearly shown in the drawings,

so as to cause the light which is reflected into the tube by the opposite inner wall of the cone or casing A to converge and concentrate at one spot upon the object held in front of the contracted mouth of the inspection-tube C. Thus a strong beam of light is thrown upon the egg, which is not inserted into, but merely held for a moment before, the tube; and as the cone A is in no sense a chimney, as in some devices of this class, but forms a casing with sufficient air-space around the lamp-chimney, there is no danger of tube C becoming detached by the melting of the solder, and no water-jacket or other device is required to protect the joint between the casing and its branch tube from the heat.

Another important advantage resulting from the construction of my device is, that it may be used with lamps of very different sizes and construction, and with long or short chimneys, because of its open top and bottom. It will readily be observed that where the cone A is in the nature of a chimney it will fit only upon lamps of a certain size and with a certain construction of burner; and if the casing were, as in some devices of this class, closed at the top and bottom, it would not only have to be provided with a side door for the insertion of the lamp, but this would have to be, with its chimney, of a certain height, so as not to exceed the height of its casing or inclosure.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The egg-tester composed of a conical sheet-metal lamp casing or inclosure, A, open at its top and bottom, and provided with a series of perforations, *a*, around its base, a side aperture, B, and a tube, C, projecting at right angles from said aperture and contracted at its outer end, substantially as and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN FRANCIS P. McMULLEN.

Witnesses:

JOHN FREDERICK,  
E. B. CURTIS.