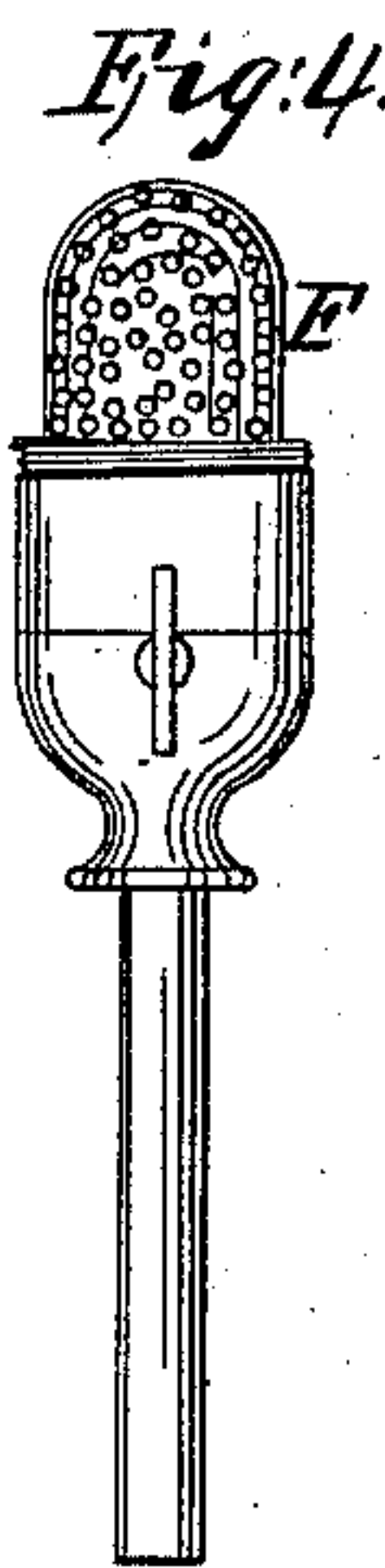
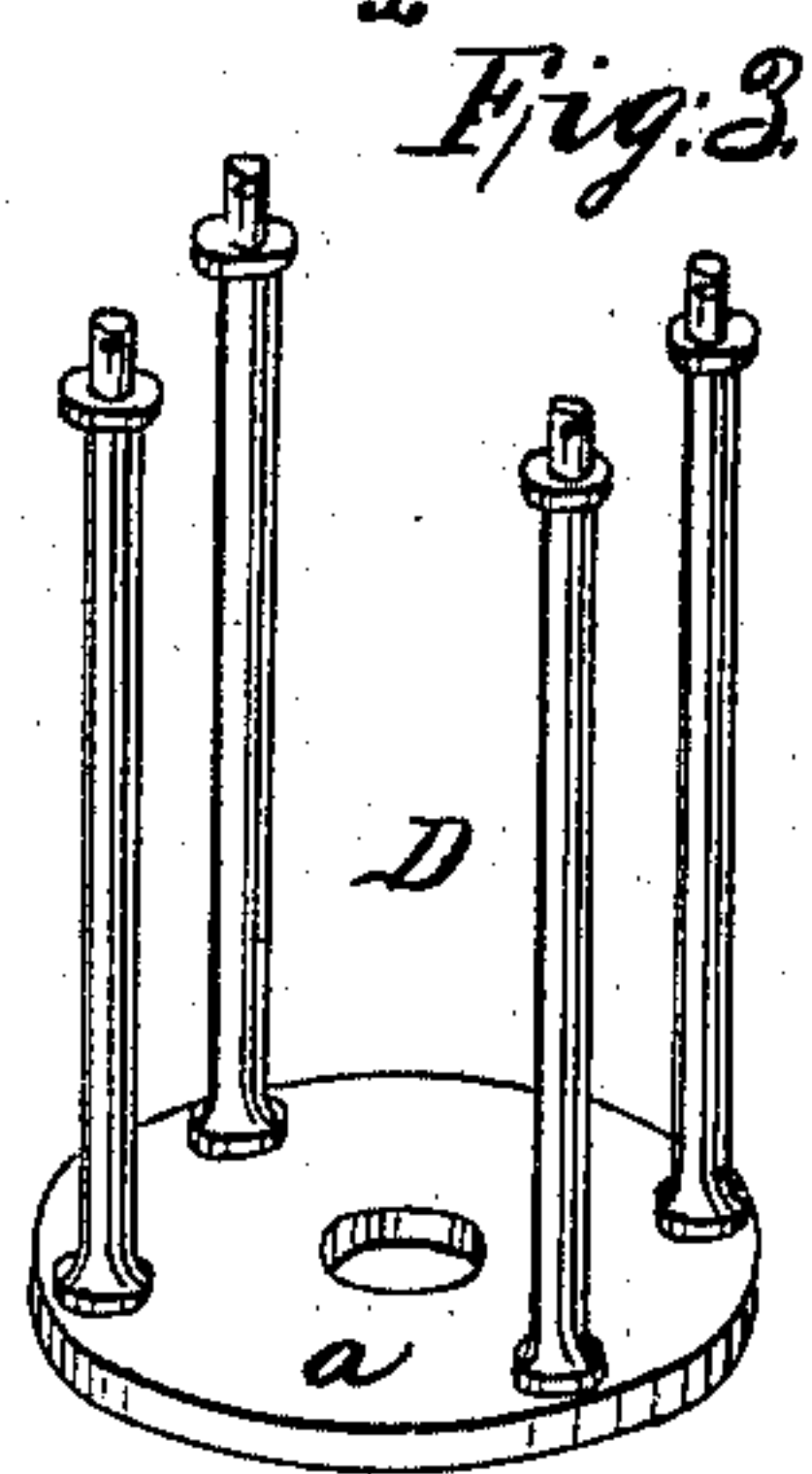
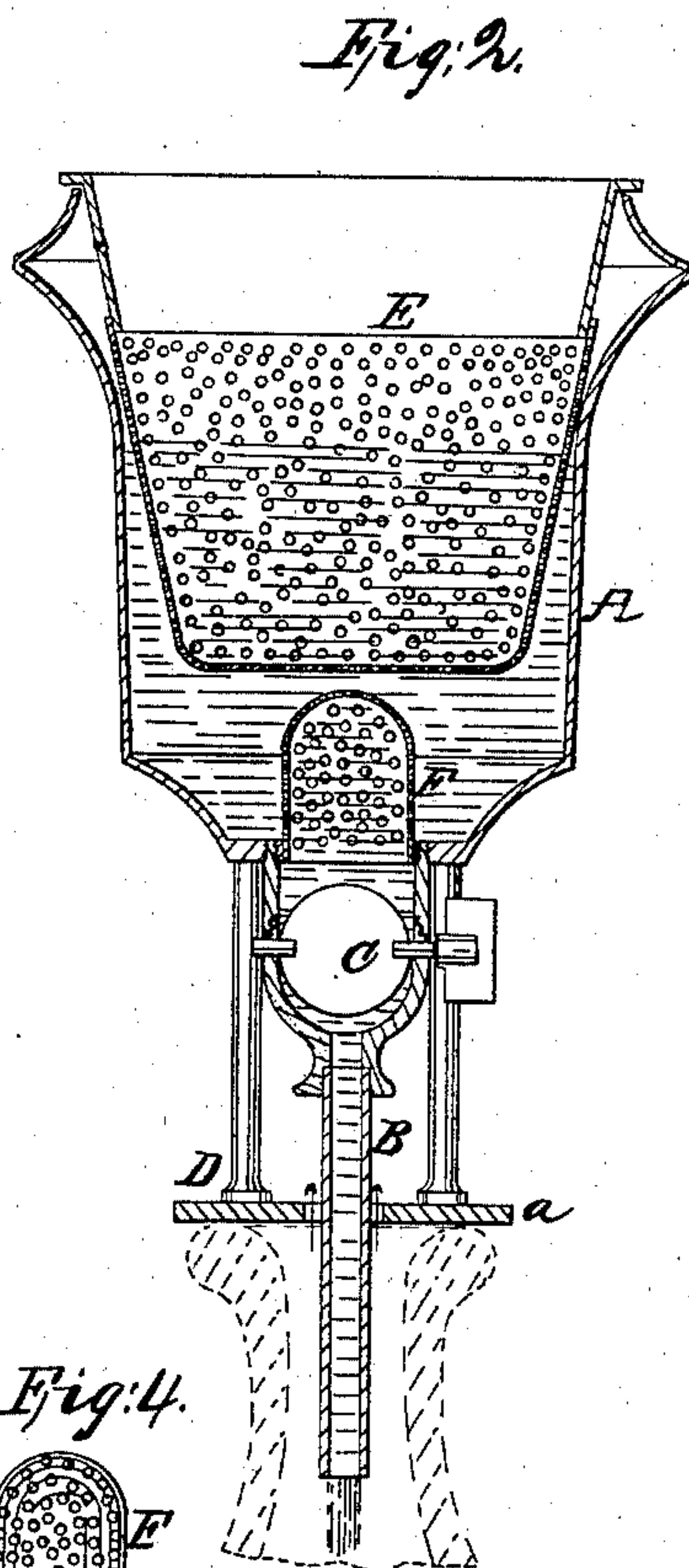
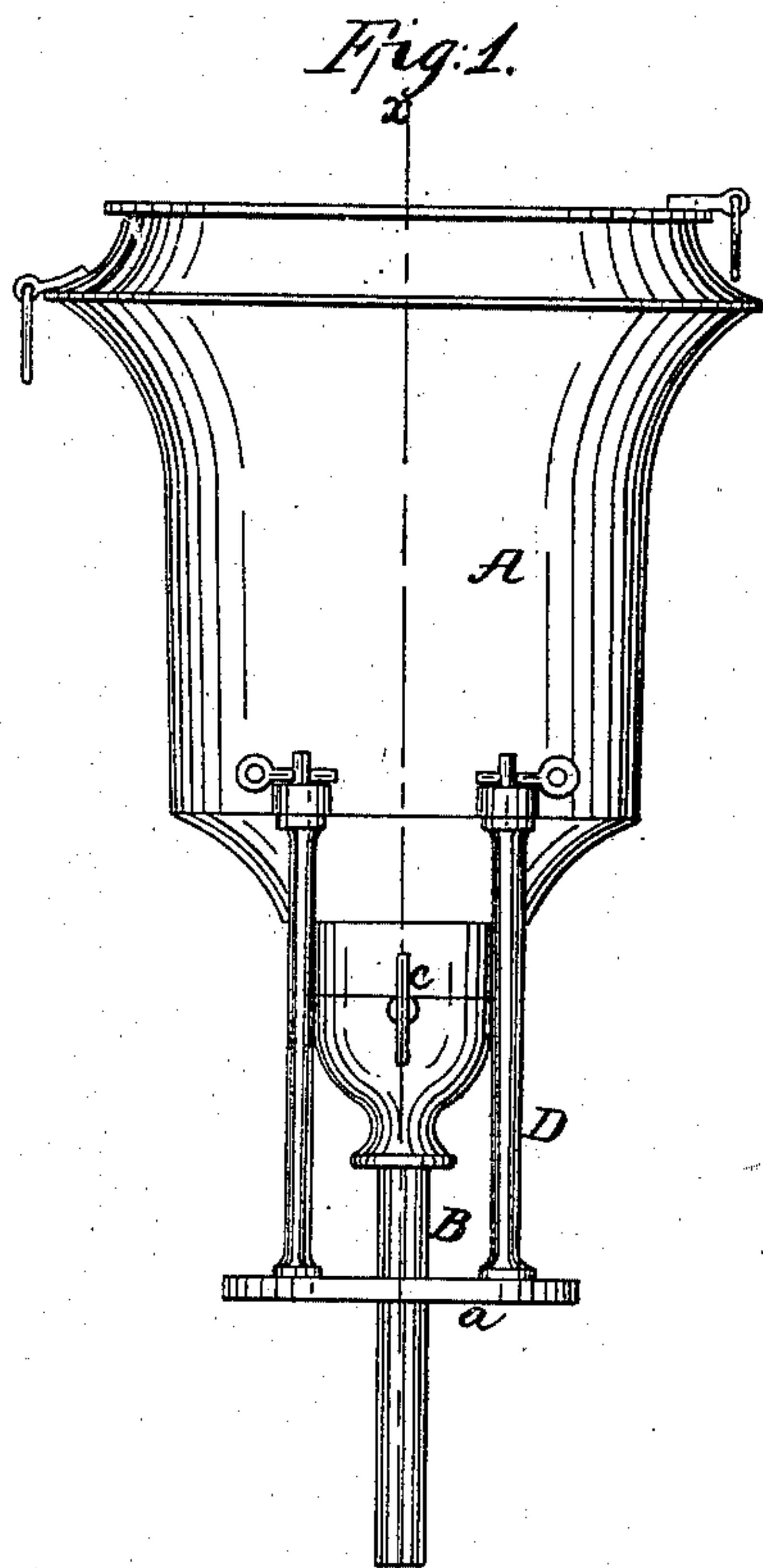


F. CATLIN.  
FUNNEL.

No. 66,127.

Patented June 25, 1867.



Witnesses.  
The Insects  
W. T. T. T.

Inventor  
Frederick Catlin  
Per *Munn & Co*  
Attorneys

# United States Patent Office.

FREDERICK CATLIN, OF WATERTOWN, CONNECTICUT.

*Letters Patent No. 66,127, dated June 25, 1867.*

## IMPROVED FUNNEL

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, FREDERICK CATLIN, of Watertown, in the county of Litchfield, and State of Connecticut, have invented a new and useful Improvement in Ventilating Funnel; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

The object of this invention is to overcome the difficulties which have hitherto been met with in the use of funnels, as well as to supply their deficiencies; and it consists in connecting the funnel with a stand, and in arranging a valve in its throat, and also providing for thoroughly straining the liquid when that is necessary, as will be hereinafter described.

Figure 1 represents an outside view of the funnel complete.

Figure 2 is a vertical section of fig. 1 through the line *x x*.

Figure 3 shows the stand of the funnel detached.

Figure 4 shows the throat or nozzle of the funnel detached, with the valve and the small strainer.

Similar letters of reference indicate like parts.

A represents the funnel proper. B is the throat of the funnel. C is the valve. D represents the stand to which the funnel is attached. E is a large strainer which is placed loosely in the funnel, the lower portion of which is formed of perforated metal. It is supported on the top of the funnel, as represented in fig. 2. F is another smaller cone-shaped strainer, formed of perforated metal, and secured to the top of the funnel-throat by a screw, and is removable at pleasure. The stand D is composed of a disk-plate *a*, to which four (or any other suitable number of) rods are permanently attached. The lower part of the funnel has projecting ears through which the upper ends of the rods pass, and to which they are secured by pins through their ends, as seen in fig. 1. In transferring liquids to bottles, or to other vessels, the funnel is placed so that its stand rests upon the top of the vessel, as seen in fig. 2, where the bottle or vessel is seen represented in red. The throat or nozzle of the funnel passes through the disk-plate of the stand, and the hole through the plate being larger than the throat, a space for the escape of the air in the vessel is left, as indicated by arrows. This arrangement obviates one great difficulty in the use of the ordinary funnel. It is a common thing, also, for the receiving vessel to be filled when more or less of the liquid remains in the funnel. This, of course, occasions much waste. By turning the valve C at the proper time the funnel may be left full, if desired, and transferred to another vessel with perfect safety from loss. The strainers E and F are, either of them, easily detached when it is not necessary to use them; but one of them, and frequently both, will be found useful in freeing liquids from flies and other impurities.

It will be seen that the parts are easily detached from the funnel proper for cleaning or other purposes.

What I claim as new, and desire to secure by Letters Patent, is—

The construction and arrangement of the funnel A, having detachable throat B, strainers E F, valve C, and stand D, substantially as described for the purpose specified.

FREDERICK CATLIN.

Witnesses:

LEMAN W. CUTLER,  
MARY E. CUTLER.