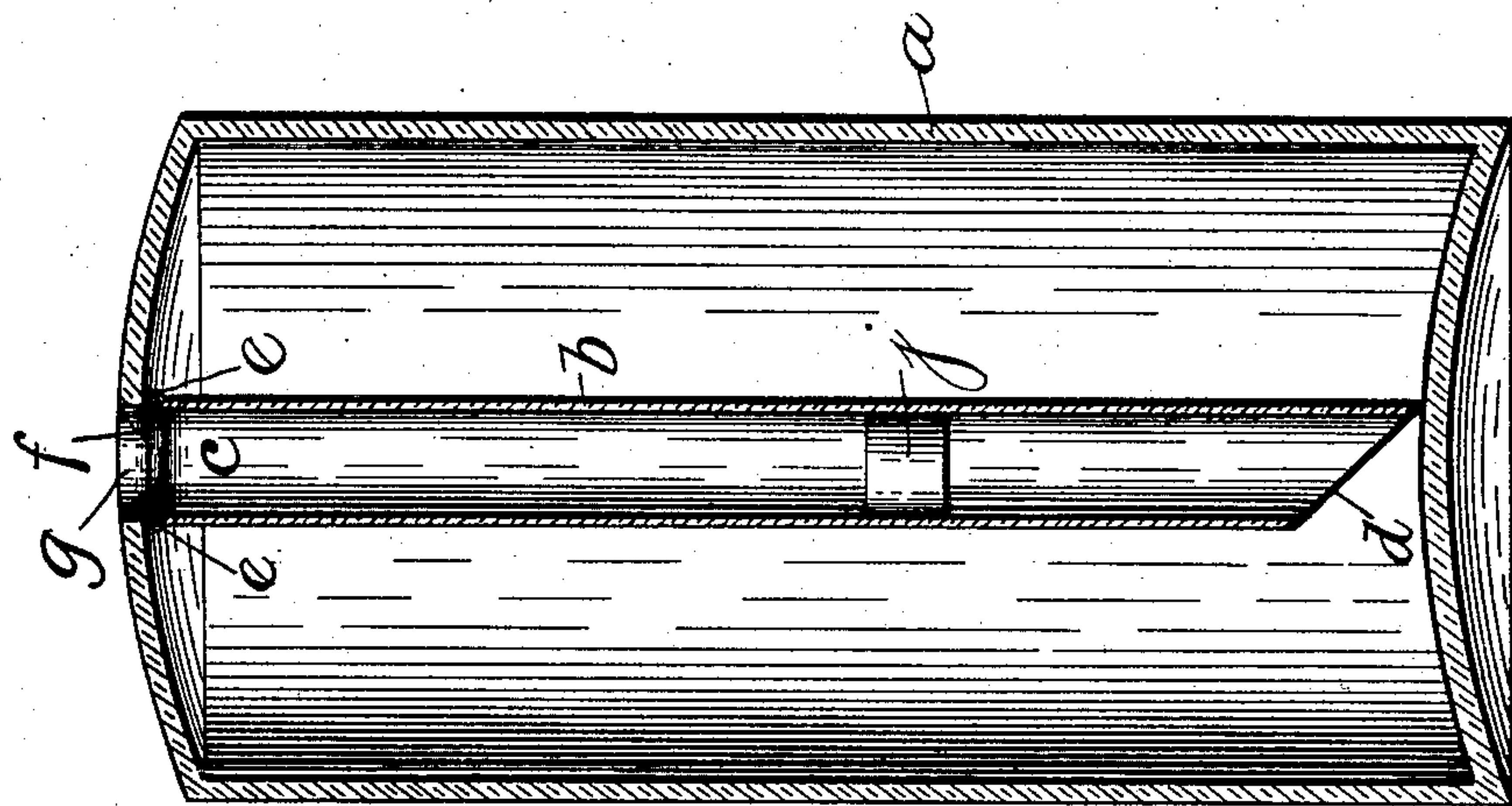
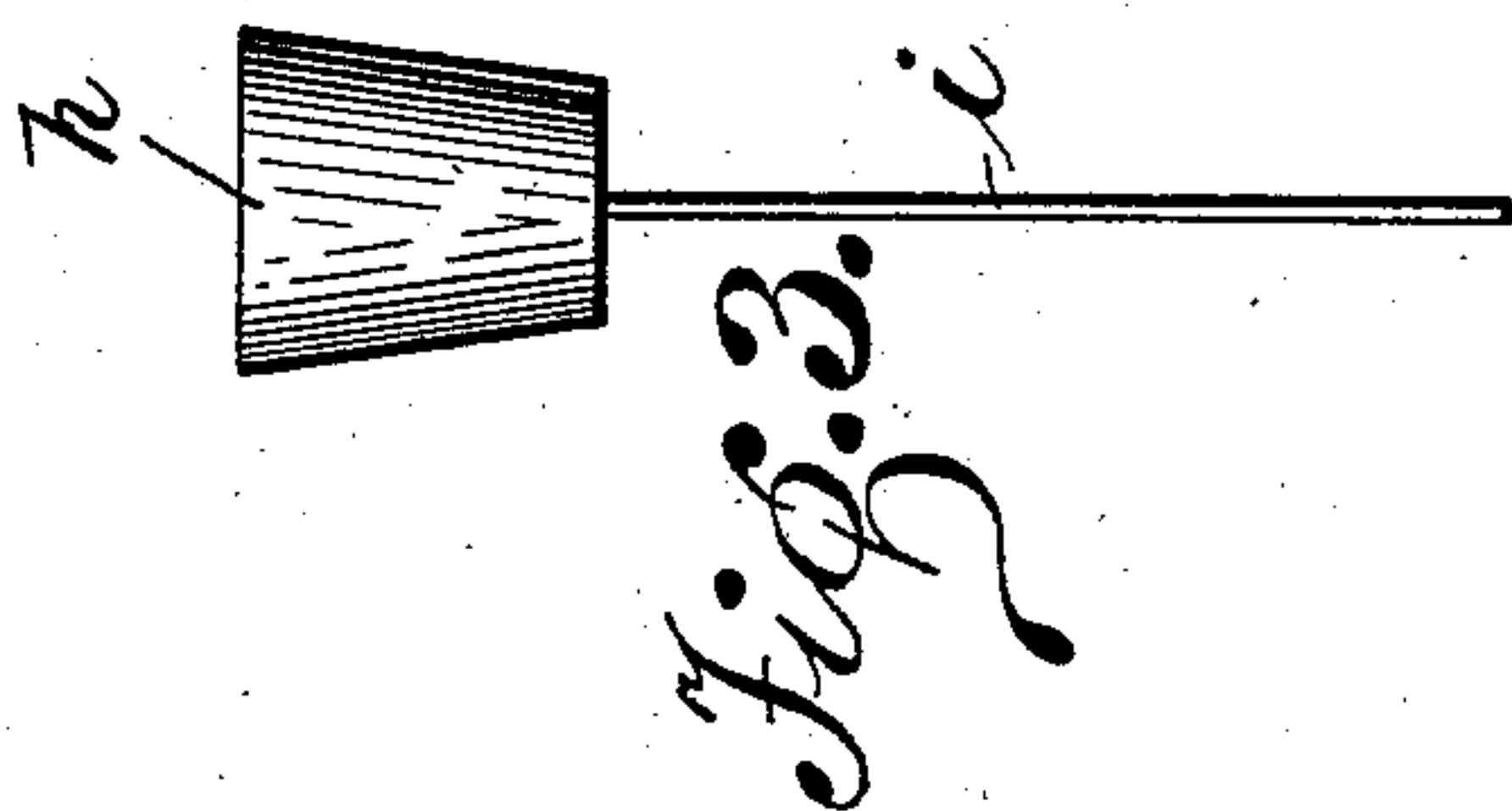
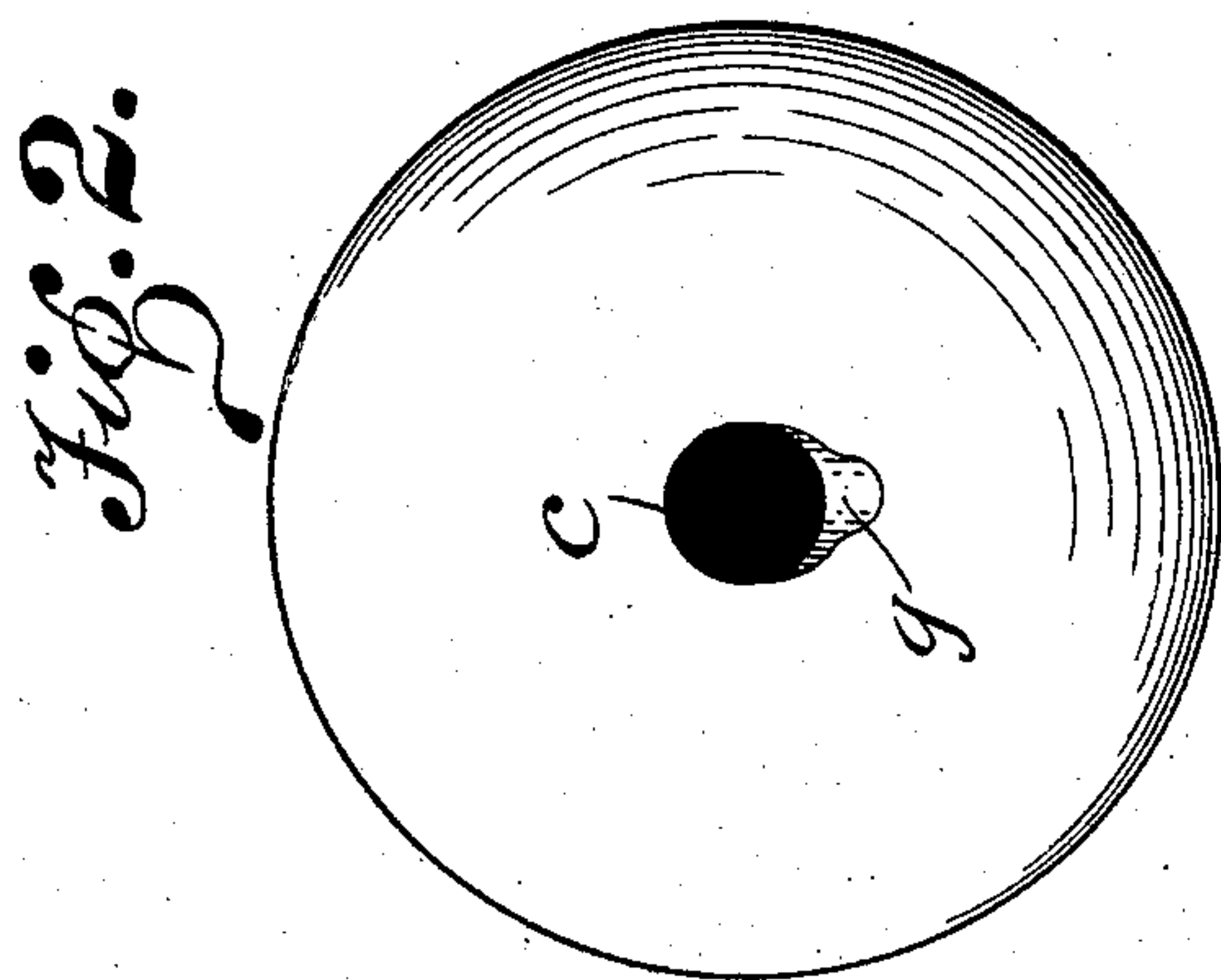


(No Model.)

E. A. HAMPSHIRE & J. E. DAVISON.
NON-REFILLABLE BOTTLE.

No. 591,400.

Patented Oct. 12, 1897.



Witnesses:

A. R. Appleman
A. M. Wilson

Fig. 1.

Inventors.

Edmund H. Hampshire.
James E. Davison

By

Henry C. Evert Atty.

UNITED STATES PATENT OFFICE.

EDMUND A. HAMPSHIRE AND JAMES E. DAVISON, OF PITTSBURG,
PENNSYLVANIA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 591,400, dated October 12, 1897.

Application filed March 5, 1896. Renewed March 5, 1897. Serial No. 626,155. (No model.)

To all whom it may concern:

Be it known that we, EDMUND A. HAMPSHIRE and JAMES E. DAVISON, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in bottles, and relates more particularly to that class known as "non-refillable" bottles, and has for its object the provision of new and novel means for constructing a bottle of the above-referred-to class which when once opened will be practically destroyed and cannot be filled again with the same ingredients as the original contents and used without detection.

The invention has for its further object to provide a bottle as above described that will be extremely simple in its construction, strong, durable, effectual in its operation, and comparatively inexpensive to manufacture.

A still further object of the invention is to provide a non-refillable bottle that will effectually prevent the counterfeiting of certain ingredients, which is frequently done by refilling the original bottle and selling the same. By the use of our improved bottle this is prevented, as the bottle cannot be used after being opened without detection.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more specifically described, and particularly pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a vertical sectional view of our improved non-refillable bottle. Fig. 2 is a top plan view of the same. Fig. 3 is a side elevation of the stopper.

In the drawings, *a* represents the bottle proper, which is constructed slightly rounded

at the top, as shown in Fig. 1, and without any neck portion. In the center of the bottle is constructed a tube *b*, which is formed integral with the top portion of the bottle around the opening *c*. This tube *b* is adapted to rest on the bottom of the bottle and is cut away on one side, as shown at *d* in Fig. 1 of the drawings, to form an outlet for the liquid. At the top of the tube, where the same is connected to the top portion of the bottle, the tube is formed with an interior groove *e*, making the thickness of the tube considerably less at this point than the balance thereof, and an air-hole *f* is provided in the groove and extends through the tube.

In the top portion of the bottle, at one side of the opening, is provided a groove *g*, tapered toward a point and inclined so as to form a spout for use in pouring out the liquid.

The stopper *h* may be composed of any suitable material and has secured in the bottom thereof a wire or rod *i* to be used as a lever for breaking the tube from the top portion of the bottle, and a cork *j* is adapted to be inserted in the tube and can be forced down to any desired point.

The operation of our improved bottle will be readily apparent from the views of the same which we have shown in the drawings.

When it is desired to fill the bottle with liquid, the same is poured in the opening *c*, where it will pass down the tube *b* and out of the same at the cut-away portion *d* into the bottle proper and will rise in the bottle until the same is filled to the desired point. When the bottle has been filled, the cork *j* is forced down in the tube to any desired position and the cork *h* inserted in the mouth of the bottle to complete the seal.

When it is desired to open the bottle, the cork *h* is withdrawn and the rod or wire carried by this cork is inserted in the tube, and when pressed against one side of the same will cause the tube to break at the thin portion, designated as the "interior groove" *e*, when the top of the tube will fall against the side of the bottle, and the contents can then be poured from the mouth or opening *c*.

It will be observed that the cork *j* is placed in the tube for the purpose of preventing the pouring out of the liquid without breaking

the tube, as this cork *j* can be inserted in the tube at a sufficient depth to prevent reaching the same with a corkscrew, and even should a catch be obtained on this cork it would require considerable force to withdraw the same, which would cause a strain on the thin portion of the tube and break the same.

After the tube has been broken it will be observed that the bottle proper has been preserved and may be used for holding the contents, but will be worthless for refilling, as the broken tube would show that the original contents had been emptied therefrom, and the breaking of the tube at the top would destroy the round surface provided for the cork, so that the hole could not possibly be closed again with the cork sufficiently to use the bottle.

By thus constructing a bottle without a neck portion and having the weak part inside of the body portion the bottle can be shipped without liability of breaking, or should the bottle be laid on its side the tube will be supported at each end by reason of its being connected at the top and resting on the base of the bottle at its lower extremity, and the rod or wire *i* being secured in the center of the cork *h* it will be held vertically and prevented from pressing against the inner face of the tube.

If desired, the rod or wire may be dispensed with in the cork *h*, as the same is merely provided in order that an instrument may be had for breaking the tube when it is desired to open the bottle.

It will be noted that various changes may be made in the details of construction of our improved non-refillable bottle without de-

parting from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a non-refillable bottle, the body portion having a tube constructed therein, said tube being connected to the top portion around the opening and being provided at the bottom with a cut-away portion and at the top with an interior groove and air-hole, substantially as shown and described.

2. In a non-refillable bottle, the body portion having a slightly-rounded top, a tube provided in said body portion inclosing the opening, said tube having a cut-away portion at the base and an interior groove and air-hole at the top, the said top portion having a tapered groove forming a spout, substantially as shown and described.

3. In a non-refillable bottle, the body portion having a slightly-rounded top, a tube provided in said body portion inclosing the opening, said tube having a cut-away portion at the base, an interior groove at the top, and an air-hole in the groove through the tube, the said top portion having a tapered groove forming a spout in combination with a cork having a rod secured therein and extending in alinement therewith, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

EDMUND A. HAMPSHIRE.

JAMES E. DAVISON.

Witnesses:

H. E. SEIBERT,

ALFRED M. WILSON.