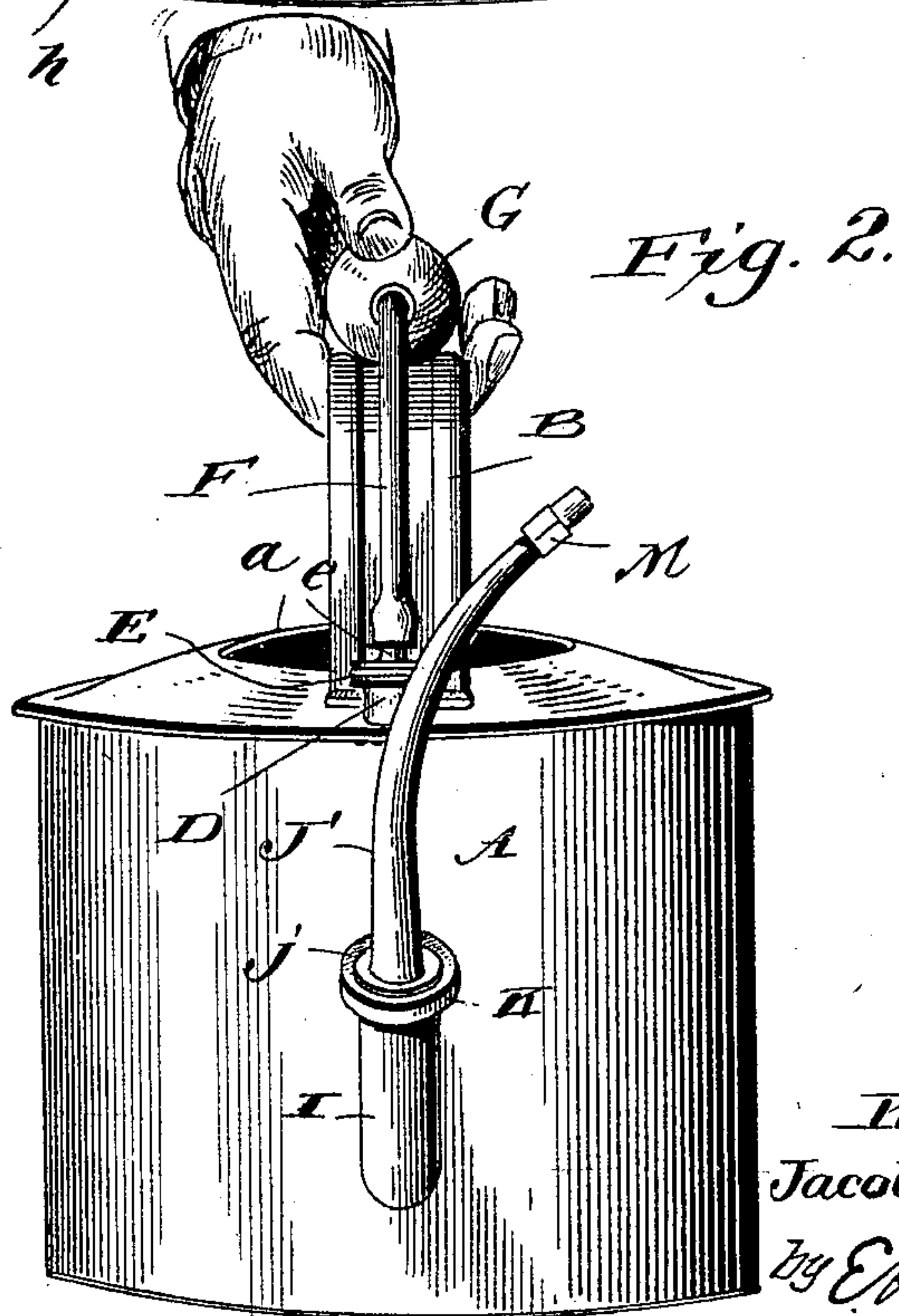
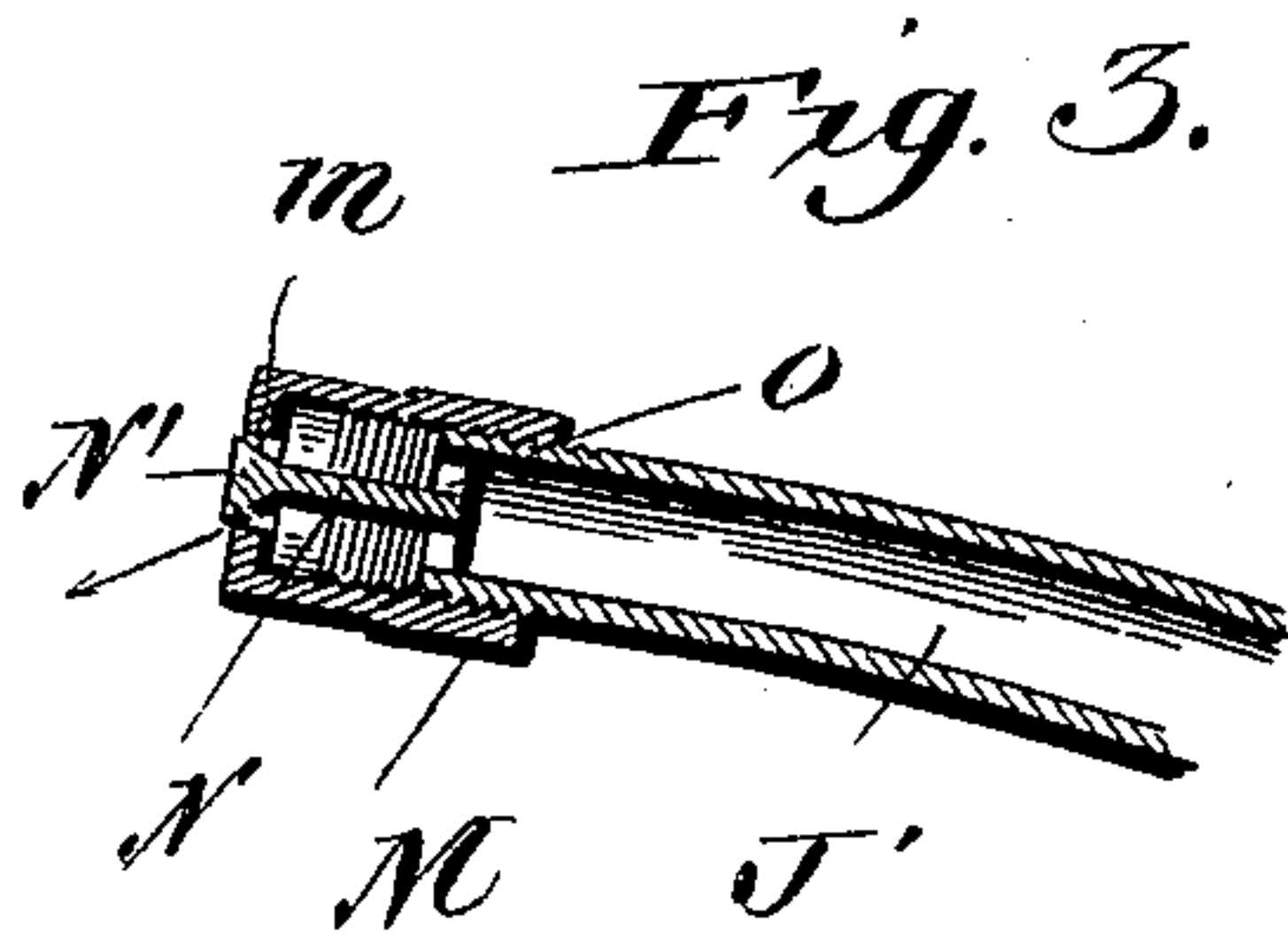
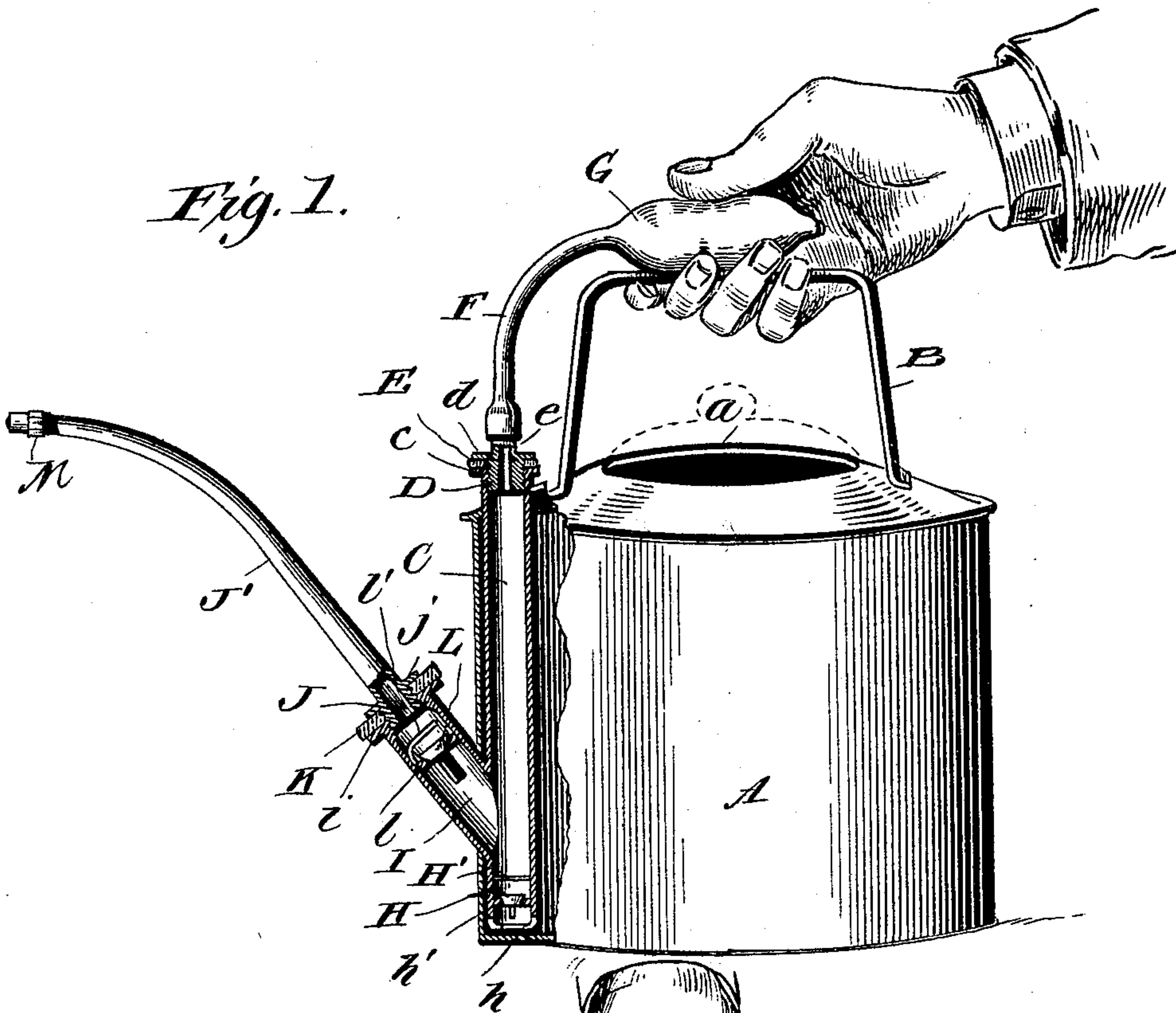


(No Model.)

J. KAGEY.
SPRAYING DEVICE.

No. 583,482.

Patented June 1, 1897.



Witnesses:

L. C. Hills.

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Atty.

UNITED STATES PATENT OFFICE.

JACOB KAGEY, OF ARCOLA, ILLINOIS.

SPRAYING DEVICE.

SPECIFICATION forming part of Letters Patent No. 583,482, dated June 1, 1897.

Application filed September 8, 1896. Serial No. 605,118. (No model.)

To all whom it may concern:

Be it known that I, JACOB KAGEY, a citizen of the United States, residing at Arcola, in the county of Douglas and State of Illinois, have invented certain new and useful Improvements in Spraying Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in spraying devices for spraying plants and other objects; and it has for its objects, among others, to provide a simple and cheap spraying device of few parts and those simple in their nature and so assembled as to be most convenient for use. The receptacle may be of any desired capacity and shape, provided with a handle by which it may be carried, and a compressible bulb is arranged so that it may be grasped by the thumb or finger of the hand that grasps the handle, leaving the other free to manipulate the plants or other objects. This bulb is connected by flexible tube with the tube that extends within the receptacle to near the bottom thereof, and within this tube is a valve, while a short tube establishes communication between the tube within the receptacle and the discharge-spout. A valve is arranged within the short tube, and the discharge-spout is adjustably connected with said short tube, so that it may be turned to throw the spray upward more or less, as may be desired, the spout being curved for this purpose. The end of the discharge-spout is provided with a rose or spreader, and a sleeve adjustable on the end of the spout serves to regulate the fineness of the spray.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention in this instance resides in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view, with a portion broken away and parts in section, showing my improved sprayer. Fig. 2 is a view at right angles to Fig. 1. Fig. 3 is a sectional detail of the outer end of the spout on an enlarged scale.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the body portion or receptacle, which may be of any suitable material, shape, and capacity. It is provided at the top with an opening *a*, through which the liquid may be poured into the receptacle, and this may or may not be provided with a cover, such as is indicated by dotted lines in Fig. 1.

B is a handle secured to the top of the receptacle in any of the well-known ways.

C is a tube extending down into the receptacle to near the bottom thereof, as shown. Its upper end extends above the top of the receptacle and is provided with a flange *c*, upon which rests the packing-ring E, of rubber or other suitable material, which is clamped between said flange and the flange *d* on the plug D, which is screw-threaded into the upper end of the tube and has a nipple *e*, onto which is secured the end of the flexible pipe or tube F, at the other end of which is the rubber bulb G. The plug has a passage therethrough, as shown in Fig. 1. The tube C is soldered or otherwise secured where it passes through the top of the receptacle, so as to make a tight joint.

The lower end of the tube C is open or provided with an opening or openings *h* and a diaphragm or spider *h'*, forming a seat for the valve H, which is limited in its upward movement by the bar or plate H'.

I is a short tube extending in an upwardly-inclined direction from the tube C near its lower end, passing through the wall of the receptacle, in which it is secured by a tight joint, and at its upper and outer end it has a flange *i*, while J' is a pipe having a screw-threaded portion J, which is screwed into the outer end of the pipe I and is provided with

- a flange *j*, between which and the flange *i* of the short pipe is a packing-ring K, of rubber or some other suitable material. This pipe J' is bent or curved, as shown, so that by simply turning it in one direction or the other the outer end of the pipe may be brought into the desired position to throw the spray upward or downward more or less, as may be desired.
- 10 L is a valve within the tube I, being adapted to be seated on the seat in the diaphragm or spider *l* and limited in its outward movement by the stop *l'*, arranged within the said tube, as shown in Fig. 1.
- 15 M is a sleeve screwed onto the outer end of the pipe J', as shown, and having its outer end provided with an opening *m*, in which is located the rose or sprayer N', carried by the shank N, which is held to the spider O within the outer end of the said pipe, the sprayer having tapered walls, as seen best in Fig. 3, so that by adjustment of the sleeve the spray may be made finer or less fine, as may be desired.
- 25 The operation will be readily understood from the foregoing description when taken in connection with the annexed drawings, and a further detailed description thereof is not deemed necessary.
- 30 The bulb is so arranged as to be conveniently compressed by the thumb or finger of the same hand that supports or carries the sprayer, so that the other hand is free to ma-

nipulate the leaves or branches of the plants that it is desired to spray. Any desired liquid may be used. 35

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is— 40

1. The combination with the receptacle, its tube extending into the same, and the bulb connected with the tube, of the short pipe extending upward from the lower end of the tube, and the discharge-spout curved as shown and connected with the short pipe by screw-threaded connection whereby the spout may be turned to vary the direction of throw of the spray, as set forth. 45

2. The combination with the receptacle, the tube extending into the same, the bulb connected with the tube, the valve in the lower end of the tube, and the short pipe extending from the tube, of the valve in the short pipe, the spout having curved discharge end and its other end screwed into the end of the short pipe, and the adjustable spraying-nozzle on the outer end of the spout, all substantially as and for the purpose specified. 55

In testimony whereof I affix my signature in presence of two witnesses. 60

JACOB KAGEY.

Witnesses:

C. I. KAGEY,
S. H. LOUTHAN.