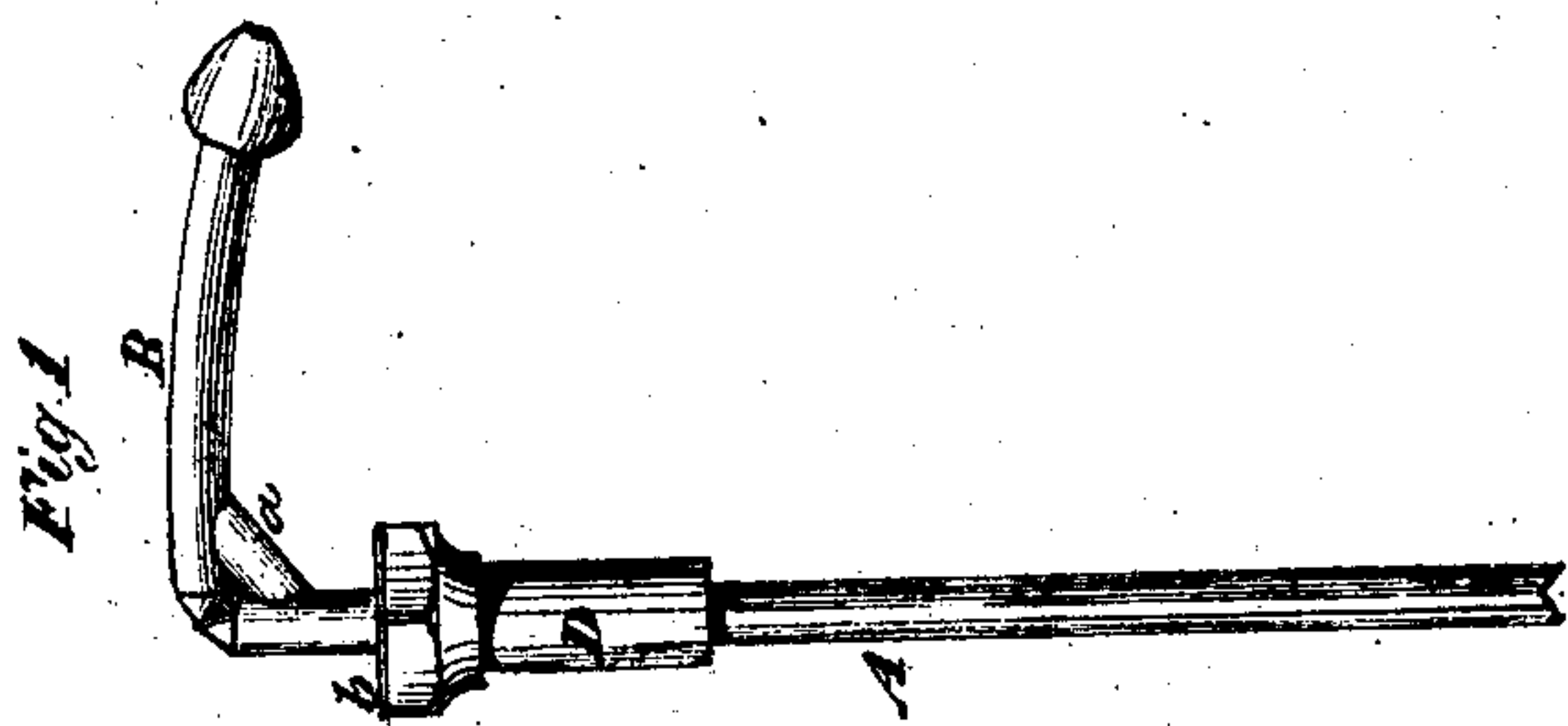
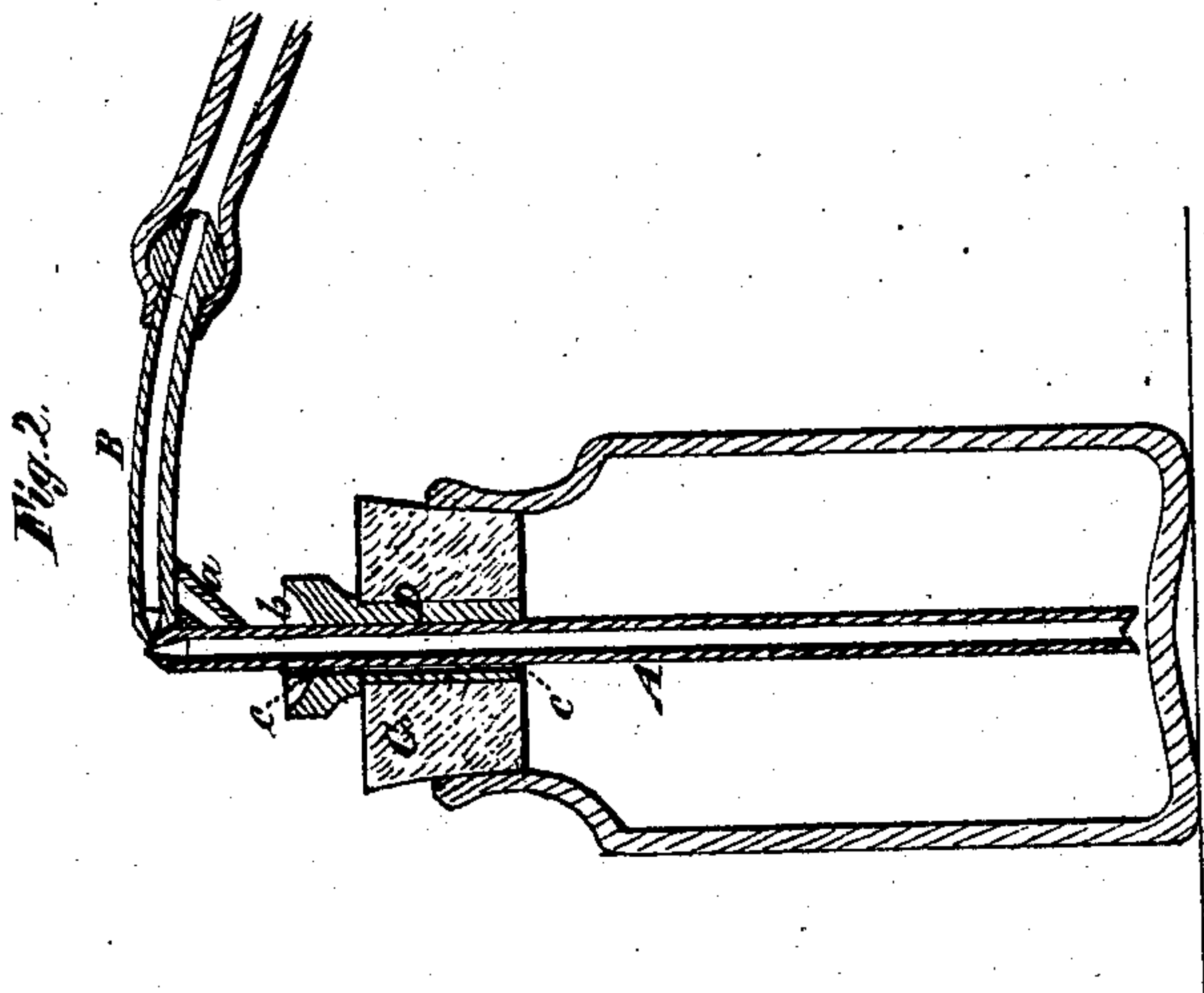


James J. Essex. *Imp^t in Atomizers.*

PATENTED JUN 27 1871

116286



Witnesses:

Geo. Haynes
J. M. Cornwell

James J. Essex
per *Amos Cornwell*
Attorney

UNITED STATES PATENT OFFICE.

JAMES J. ESSEX, OF NEWPORT, RHODE ISLAND.

IMPROVEMENT IN ATOMIZERS.

Specification forming part of Letters Patent No. 116,286, dated June 27, 1871.

To all whom it may concern:

Be it known that I, JAMES J. ESSEX, of NEWPORT, in the county of Newport and State of Rhode Island, have invented a new and useful Improvement in Atomizers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

This invention consists in a novel construction of the tube of an atomizer, whereby there is provided in the tube itself, or in connection with it, a vent, as well as a passage for the return of any drip to the bottle, and the tube is complete in itself, suitable for insertion into any bottle-stopper in which a hole is provided for its reception.

Figure 1 in the drawing is a side view of a tube with my improvement. Fig. 2 is a vertical section of the same and of a bottle, into the cork of which it is inserted. Fig. 3 is a horizontal section of the suction-tube and the surrounding tube, in which the vent and return passage are provided.

Similar letters of reference indicate corresponding parts in the several figures.

A is the suction-tube, and B the air-tube, constructed and arranged and connected at *a*, all in the usual manner. These tubes may be of metal or other material. That portion of the suction-tube A which is received within the cork or stopper C is surrounded by a tube, D, which is soldered or otherwise securely attached to its exterior, such tube being of an internal caliber to fit closely around the suction-tube, but having cut longitudinally through its interior a notch or channel, *c*, which, when it is put on and secured

to the suction-tube, forms a passage outside of the latter, such passage constituting the vent, as well as serving for the return of any drip which may run down the tube from the nozzle thereof. The said tube D may consist of a piece of plain tubing; or may be made with a drip-cup, *b*, at the top, as shown in the drawing; or may have its upper part provided with a flange broad enough to cover the whole of the cork or stopper and form an ornamental cap thereto.

The atomizer thus constructed or provided with the channeled exterior tube D forms by itself a complete instrument, which is applicable to any cork or bottle-stopper in which there is made a hole of suitable size to receive the tube D, doing away with the necessity of making a special stopper, and forming a better vent and drip-return passage than is commonly formed by making a hole in a cork.

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

The combination, with the suction-tube A of the atomizer, of the attached external tube D, between which and the suction-tube there is a channel, *c*, serving as the vent and drip-return passage, and adapted for use in connection with an ordinary cork or other stopper, substantially as herein described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES J. ESSEX.

Witnesses:

FRED HAYNES,
R. E. RABEAU.