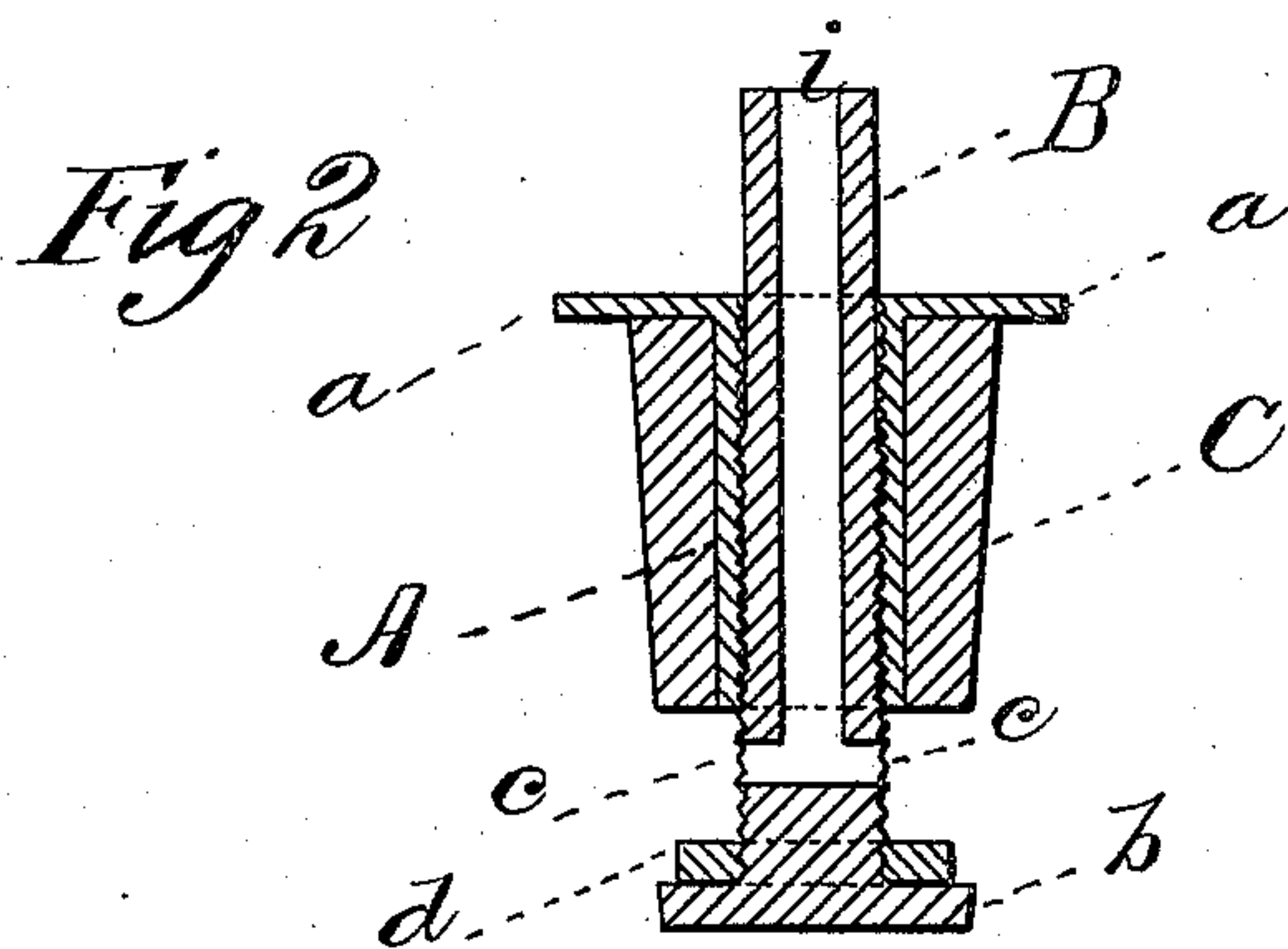
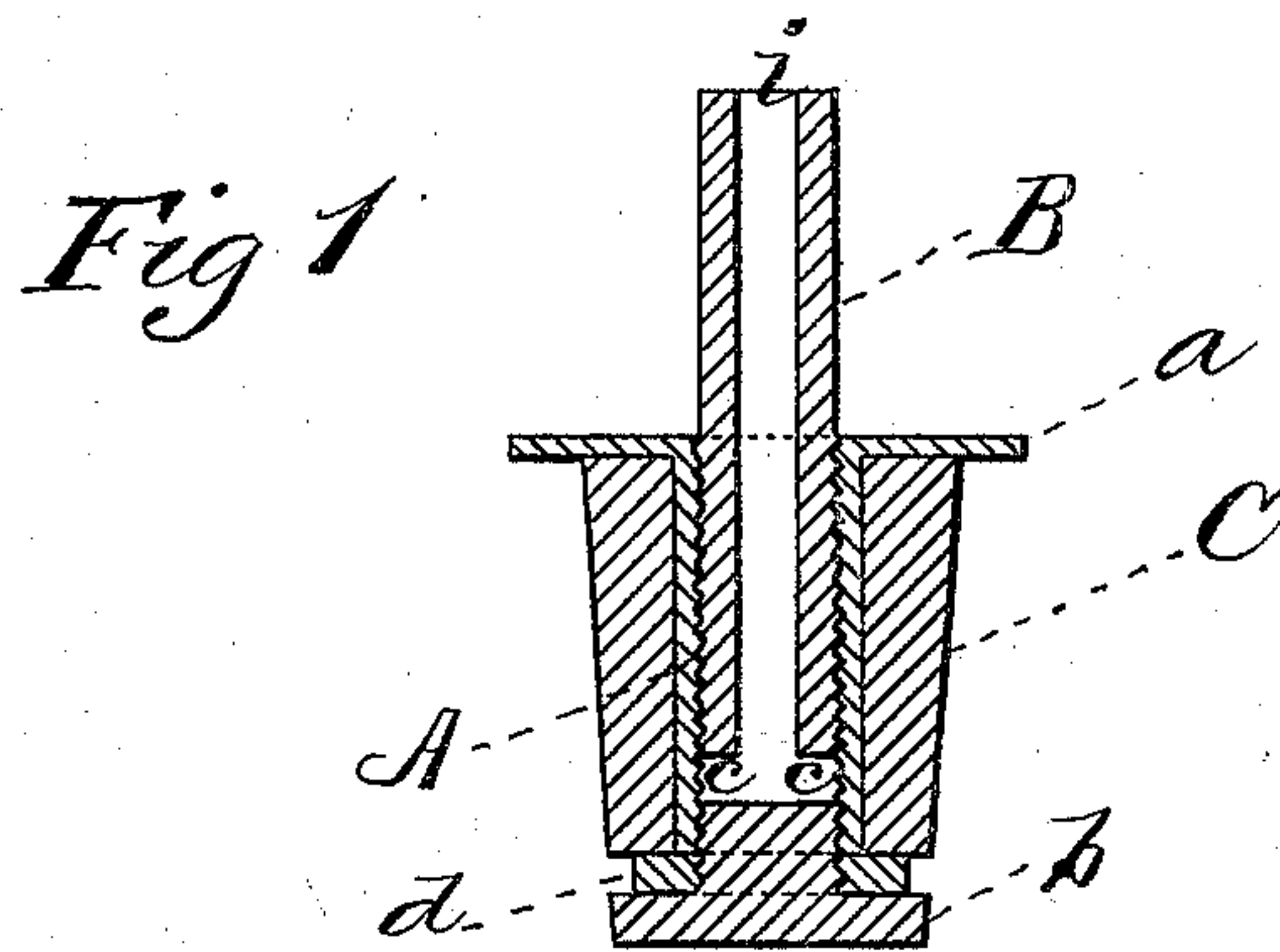


S. S. NEWTON.
BOTTLE-STOPPER.

No. 171,304.

Patented Dec. 21, 1875.



WITNESSES

Mary J. Utley
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UNITED STATES PATENT OFFICE

STEPHEN S. NEWTON, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **171,304**, dated December 21, 1875; application filed November 20, 1875.

To all whom it may concern:

Be it known that I, STEPHEN S. NEWTON, of Binghamton, in the county of Broome and State of New York, have invented a new and valuable Improvement in Bottle-Stoppers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figures 1 and 2 of the drawings are representations of vertical central sections of my bottle-stoppers.

This invention has relation to improvements in bottle-stoppers. The object of the invention is to devise a stopper which will be applicable indifferently to fluid or perfumery bottles, or which may be used for ventilating cans and other purposes.

The nature of the invention consists in the arrangement and novel construction of the various devices used, whereby very desirable results are obtained, as will be hereinafter more fully explained and claimed.

In the annexed drawings, the letter A designates a metallic tube of suitable size, which is provided with a broad annular flange, *a*, upon its upper edge. The interior of this tube is screw-threaded, and is designed to receive a correspondingly-threaded tubular plug, B, the lower end of which is closed, and is provided with a broad cap or head, *b*, which will prevent it from being drawn through tube A under circumstances hereinafter explained. Tube B is provided, near its lower end, just above head *b*, with ports *c*, and also with a washer, *d*, which, in some cases, may be of vulcanite, but is generally made of leather or of rubber. This washer is passed over tube B, and lies upon head *b*, as shown in Figs. 1 and 2. Tube A is provided with an outer covering of cork, rubber, or other elastic substance, C, which is preferably of tapering form, and is designed to close the neck of a bottle when my improved stopple is inserted therein.

As shown in Fig. 1, the upper end of tube B projects above the upper surface of the tube A, thus affording an education-spout, *i*, and a means whereby the stopple may be opened or closed, as may be required.

The operation of my improved device is as follows: The bottle being filled with a liquid, as oil, medicine, perfumery, or the like, or with a powder, and the stopple being inserted in the neck of the said bottle, the latter is closed by seizing the projecting end of the tube B and turning it so as to bring washer *d* in close contact with the lower edge of the tube A. In this position port *c* will be within the bore of tube A, and all exit of the contents of the bottle will be prevented through the said ports, while all leakage will be prevented by the compression of washer *d* against the lower edge of tube A.

By this means the neck of the bottle will be accurately closed, and all evaporation or other waste will be prevented.

To open the bottle, so as to allow its contents to be discharged, the tube B will be turned so as to bring ports *c* below the lower edge of tube A, when the contents of the said bottle may be discharged by inverting the same and allowing its contents to flow through ports *c* into and out of tube B.

It will be evident that the stopple above described may be advantageously used, not only in confining and releasing ordinary liquids, but also for aerated or effervescing liquids; also, that it may be used with very satisfactory results for ventilating wine-casks, cans, and other like vessels containing substances which require ventilation or an exit for gases produced by fermentation or other similar chemical changes or processes.

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

The combination of the flanged tube A, having its interior screw-threaded, the screw-threaded plug B, provided at its lower end with a broad head, *b*, and having ports *c* just above said head, and a washer, *d*, whereby, when the stopper is closed, the washer abuts against the lower end of the tube and the ports lie within the bore of the tube, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

STEPHEN S. NEWTON.

Witnesses:

WM. H. SCOVALL,
DAN. WHEELER.