

No. 661,659.

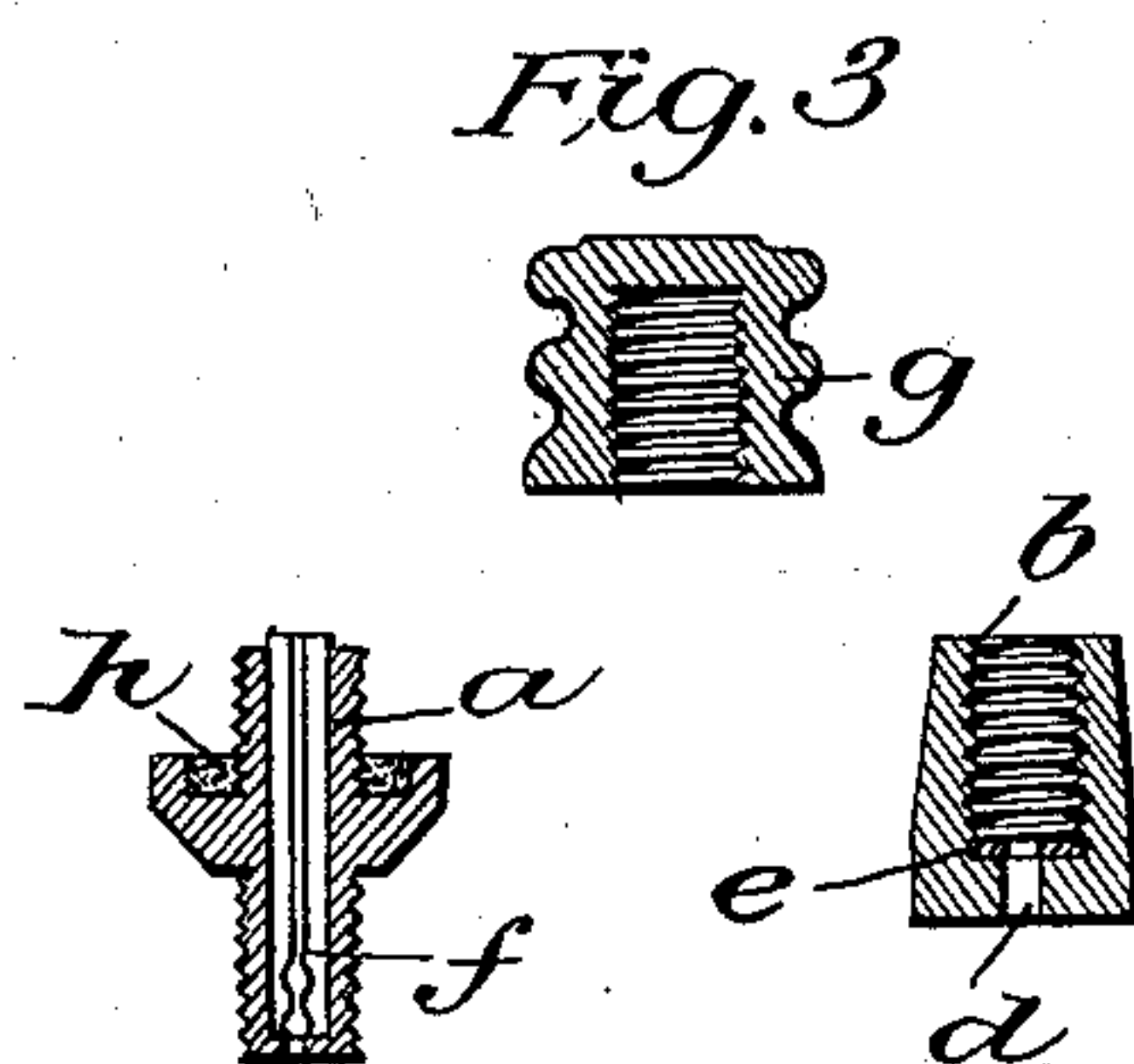
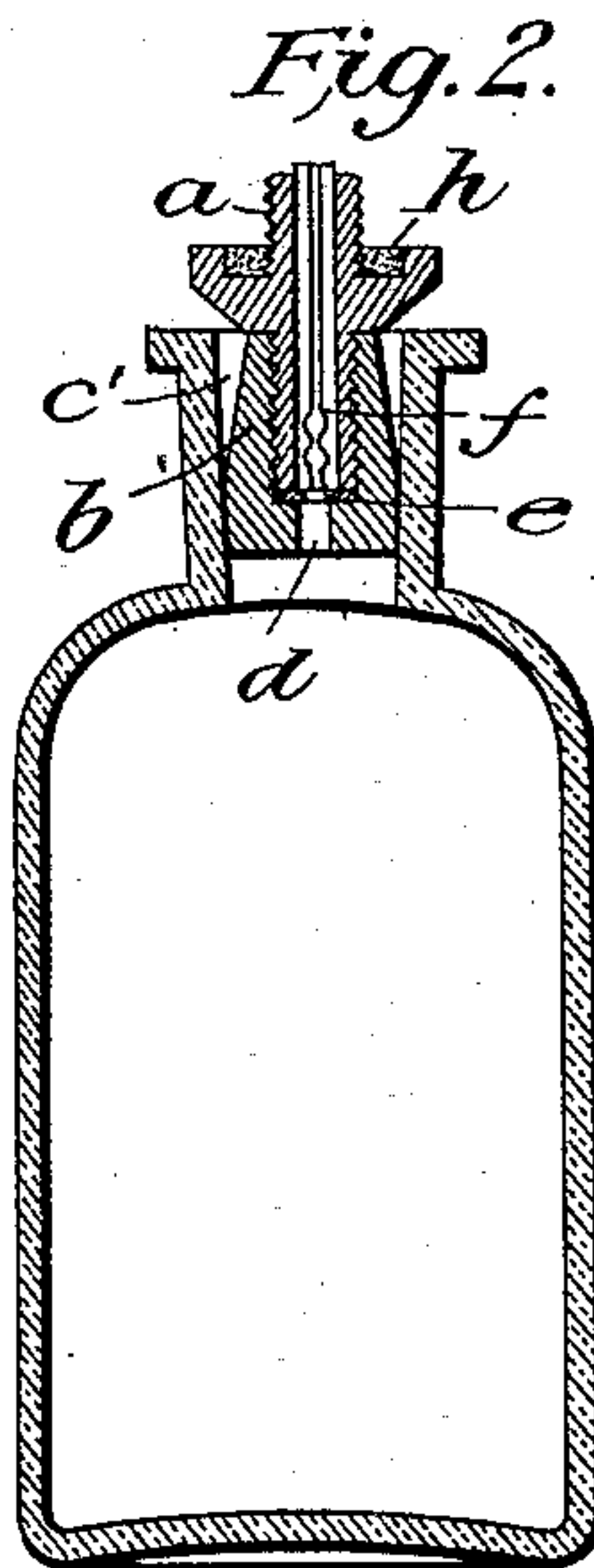
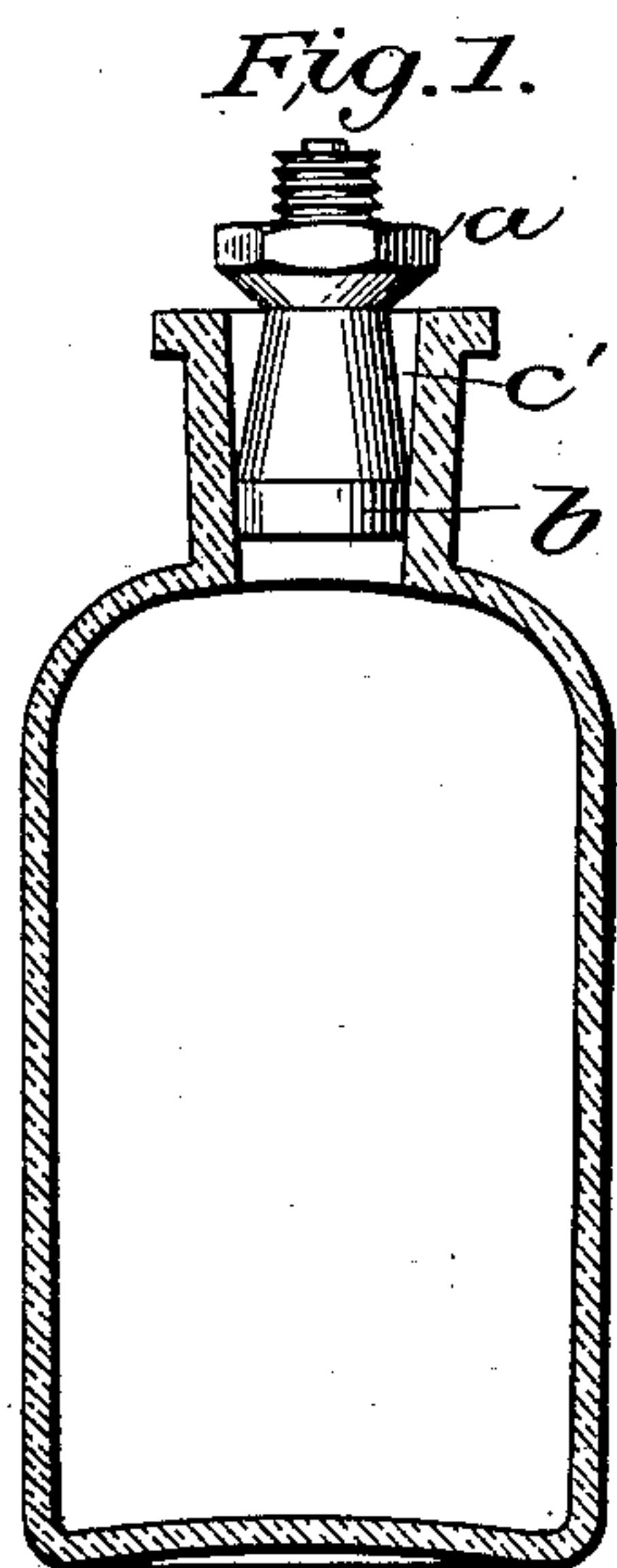
Patented Nov. 13, 1900.

H. GOETZ.

STOPPER FOR BOTTLES CONTAINING VOLATILE LIQUIDS.

(Application filed Apr. 24, 1899.)

(No Model.)



Witnesses:

*Samuel Percival
Alber Jones*

Inventor.

Heinrich Goetz

By his Attorneys

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UNITED STATES PATENT OFFICE.

HEINRICH GOETZ, OF FRANKFORT-ON-THE-MAIN, GERMANY.

STOPPER FOR BOTTLES CONTAINING VOLATILE LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 661,659, dated November 13, 1900.

Application filed April 24, 1899. Serial No. 714,264. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH GOETZ, a subject of the Emperor of Germany, residing at Schleusenstrasse 17, Frankfort-on-the-Main, in the Empire of Germany, have invented certain new and useful Improvements in Stoppers for Bottles Containing Volatile Liquids, (for which I have made application for patent in Germany on November 26, 1898;) and I do hereby 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.

This invention consists in a new method of stoppering bottles used for volatile liquids employed in medicine and in industrial operations, more particularly ethyl chlorid and methyl chlorid.

Figures 1 and 2 illustrate the stoppering arrangement in elevation and in section, respectively. Fig. 3 represents the several parts of which the same is composed.

Into the neck of the bottle, preferably of cast glass, (the interior of the neck being emery-ground in the form of a cone,) a metallic body consisting of two parts *a* and *b* is inserted, the part *b* being formed with two conical surfaces, the lower one being fitted as perfectly as possible into the cone-shaped neck. The joint is filled in with a compound of silicate of potash or some other adhesive substance, the space *c* between the upper cone and the neck of the bottle being also filled in

with some kind of impermeable cement, Figs. 1 and 2.

The two parts *a* and *b* (shown in Fig. 3 in section) are perforated. In *b* is a screw-thread, to which the lower part of *a*, which is employed for pouring out the volatile liquids, is screwed. *a* is furnished in the middle with a glass stem *f*, in which is a capillary orifice, and at the bottom, by which it is connected with the piece *b*, it presses against a leaden ring *e*. The capillary orifice is closed by a screw-cover *g*, which is made tight by pressing against an india-rubber ring placed in the groove *h* of the piece *a*.

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

A stopper for bottles containing volatile liquids consisting of a lower hollow perforated metallic body having two conical surfaces and adapted to be cemented in the neck of the bottle, an upper hollow body screwing into the lower body, a capillary tube inserted in the upper metallic body and communicating with the perforation in the lower body, and a screw-cap screwing onto the upper body and closing the capillary tube.

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

HEINRICH GOETZ.

Witnesses:

GEORGE MITZENSKI,
RICHARD GUENTHER.