

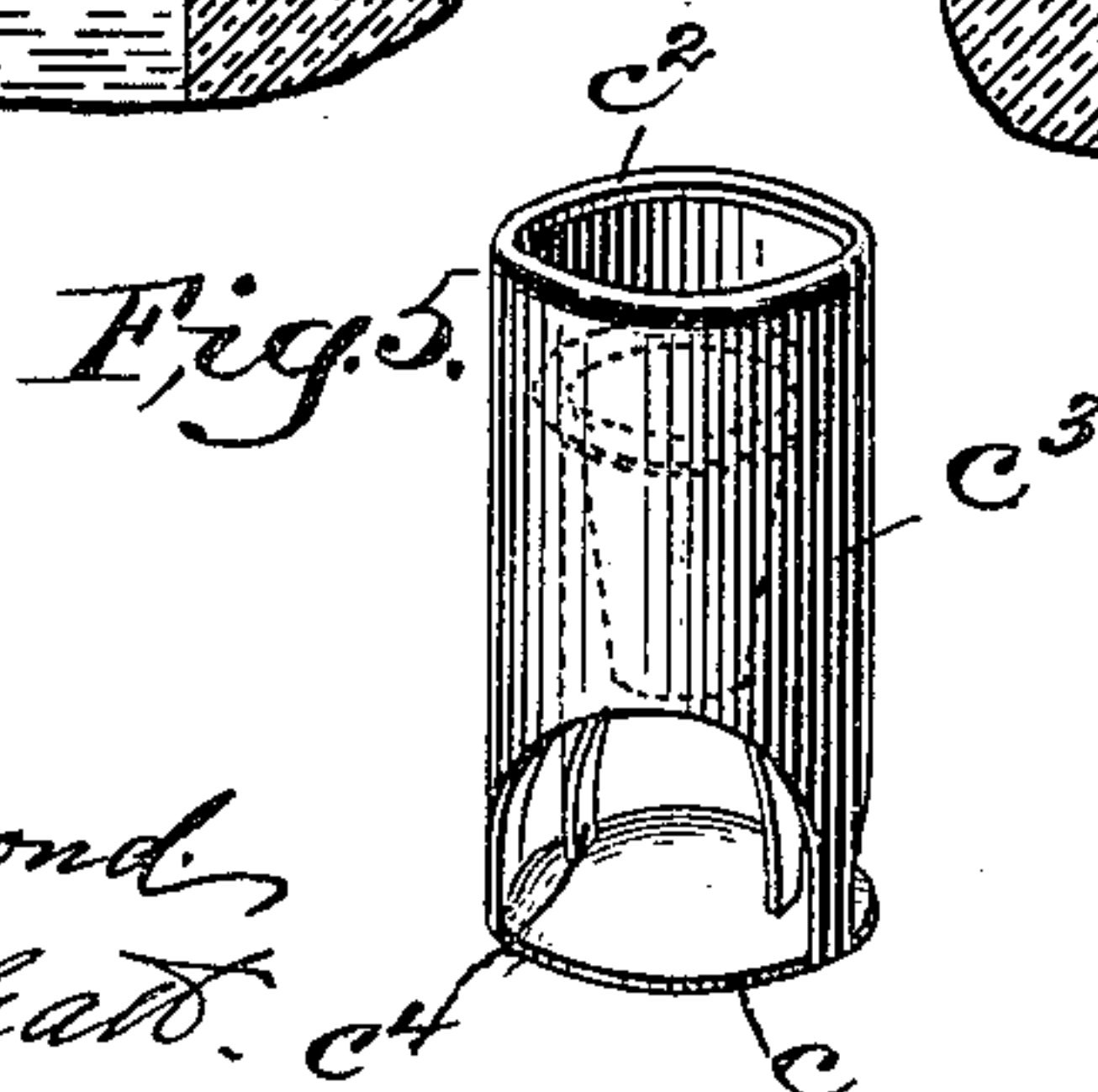
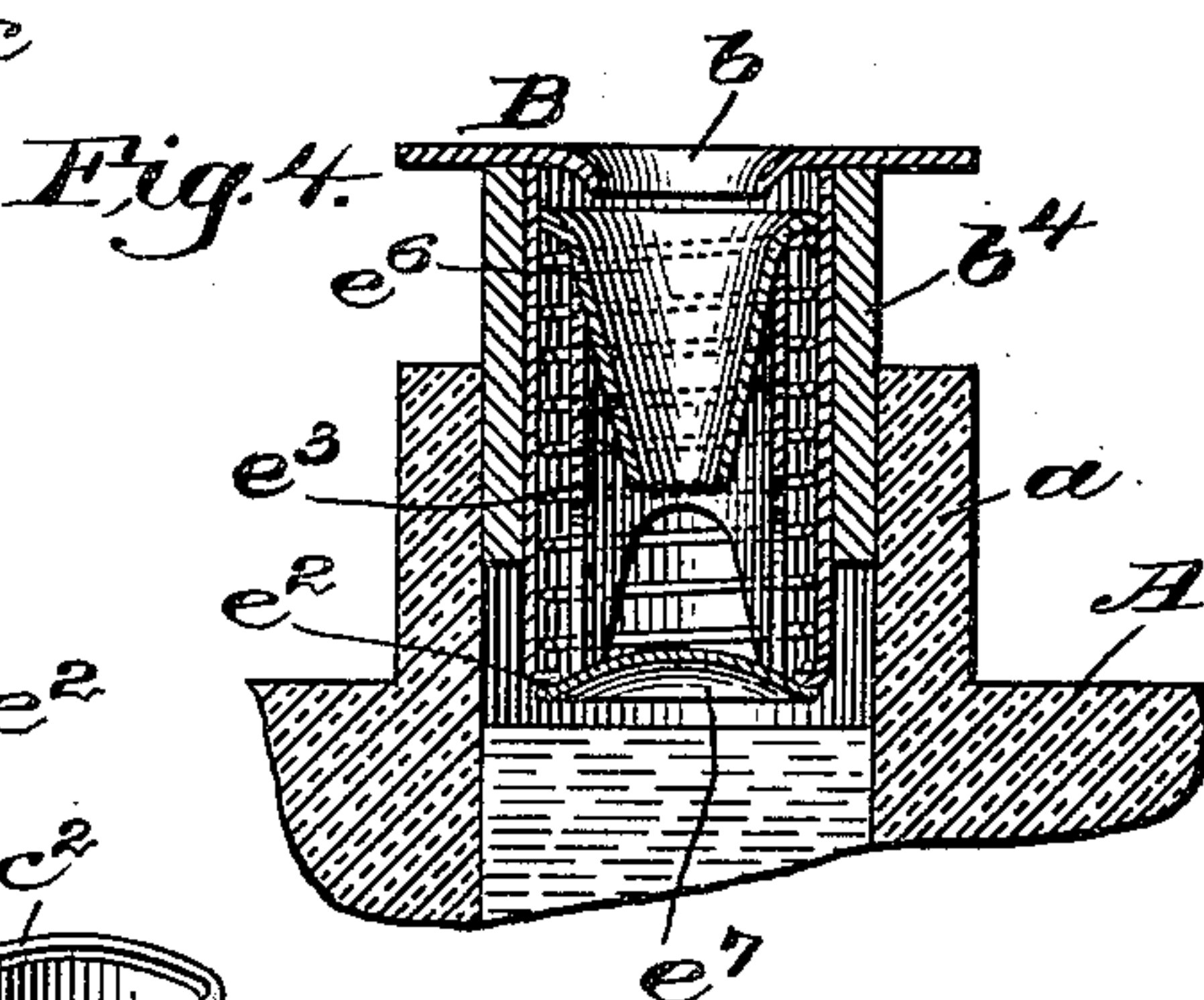
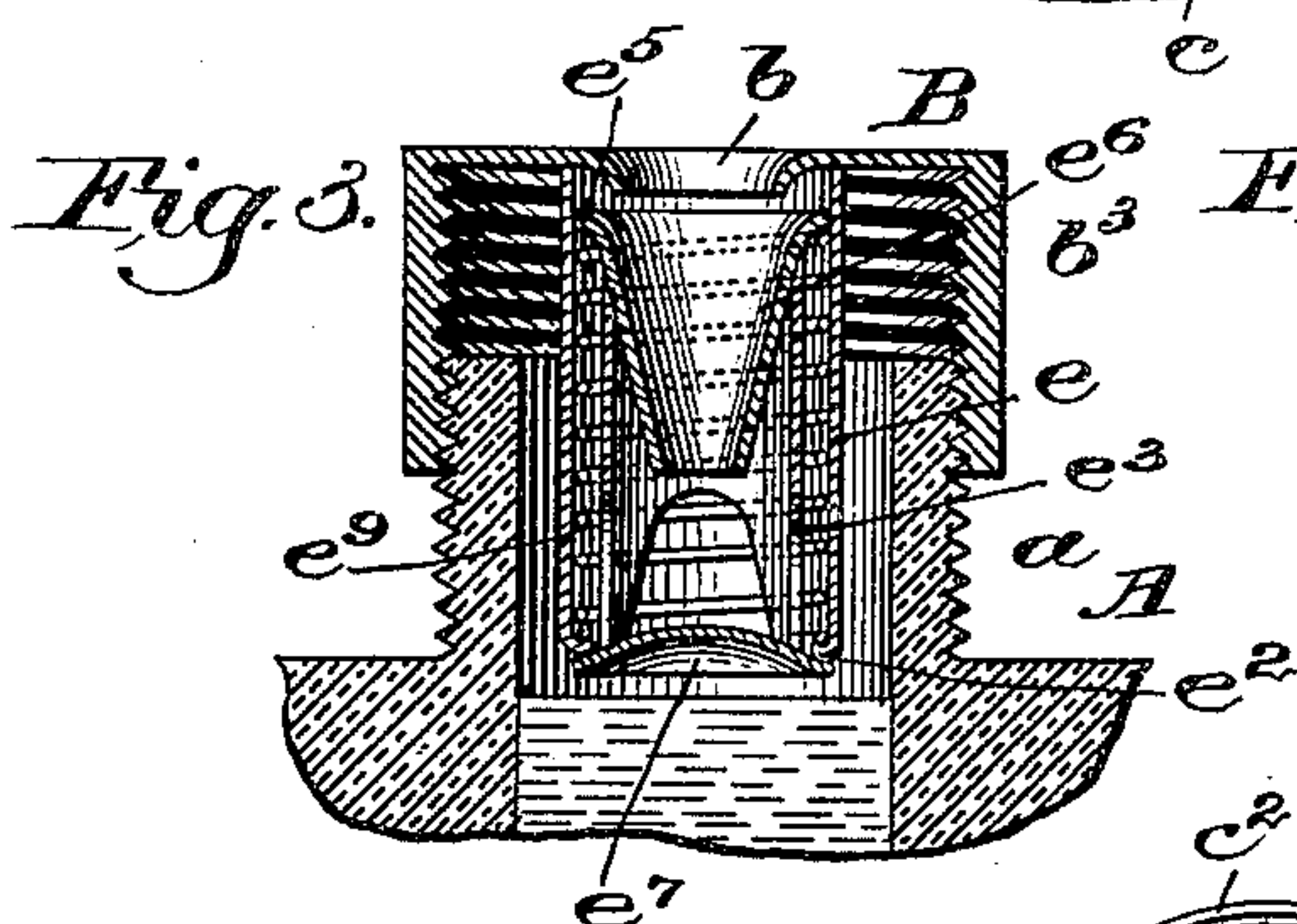
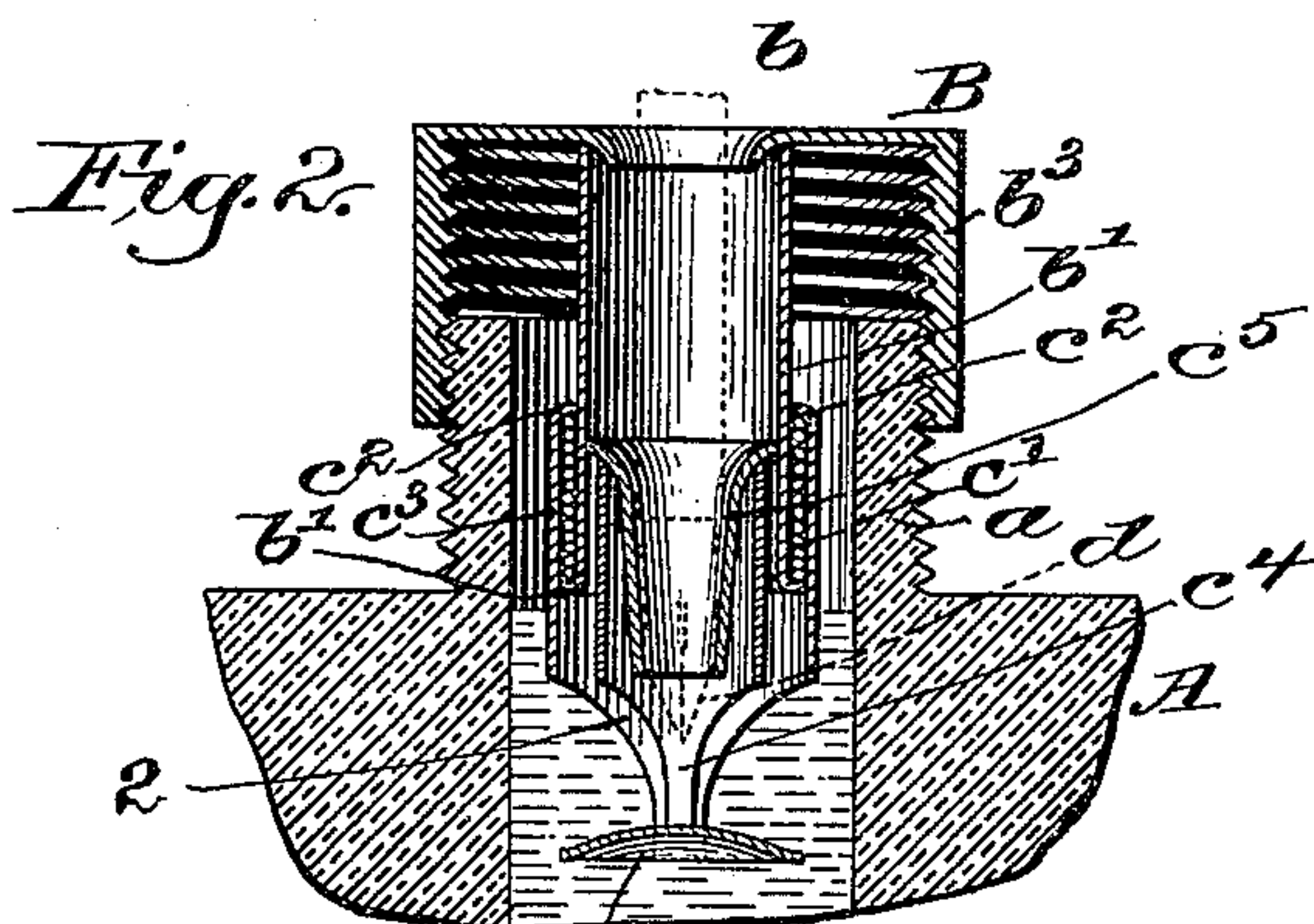
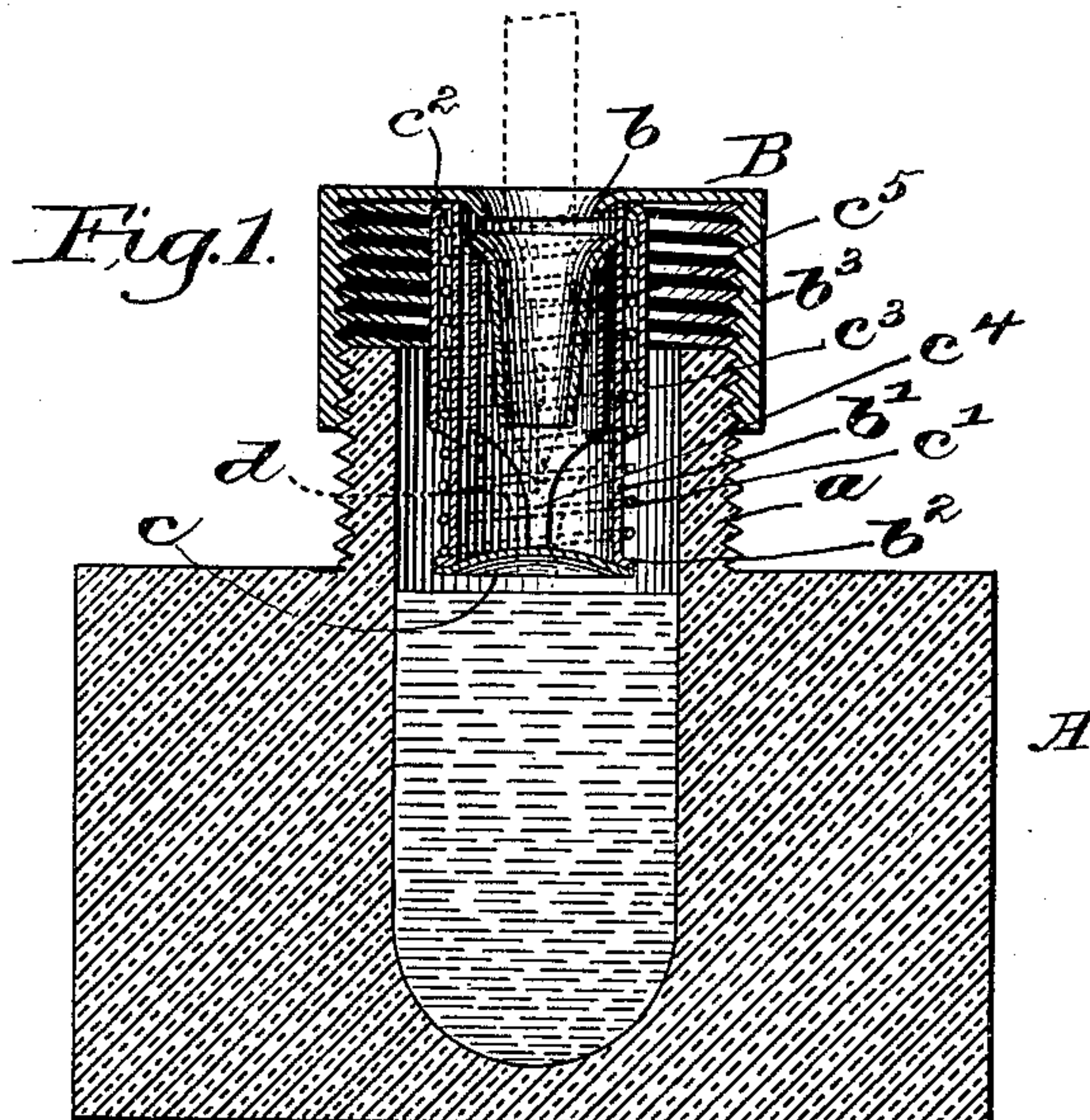
No. 639,913.

Patented Dec. 26, 1899.

L. STANEK.
STOPPER FOR INK WELLS, &c.

(Application filed Apr. 6, 1899.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

LUCIAN STANEK, OF BOSTON, MASSACHUSETTS.

STOPPER FOR INK-WELLS, &c.

SPECIFICATION forming part of Letters Patent No. 639,913, dated December 26, 1899.

Application filed April 6, 1899. Serial No. 711,902. (No model.)

To all whom it may concern:

Be it known that I, LUCIAN STANEK, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Stoppers for Ink-Wells and Analogous Articles, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

10 This invention relates to stoppers for ink-wells, and the like, and has for its object the production of a stopper having an interior valve whereby, while permitting a pen to readily enter the ink, the ink will not be spilled from the well if the latter be overturned.

Figure 1, in vertical section, shows an ink-well with my improved cap and valve applied, the same being closed, the dotted lines showing a pen inserted in the mouth of the cap ready to be immersed in the ink in the well. Fig. 2 is a similar view with the valve open. Fig. 3 shows a modified location of the spring for actuating said valve. Fig. 4 shows a modified form of connecting the stopper with the neck of the well, and Fig. 5 shows the cylinder detached and in side elevation.

The well A may be made of glass or other material and of any desired or usual shape.

30 The body of the well may have, and is represented as provided with, a neck a , said neck in Fig. 1 being shown as provided with a screw-thread.

The stopper for the neck of the well is composed of a top plate B, having a central opening provided with an ink-detaching edge b , represented as downturned to form a lip, said plate having depending from it a tubular body b' , provided at its lower end with a flange b^2 . (Shown in Figs. 1 and 2 as outturned.) The edge of the top plate may have, as in Figs. 1, 2, and 3, a flange b^3 , provided at its interior with a screw-thread to engage the threads of the neck and permit the top plate and its attached parts to be raised and lowered to adapt the valve and the stopper to the ink in the well. If desired, however, this threaded flange may be omitted, and the body of the cylinder b' may be surrounded by cork or other elastic packing b^4 . (See Fig. 4.) The lower end of the cylinder b' has coöperating with it a suitable spring supported and actuated valve c . The spring c' for normally closing the valve

is herein shown as a spiral spring, and its lower end rests on a flange b^2 at the lower end of the cylinder, the upper end of the spring acting against a lip or projection c^2 of a sliding sleeve c^3 , surrounding the cylinder b' and supporting at its lower end the valve c . The top of valve c supports feet c^4 of a cone-shaped open pen-receiver c^5 , suitably located within the upper end of the cylinder. The pen-receiver is tapered at its interior, so that the sides or edges of a pen d (shown by dotted lines) when inserted through the opening of the top plate and in the said receiver will contact with the receiver, and thereafter by further downward pressure on the pen the valve may be made to open or retire from the lower end of the cylinder, the valve descending with the pen until the point of the pen enters the ink, as in Fig. 2. The wall of the cylinder is shown as provided with openings 2 above the valve to permit ink to enter the cylinder above the valve as the latter is depressed or removed from the end of the cylinder. When the valve is closed, the well may be overturned, but the ink cannot escape. The spring c' will preferably be composed of phosphor-bronze or material that will not rust or corrode.

This invention is not limited to the particular shape shown for the valve or its operative spring, and my invention is broad enough to include any valve coöperating with the lower end of the cylinder and normally kept closed by a spring.

In the modification, Figs. 3 and 4, I have shown the lower end of the cylinder e , depending from the top plate B, as having a lip e^2 , turned inwardly rather than outwardly, as in Figs. 1, 2, and 3, and the sleeve or shank e^3 , carrying the valve e^7 , enters the cylinder e , and the upper end of the spring e^4 acts against an outturned lip or flange e^5 of the pen-receiver e^6 . In this modification the pen-receiver e^6 is supported directly by the spring e^9 .

While my improved stopper is especially adapted for use in connection with ink-wells, yet this invention is not intended to be limited in all cases to its use in an ink-well, for it will be obvious that my stopper may be used to stop any neck leading into any well or receptacle for any other liquid to which ready access is to be had.

Having fully described my invention, what

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

1. A stopper consisting of a top plate, a depending cylinder having at its lower end a spring-supporting flange, a spring supported by said flange, and a valve adapted to normally close the lower end of said cylinder and having a tubular shank fitted to slide vertically with relation to said cylinder and closable by said spring, substantially as described.

2. A stopper consisting of a top plate, a depending cylinder having at its lower end a spring-supporting flange, a spring supported by said flange, a valve located to normally close the lower end of said cylinder and having a tubular shank fitted to slide vertically with relation to said cylinder, and closable by said spring, and a pen-receiver sustained in the upper end of said cylinder and adapted to be struck by the pen when inserted in the opening of the top plate, to thereby open the valve, substantially as described.

3. A stopper consisting of a top plate having a depending cylinder flanged at its lower

end, a valve-carrying sleeve surrounding said cylinder and having a lip, a spring surrounding said cylinder and located between it and said sleeve and acting normally to keep said valve closed against the end of said cylinder, substantially as described.

4. A stopper consisting of a top plate having a depending cylinder flanged at its lower end, a valve-carrying sleeve surrounding said cylinder and having a lip, a spring surrounding said cylinder and located between it and said sleeve and acting normally to keep said valve closed against the end of said cylinder, and a pen-receiver sustained by the upper side of said valve and free to slide within the cylinder and be opened by the pen, substantially as described.

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

LUCIAN STANEK.

Witnesses:

GEO. W. GREGORY,
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