

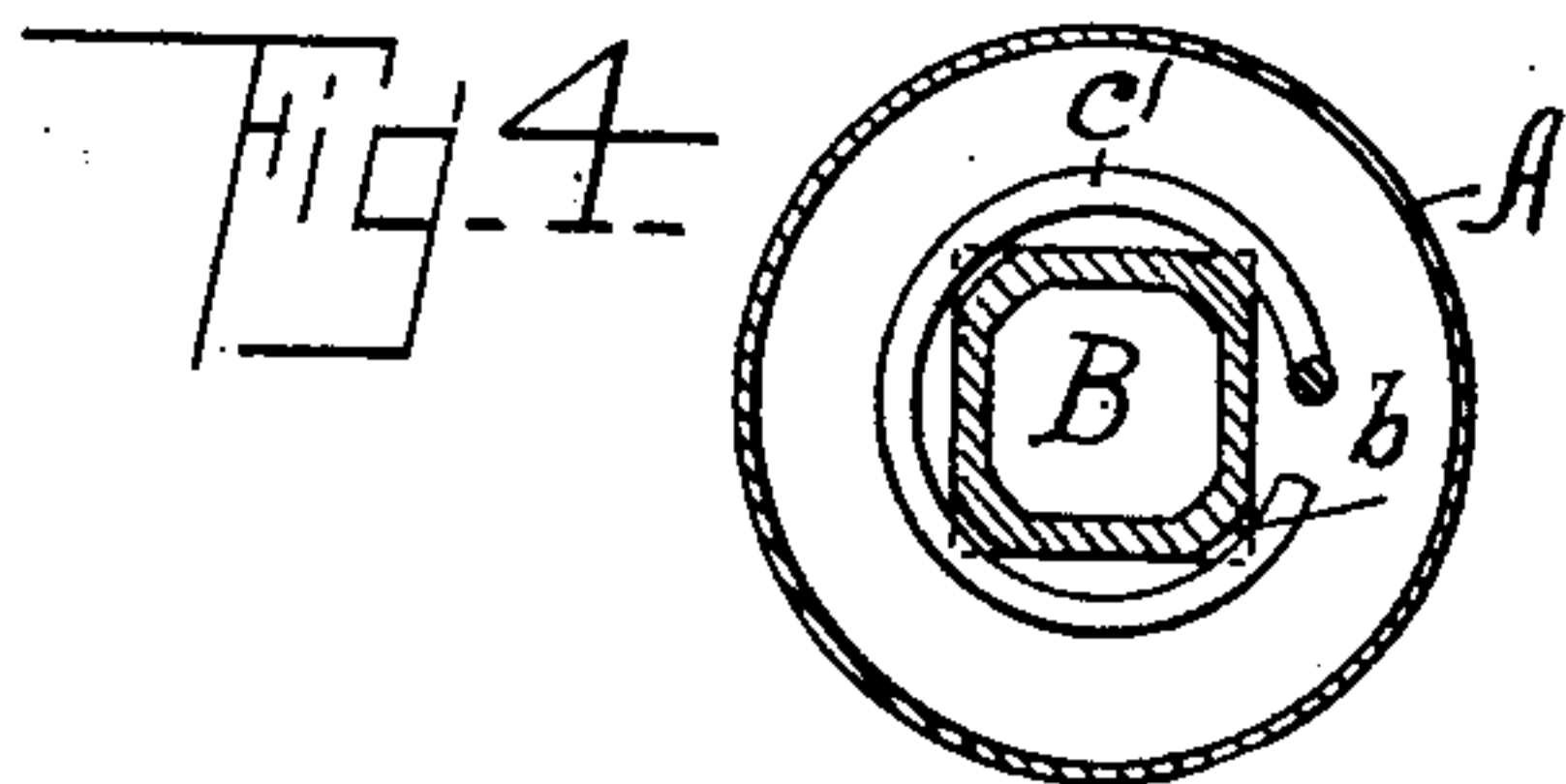
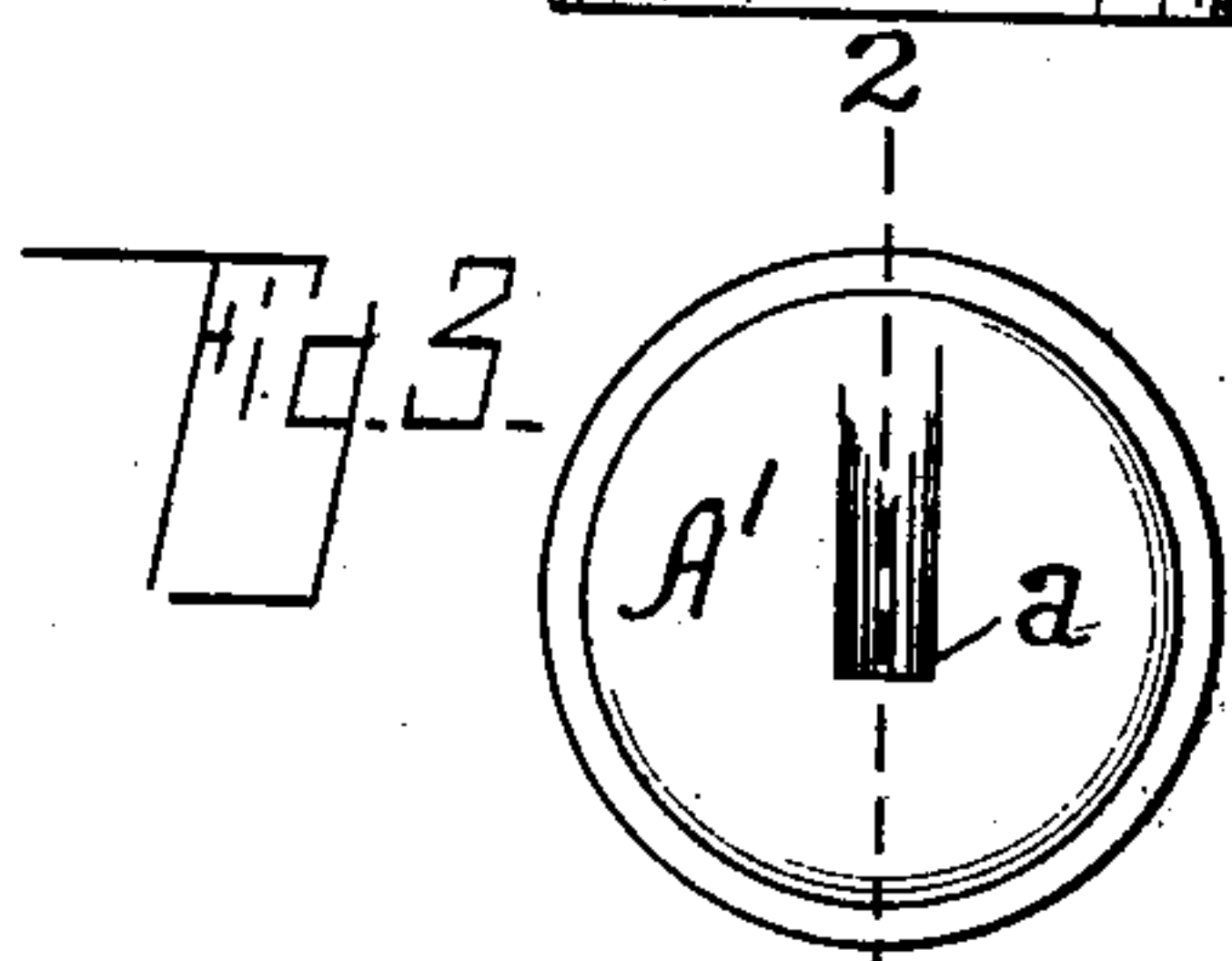
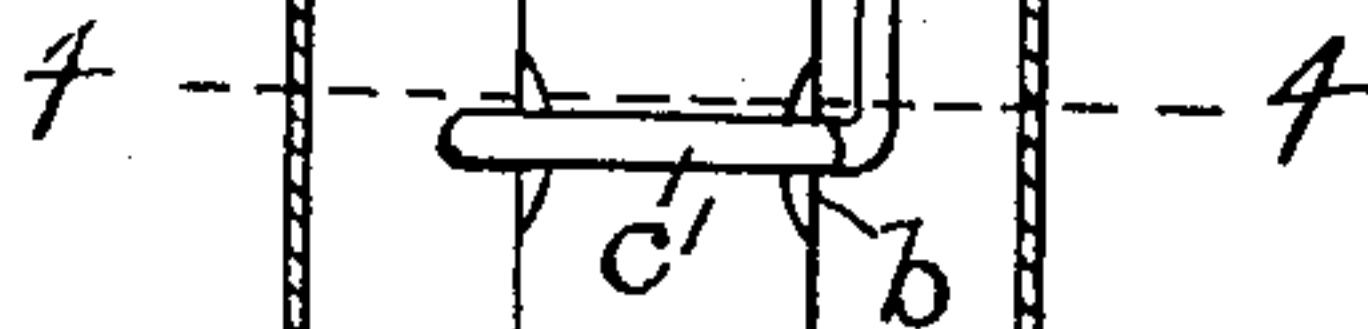
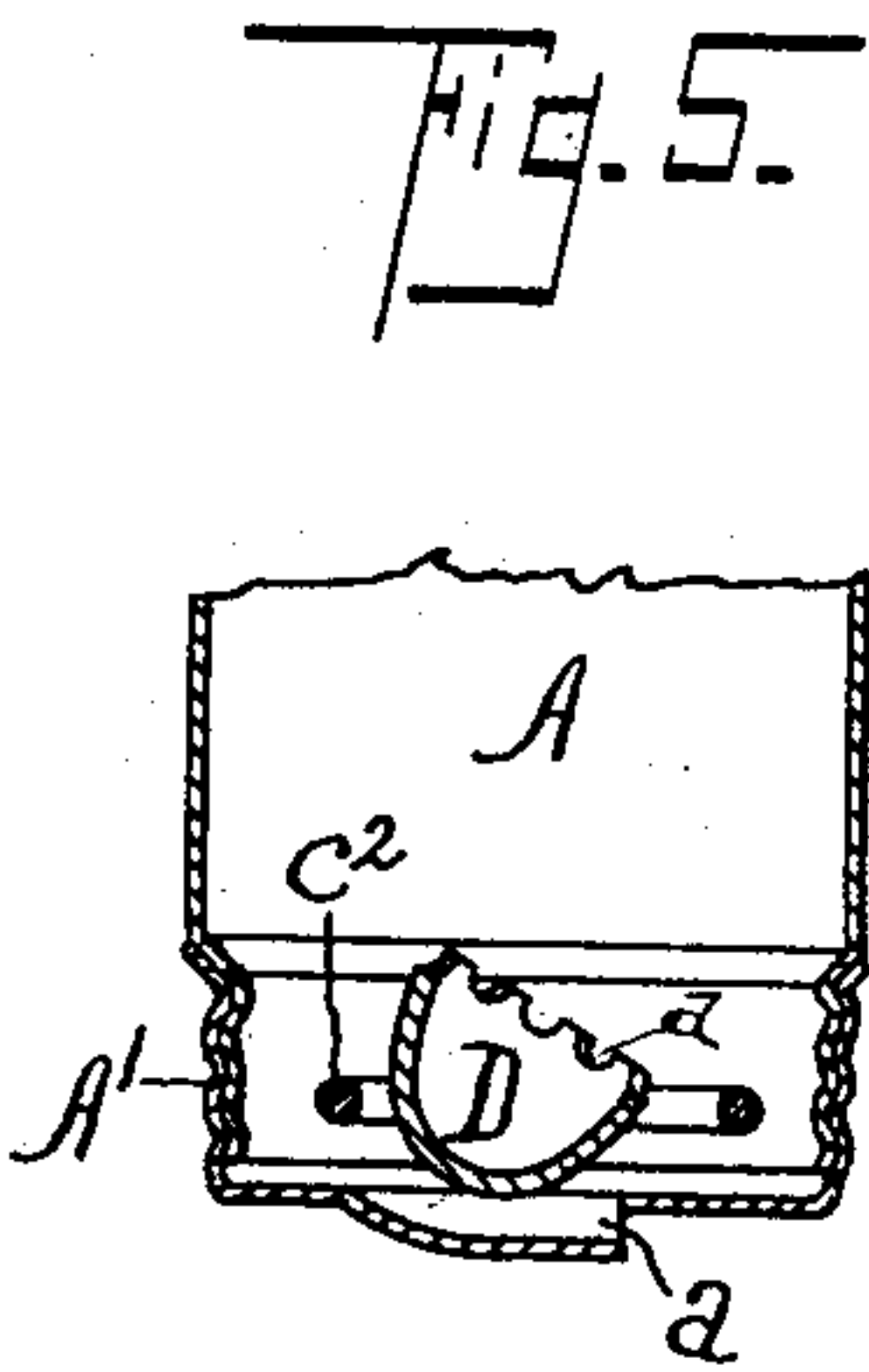
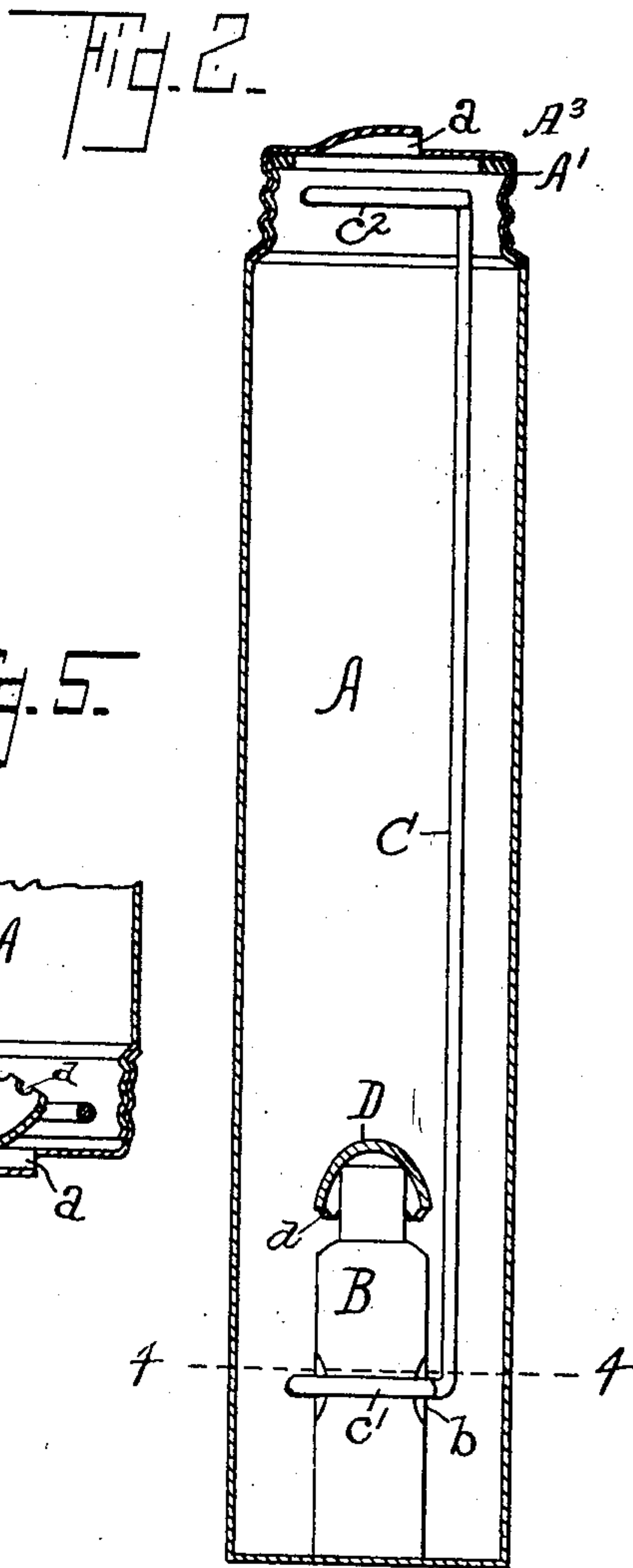
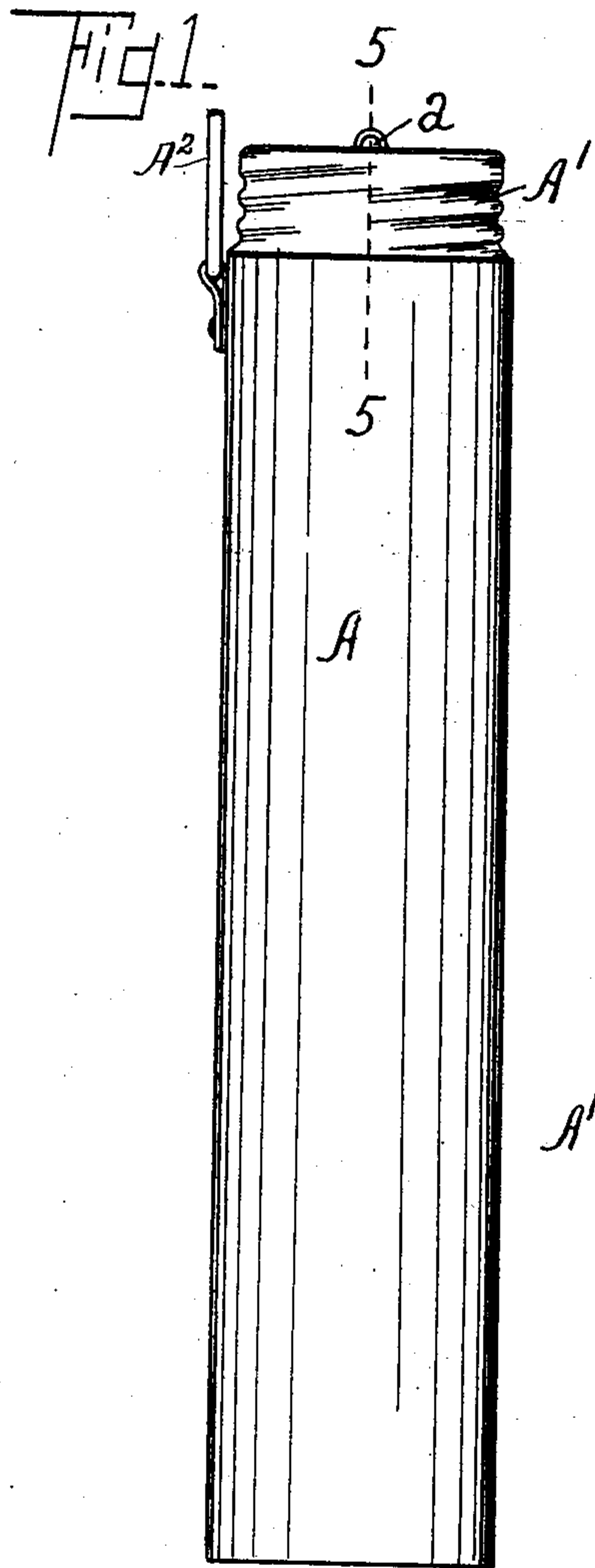
No. 762,502.

PATENTED JUNE 14, 1904.

W. S. STROWGER.
CHEMICAL FIRE EXTINGUISHER.

APPLICATION FILED APR. 6, 1903.

NO MODEL.



WITNESSES = 2

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UNITED STATES PATENT OFFICE.

WALTER S. STROWGER, OF ROCHESTER, NEW YORK, ASSIGNOR TO
STROWGER COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

CHEMICAL FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 762,502, dated June 14, 1904.

Application filed April 6, 1903. Serial No. 151,226. (No model.)

To all whom it may concern:

Be it known that I, WALTER S. STROWGER, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Chemical Fire-Extinguishers, of which the following is a specification.

This invention relates to chemical fire-extinguishers; and its object is to provide an extinguisher that is light in weight, that is of suitable size and proportions to be suspended in convenient places in buildings, and can be readily handled.

Other advantages will become apparent as the device is described.

In the drawings, Figure 1 is a side elevation of the extinguisher. Fig. 2 is a vertical section of the extinguisher, the several parts that it contains being shown in place. Fig. 3 is a top view. Fig. 4 is a cross-section on the line 4 4 of Fig. 2; and Fig. 5 is part of a vertical section on the line 5 5 of Fig. 1, showing the position that may be taken by one of the parts when the extinguisher is in use.

The fluid-holding vessel A of the extinguisher is represented as tubular in form. Its lower end is sealed and its upper end closed by a removable screw-cap A'. This form is preferable because it takes little room when suspended, can be handled readily, and is well adapted to contain the parts hereinafter described. The tube A is filled approximately with water that contains bicarbonate of soda or some other material that will generate gas when an acid is added to the water. The acid is contained in a bottle B, which is seated within the tube A at its lower end. The bottle B is held by a frame C with its mouth uppermost and is retained by said frame in this same relative position with reference to the tube A whatever position the tube A is in. This upright position of the bottle with reference to the tube in all positions of the tube is one of the distinctive features of the invention. It is of course essential that the bottle shall be readily removable from the tube. To meet these two require-

ments last referred to, a frame C is employed that supports the bottle B and by which it can be removed from the tube A. The frame is represented in the drawings as consisting of a wire rod having a loop at either end. The lower loop c' encircles the bottle B, lying within a circumferential groove b , that may be made in the bottle itself. Other means may be employed for attaching said frame to the bottle. The loop c'' at the upper end of the frame C lies just beneath the removable cap A' of the tube A. The loop c'' serves both as a handle for removing the frame and bottle and also prevents said parts from sliding within said tube when it is changed from its vertical position.

The means provided for keeping the water from the bottle when the latter is inserted within the full tube consists of a weighted air-seal cap D, that is adapted to fit liquid-tight over the mouth of the bottle, but so that it will drop off when the tube is reversed and allow the acid to flow out of the bottle into the tube. When the tube A is reversed, the cap D drops into the cap A' on the end of the tube A.

The nozzle a , through which the fluid is forced out of the tube by the gas when generated by the chemical action of the acid on the carbonate or other material, is represented as formed on the top of the cap A'. A simple and cheap construction is shown, consisting of a lip stamped from the cap A', leaving a perforation beneath it, through which the fluid may flow. The lip a is so shaped that it causes the liquid to flow in a concentrated stream, as from a nozzle.

The extinguisher is charged and suspended by the bail A². When it is to be used, it is inverted. The cap D drops from the top of the bottle B, falling through the loop c' into the cap A'. The cap D is so shaped that when it lies upside down upon the cap A or on its side it cannot stop the passage through the cap A' and prevent the discharge of the fluid through said passage. If the cap D lies top uppermost upon the cap A', the fluid can readily flow through slots d in the sides of said cap D to

the nozzle *a*. The gasket *A*³ within the cap *A'* has its center removed, so that it does not obstruct the passage of the nozzle *A'*. When the extinguisher is inverted, the loop *c*² on the top of the frame *C* comes in contact with the cap *A'*, and the bottle *B* cannot fall down into the tube *A*. By thus securing the bottle *B* in its upright position with reference to the tube *A* at the lower end of said tube an efficient means is obtained for quickly and thoroughly mixing the acid with the contents of the tube, for when the tube *A* is inverted all the acid contained in the bottle *B* is discharged at once into the tube at that point where it is best calculated to reach all parts of the tube.

What I claim is—

1. In a fire-extinguisher the combination with a fluid-holding vessel, having a nozzle, of a removable cap for said vessel; an acid-bottle having a circumferential groove; a frame for lifting said acid-bottle from said vessel, and

retaining it at the lower end of said vessel, having a loop adapted to lie within said groove and another part adapted to lie directly beneath the cap of said vessel, substantially as shown and described.

2. In a fire-extinguisher the combination with the vessel *A*, of the removable cap *A'*, having the nozzle *a* and a channel leading from the interior of said vessel *A* to said nozzle; the bottle *B*; a frame adapted to removably support said bottle within said vessel at its lower end in an upright position with reference to said vessel; and a loose cap *D* for said bottle having slots *d* adapted to bridge the channel to said nozzle *a*; substantially as shown and described.

WALTER S. STROWGER.

Witnesses:

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