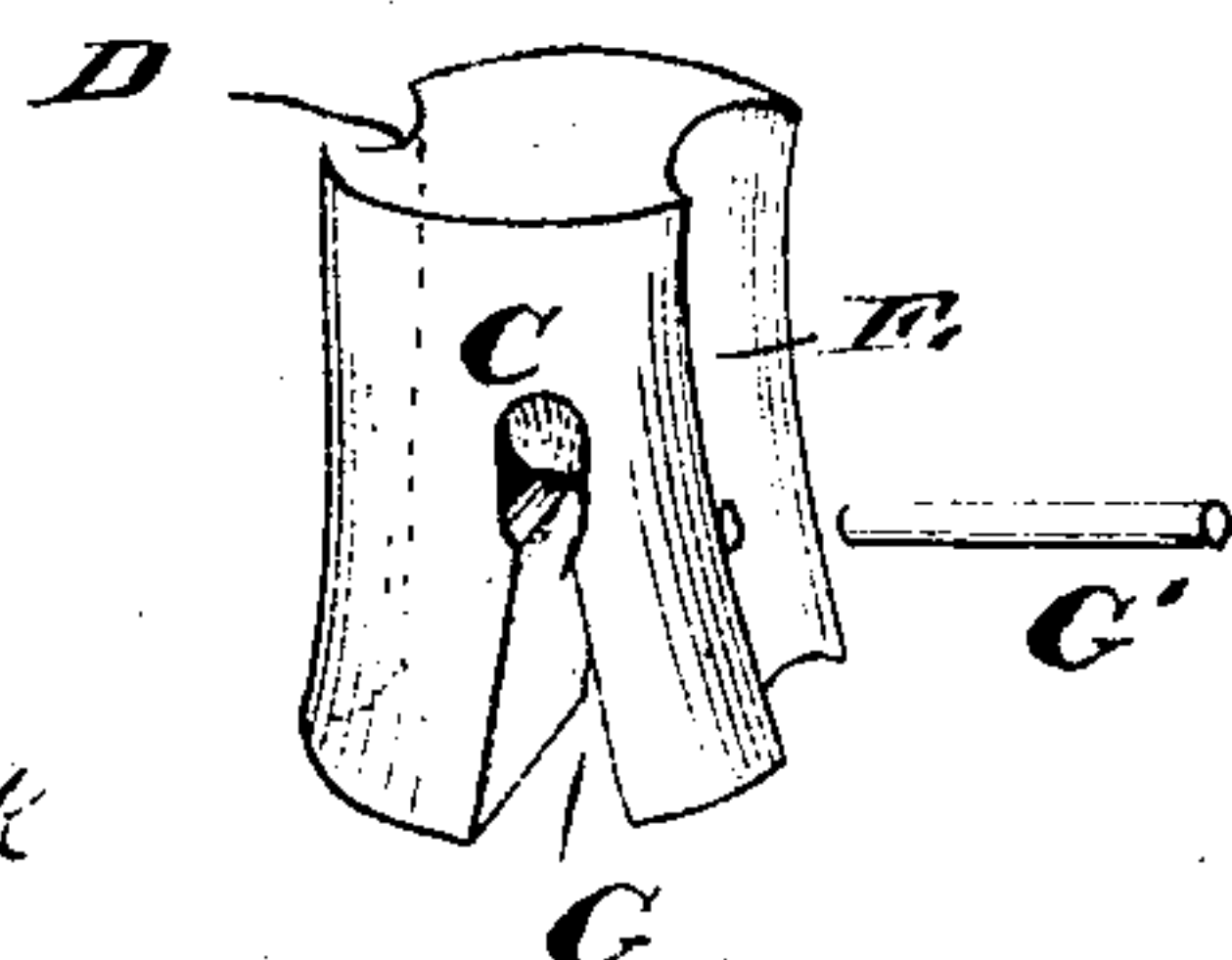
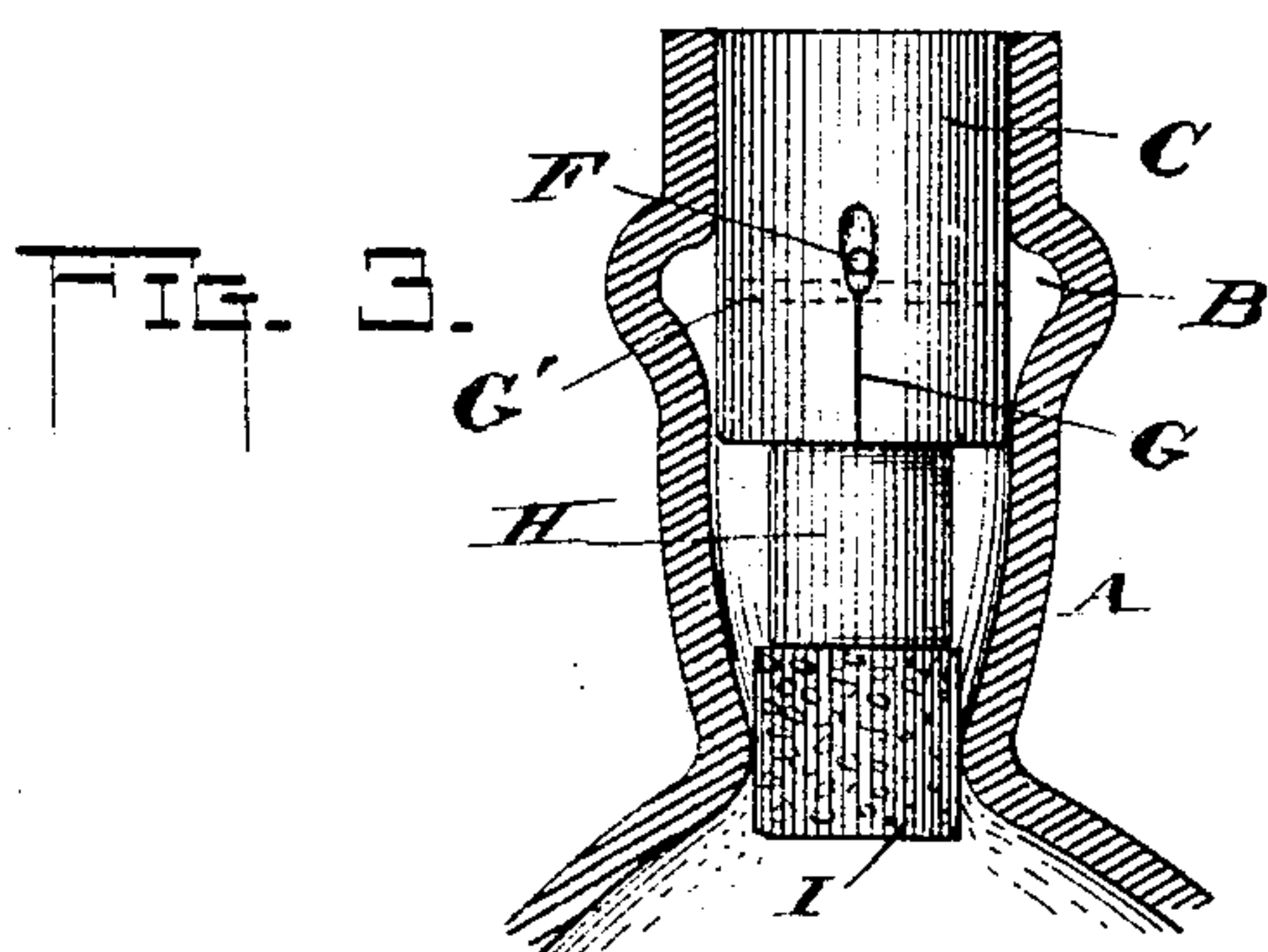
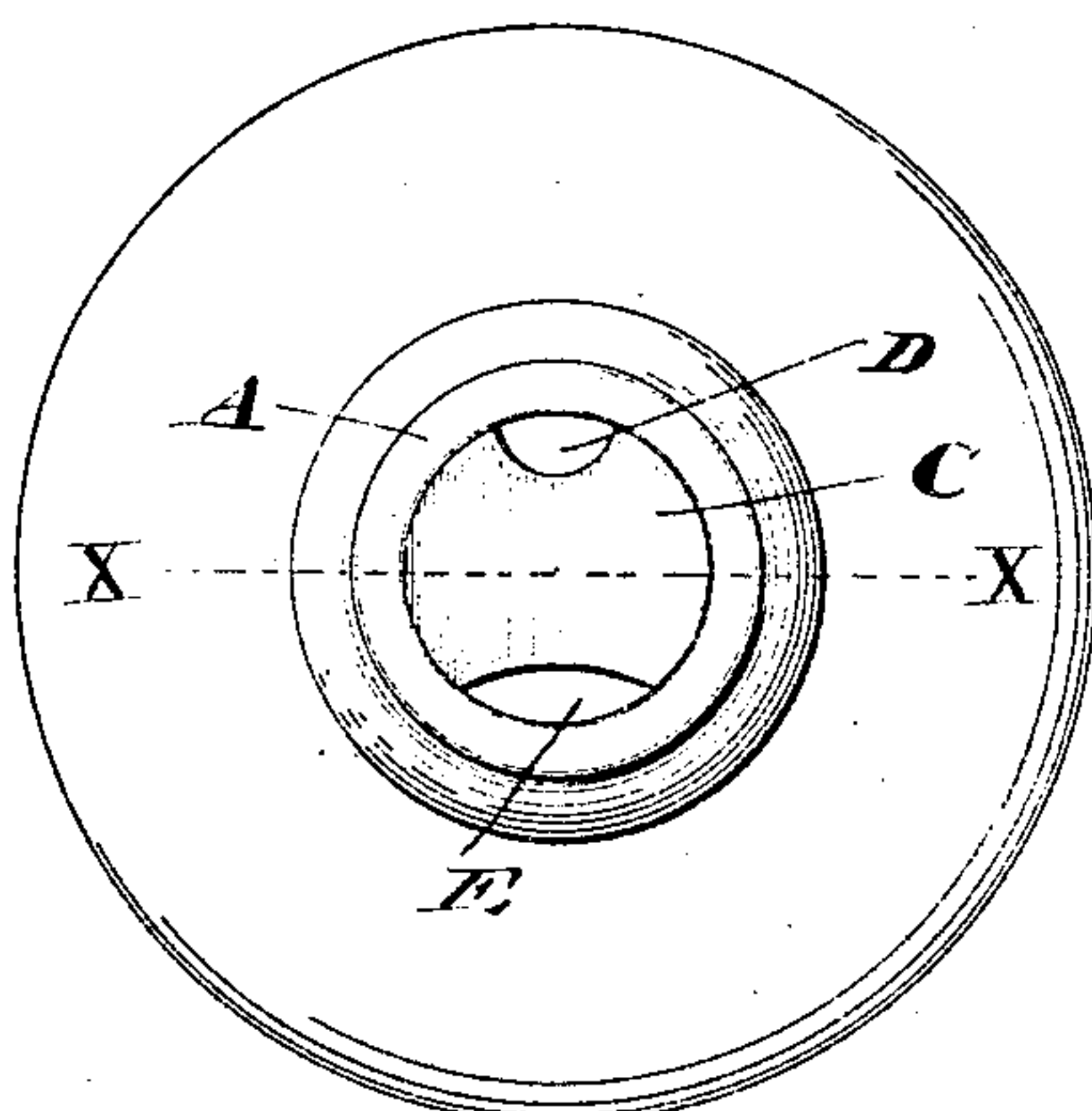
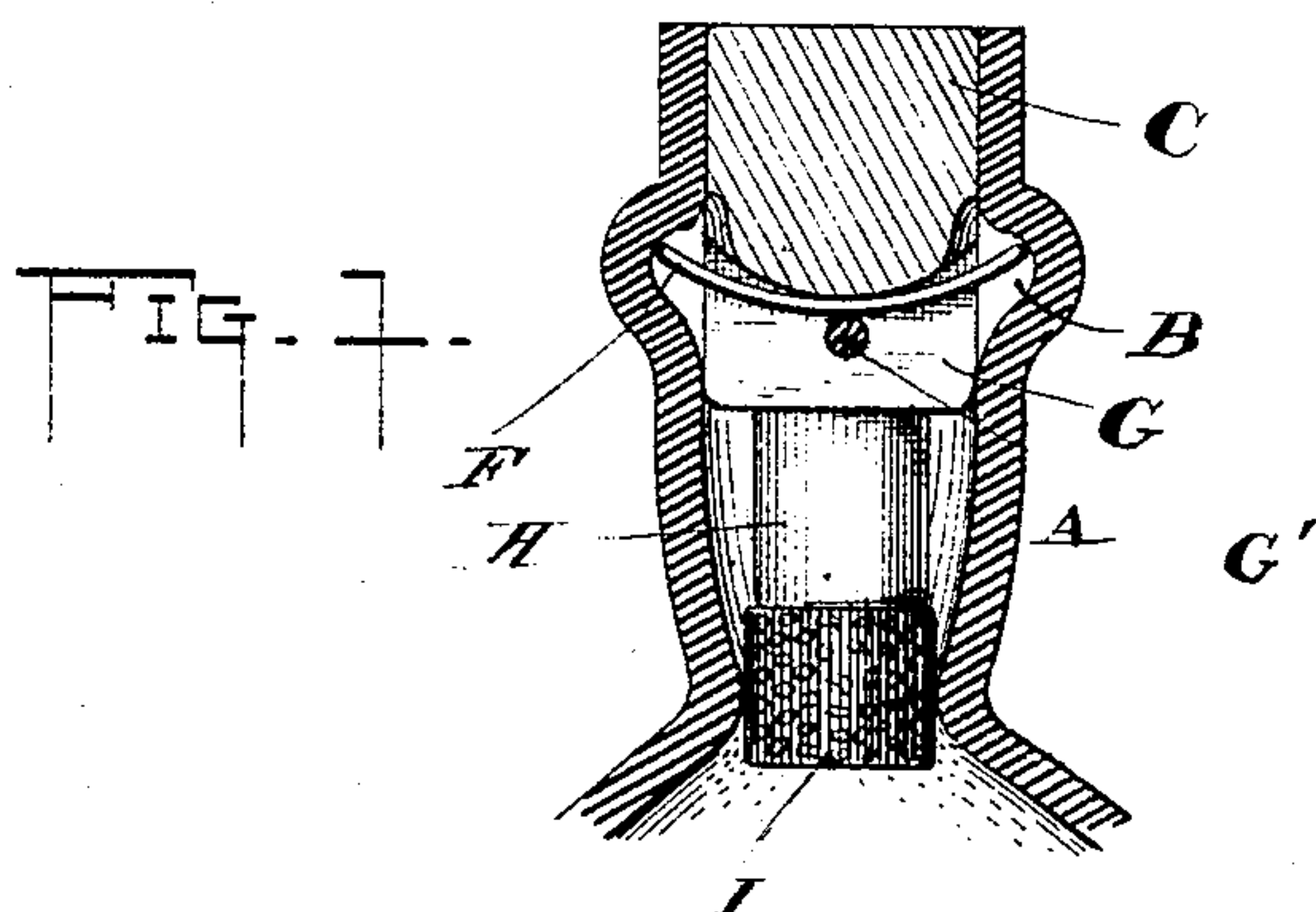


No. 765,780.

PATENTED JULY 26, 1904.

T. J. LAMPING.
STOPPER FOR BOTTLES.
APPLICATION FILED OCT. 1, 1903.

NO MODEL.



WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS JAMES LAMPING, OF MOLINE, ILLINOIS.

STOPPER FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 765,780, dated July 26, 1904.

Application filed October 1, 1903. Serial No. 175,401. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JAMES LAMPING, a citizen of the United States, residing at Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Stoppers for Bottles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to bottle-stoppers, and has for its object to provide a bottle that cannot be resealed after having been opened or uncorked.

A further object of the invention is to furnish a stopper for a bottle of the character described that will be self-fastening.

My invention relates also to certain details of construction and arrangement of parts, as will be pointed out in the following specification, aided by the accompanying drawings, in which—

Figure 1 is a vertical section of the neck of a bottle, showing an outer stopper also in cross-section. Fig. 2 is a plan or top view of the same. Fig. 3 is a vertical section of the neck of the bottle, showing the stopper as seen when given a quarter-turn from the position shown in Fig. 1. Fig. 4 is a perspective view of an outer stopper, showing its construction.

My invention lies in the combination of two stoppers—one an inner hermetic seal with which to retain the contents of the bottle, the other a longitudinally-grooved self-fastening outer stopper—together with a specially-formed neck of a bottle, all of which will now be explained at length.

In the figures, A indicates the neck of the bottle, the upper portion of which is provided with an annular outwardly-extending bead, the inner surface of which forms groove B. (Shown in both Figs. 1 and 3.) The lower part of the neck where it joins the body of the bottle is gradually constricted from above downward, as shown. I provide an outer stopper C, which normally occupies the position shown. This member is grooved at D and E its entire length, and its lower end is split upward and receives a transverse spring

F, the said split being indicated by the letter G. Fig. 4 shows this member split and spread to receive the said transverse spring, after which by a blow of a hammer or other instrument it is closed to hold the spring in place. I also show a pin G', however, which is passed through the stopper at right angles to the spring. Either the pin or the split feature may be used, or both may be used together, if desired, or any other means that may suggest itself to the manufacturer could be used as well. Below the stopper C is a solid cylindrical portion H, which rests upon a cork, rubber, or other suitable material I, forming the hermetic member above mentioned.

In assembling the various members to seal the bottle the cork I is dropped into the neck ready to enter the constriction. The member H follows and lies upon the said cork, and then the stopper C, with its spring F in place, is entered and pushed down, thereby forcing the spring down until it reaches the groove B, where it at once expands and engages said groove. This locks the stopper in place, and it cannot be withdrawn in any way, as will be clearly understood. In forcing the said stopper C into its proper position it naturally bears upon the member H, which in turn forces the cork I into the neck, where it forms a perfectly-tight seal. Now when it is desired to draw off the contents of the bottle any suitable instrument is inserted through one of the grooves D E in the stopper C to contact with and push the cork I into the bottle, and, as a matter of course, the portion H will also enter the bottle. By tilting the bottle the contents may now be easily run off, since the air will enter one of the said grooves while the fluid finds exit through the other. It will be impossible to reseat the bottle, since nothing can be entered through the stopper C of sufficient size to again fill the constriction. Neither would it be practicable to attempt to enter a loop into the bottle with a view of drawing the cork I back into the neck after filling the bottle. It will be understood that only the cork I serves to hold the contents of the bottle in place, since the elements C and H are not suited for that purpose, and, as before intimated, said member I may be constructed

of cork, rubber, or, in fact, any other yielding material that will form a tight-fitting element.

The member H may be of wood or other cheap material, it having no other office than to force the cork I into place and hold it there. However, this said member H may be eliminated, if desired, and the stopper C could be elongated to gain the same end.

The stopper C may be of metal of any suitable kind and may even be of glass, although some other means than that described and shown would be necessary to hold the spring F in place.

Many changes may be made in my improved bottle-closing means that will still come within the scope of my invention.

I am fully aware that bottles are stoppered ordinarily with plain stoppers; also with stoppers fastened inside the neck, as in the ordinary "pop" or soda-water bottles, with stopper at the base of the neck. I am aware also that bottles are sealed with tin or paper caps or outside coverings of the same; but

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

1. In a bottle of the character described, a non-removable stopper therein and a cork below the same for hermetically sealing the bottle, said cork being removable from the neck by being pushed inward as described.

2. In a bottle of the character described, a non-removable stopper therein and a cork below said stopper for hermetically sealing the bottle, said cork being removable from the neck only by being pushed inward into the bottle to permit passage of the contents of the bottle, there being openings through the outer or fixed stopper for exit of said contents.

3. In a bottle that cannot be recorked, an enterable but non-removable stopper therefor, a cork beneath the stopper and within the neck of the bottle and held from upward movement by said stopper, there being passages through the stopper through which the contents of the bottle finds exit after removal of the cork by forcing the same into the bottle.

4. In a bottle that cannot be recorked, the bottle having its neck gradually constricted toward its base, a non-removable stopper located in the neck above the constriction, and a cork below the stopper and located in the constriction and held from upward movement by the said stopper substantially as set forth.

5. A bottle having a constriction in its neck,

a cork for entering and closing the neck at such constriction and means entered in the neck above the cork preventing withdrawal of such cork, there being an opening through said means for reaching the cork to force it into the bottle to permit exit of the contents of said bottle, the said means preventing entrance of a new cork for closing the bottle fluid-tight at such constriction.

6. In a bottle that cannot be recorked, the bottle having its neck gradually constricted toward its base, an annular groove in the neck above the constriction, a stopper permanently located within the neck, means held by said stopper and engaging the said groove for holding said stopper permanently in place, and a cork below the stopper and held within the constriction by said stopper except as against downward movement, there being passages through the stopper by which to enter and dislodge the cork and through which the contents of the bottle finds exit.

7. In a bottle of the character described, the neck thereof having a constriction at its base, an inner annular groove in said neck above the constriction, a stopper entered at the top of the neck, a spring therein adapted to engage the said groove to prevent the withdrawal of said stopper, a cork below the said stopper and held from upward movement within the constriction, there being passages through the stopper for entrance to the cork to dislodge the same said passages also permitting the exit of the contents of the bottle substantially as set forth.

8. In a bottle of the character described, the neck A having a constriction in its lower portion, there being an annular groove B in said neck above the constriction, a stopper C for entering the neck to occupy a position above the constriction, a transverse member therein for engaging the said groove B and preventing withdrawal of said stopper, the cork I within the constriction and a member H between the stopper and the cork all substantially as set forth and for the purposes described.

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

THOMAS JAMES LAMPING.

Witnesses:

ROBERT W. RANK,
C. EDWARD BOLD.