

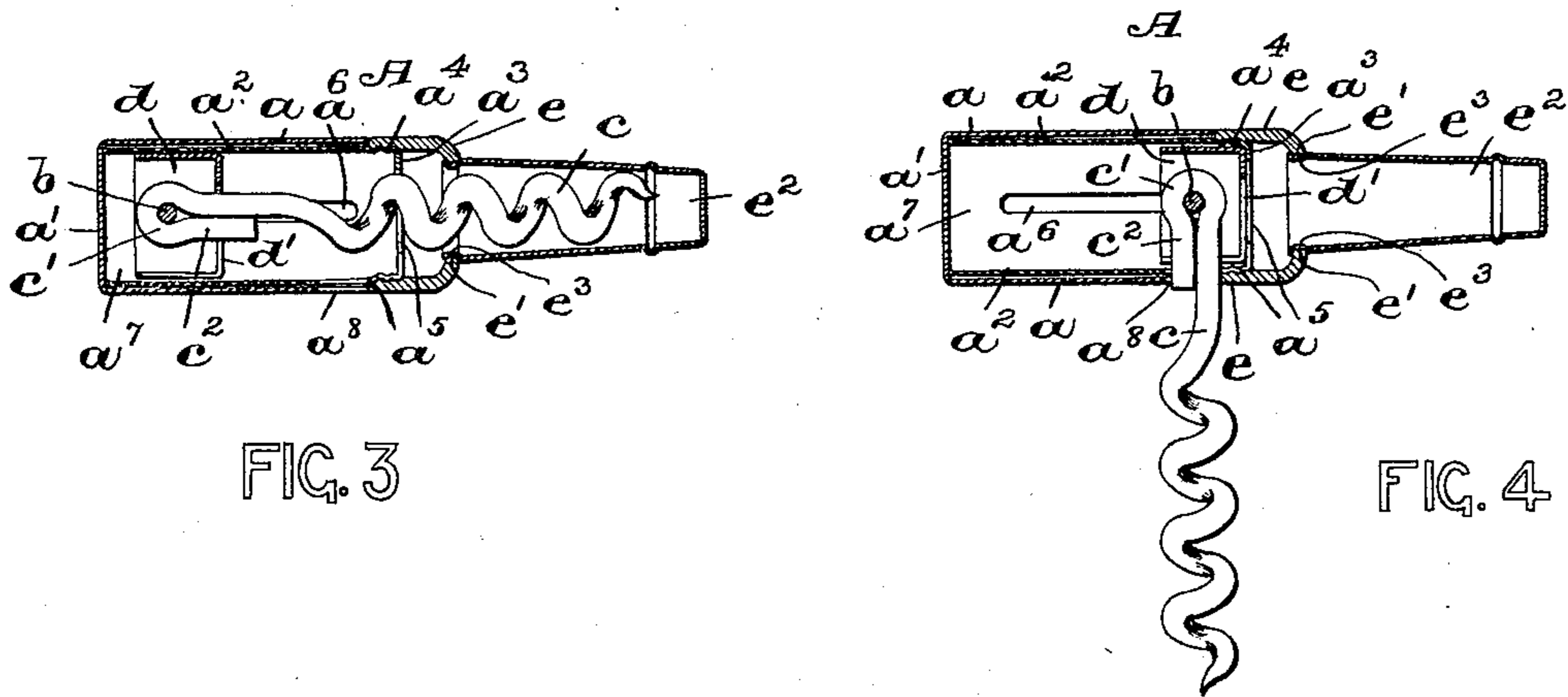
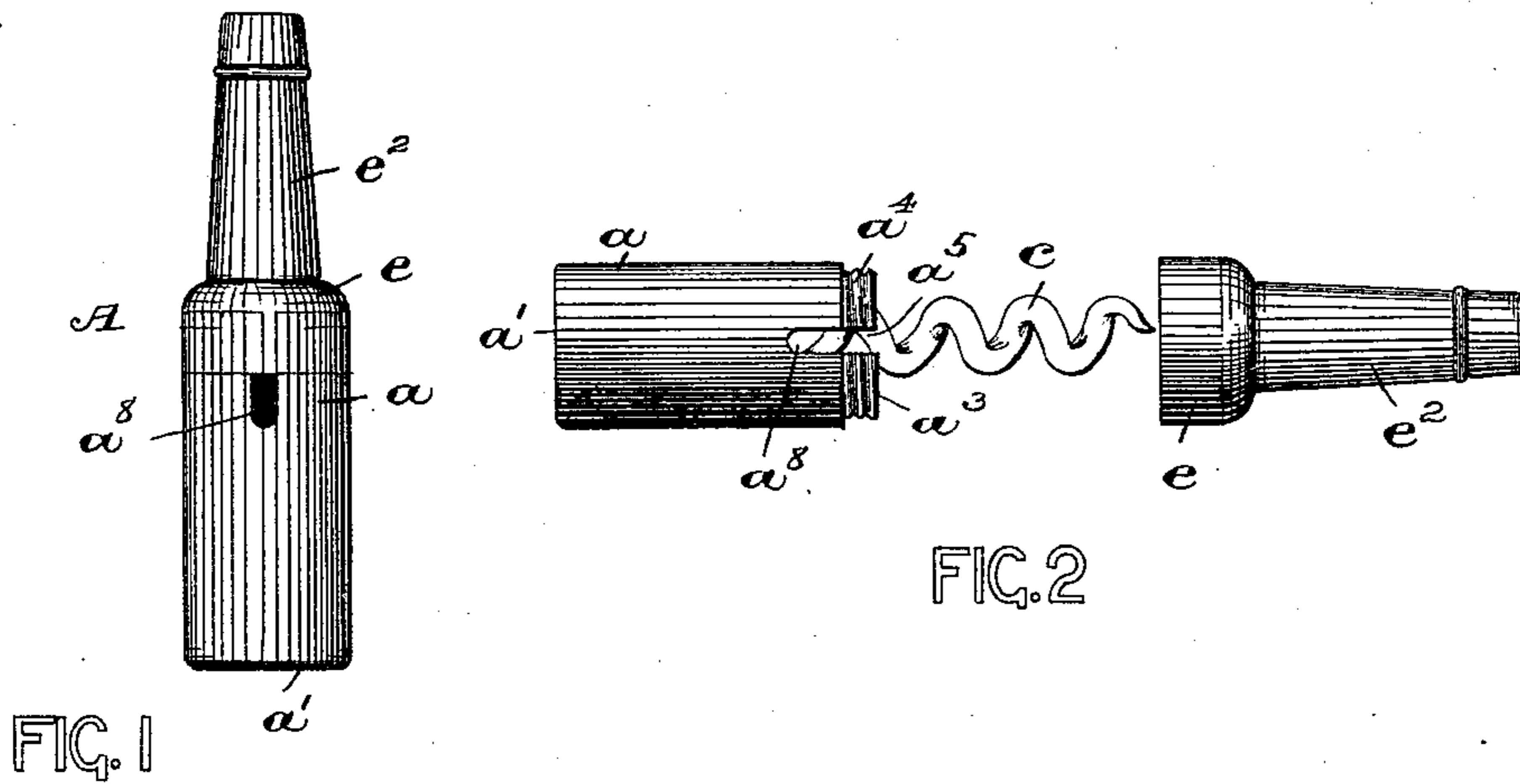
(No. Model.)

2 Sheets—Sheet 1.

W. A. WILLIAMSON.
CORKSCREW.

No. 583,561.

Patented June 1, 1897.



WITNESSES:

Marcy J. Dunsdell
William H. Campfield Jr.

INVENTOR:

WILLIAM A. WILLIAMSON

BY

Fred C. Fraentzel,
ATTORNEY

W. A. WILLIAMSON.
CORKSCREW.

No. 583,561.

Patented June 1, 1897.

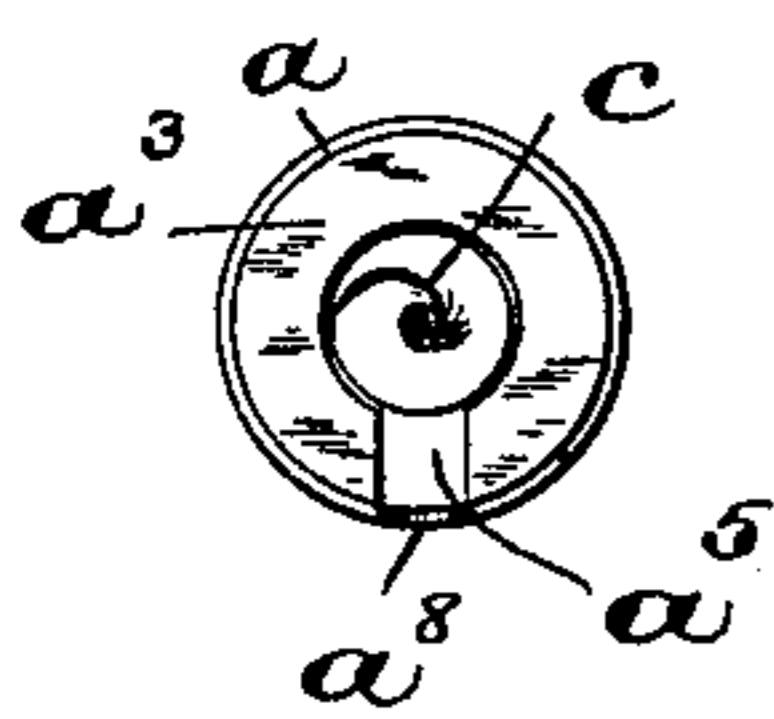


FIG. 5

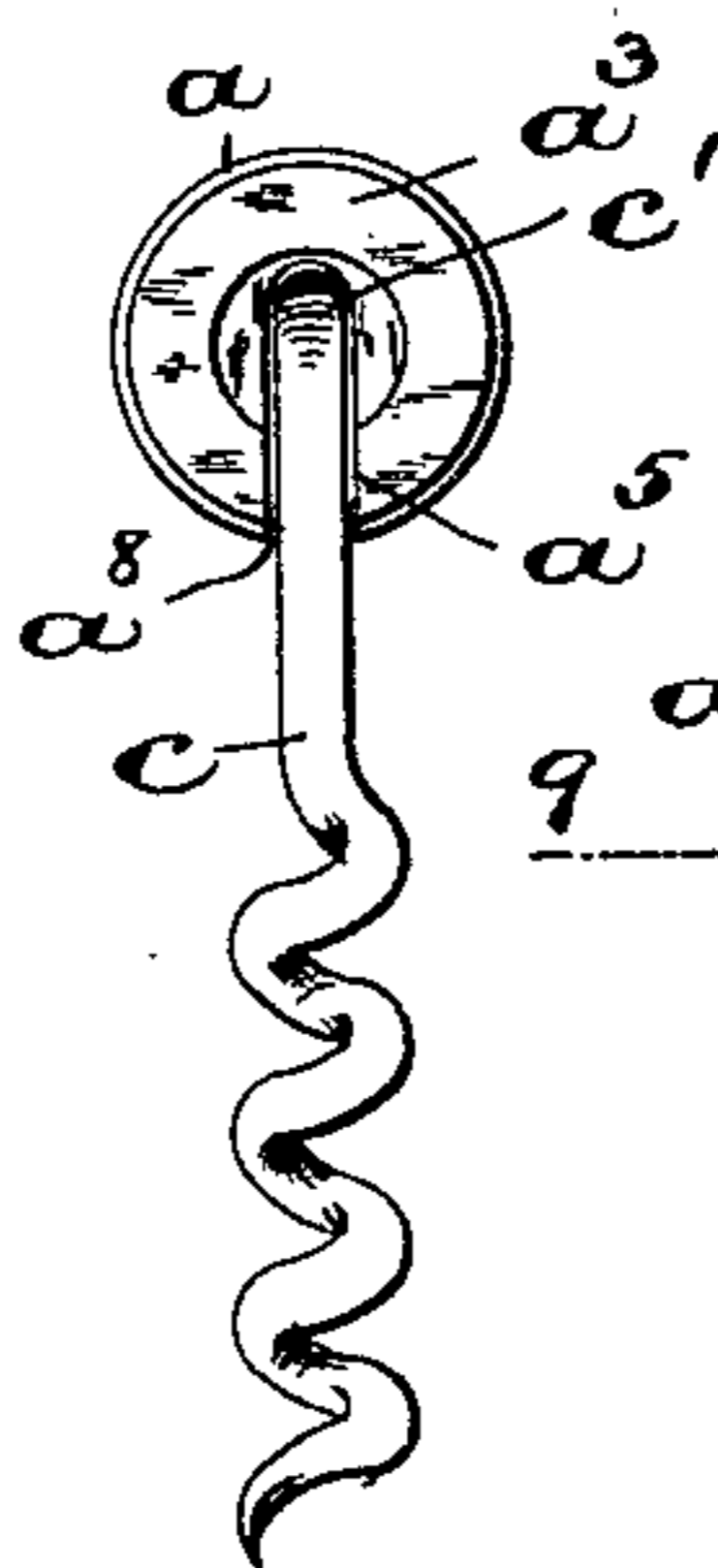


FIG. 6

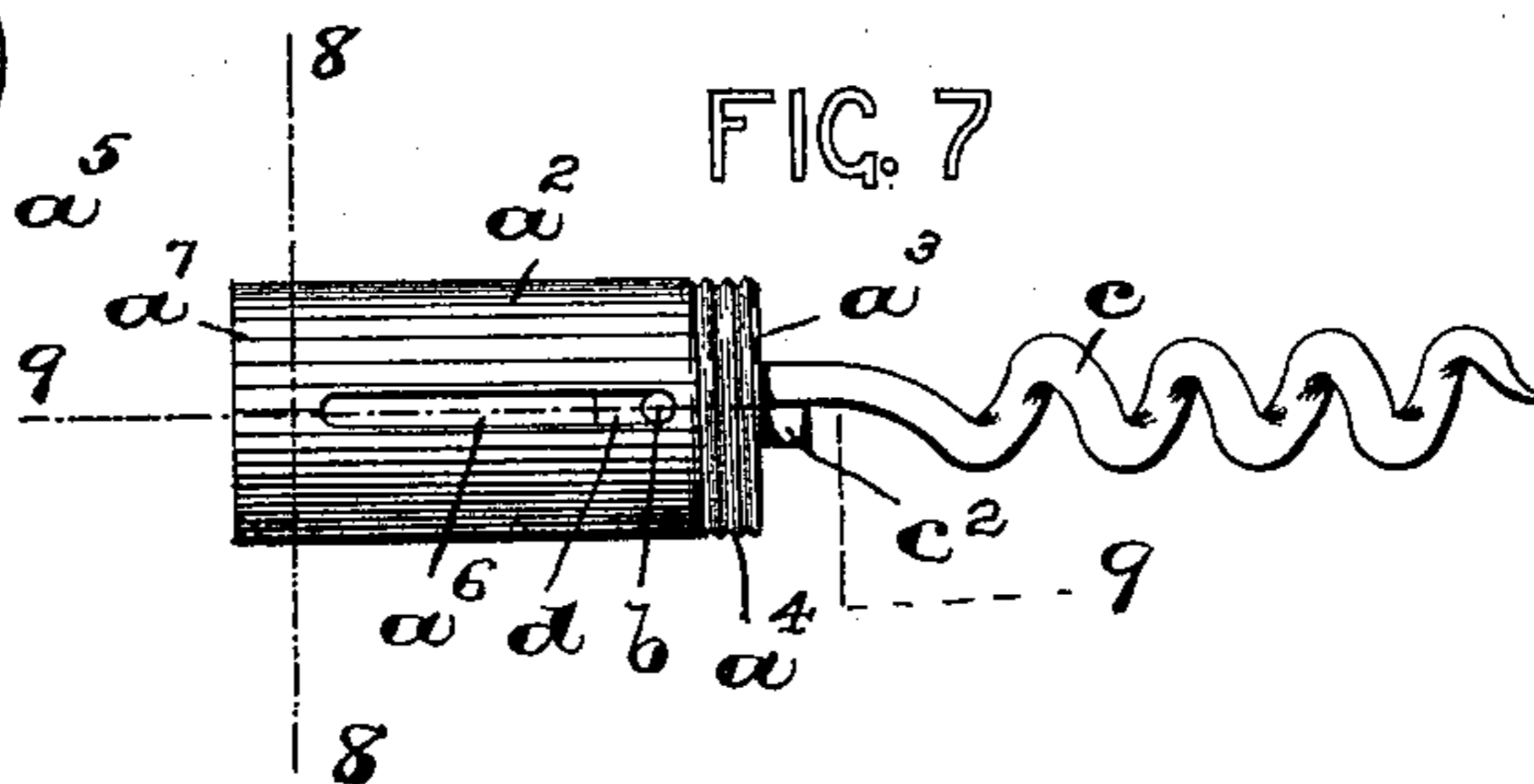


FIG. 7

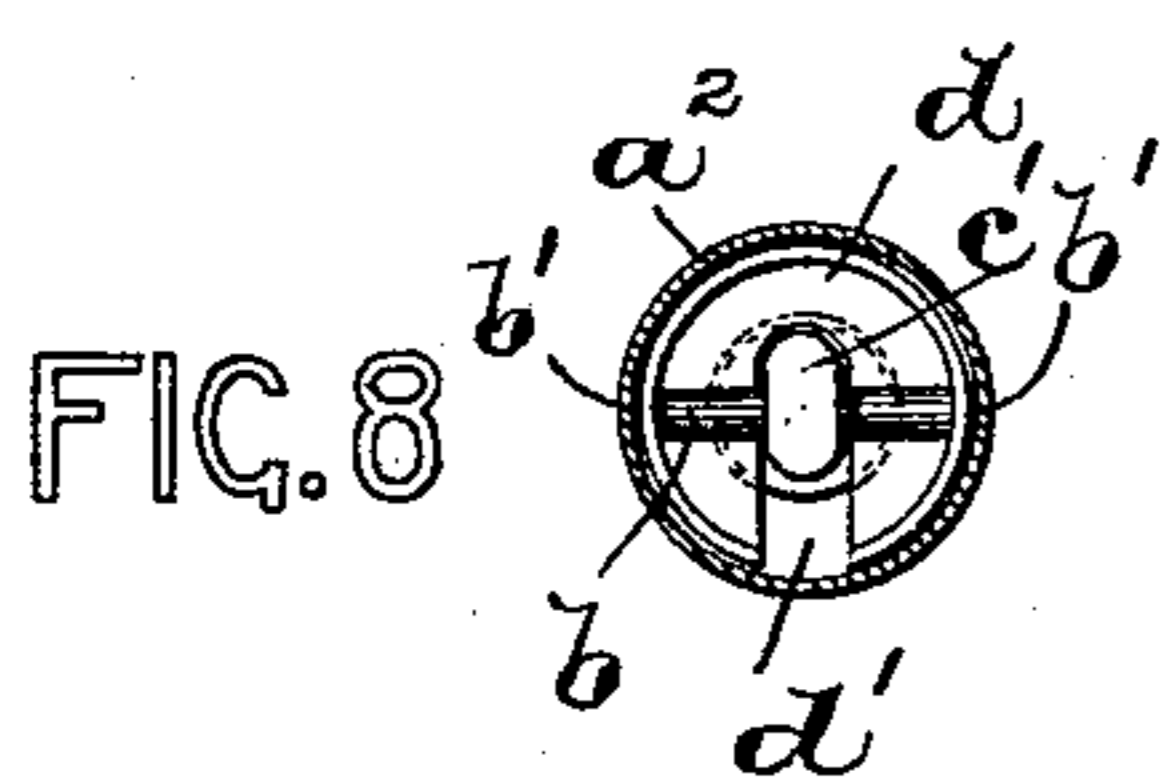


FIG. 8

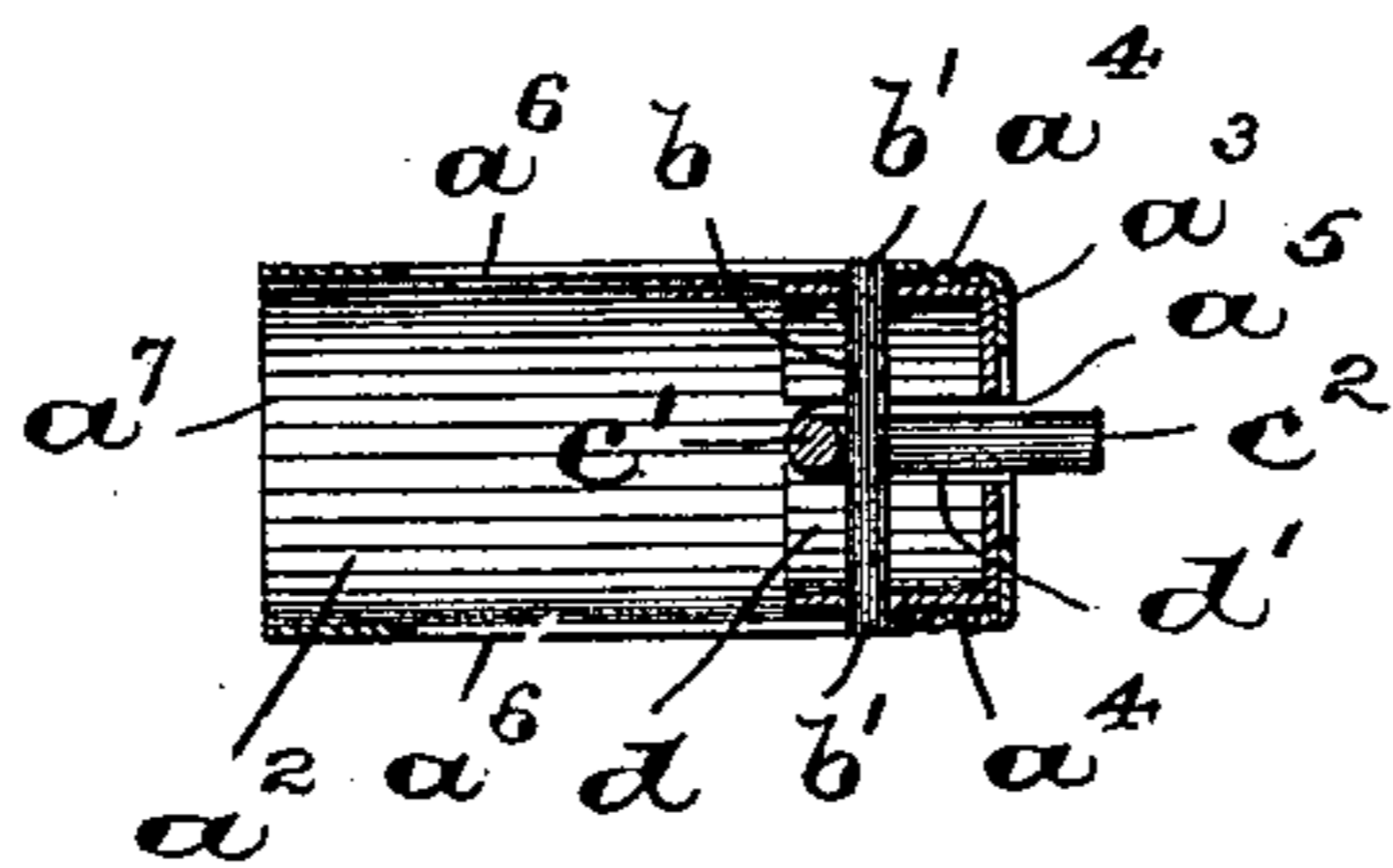


FIG. 9

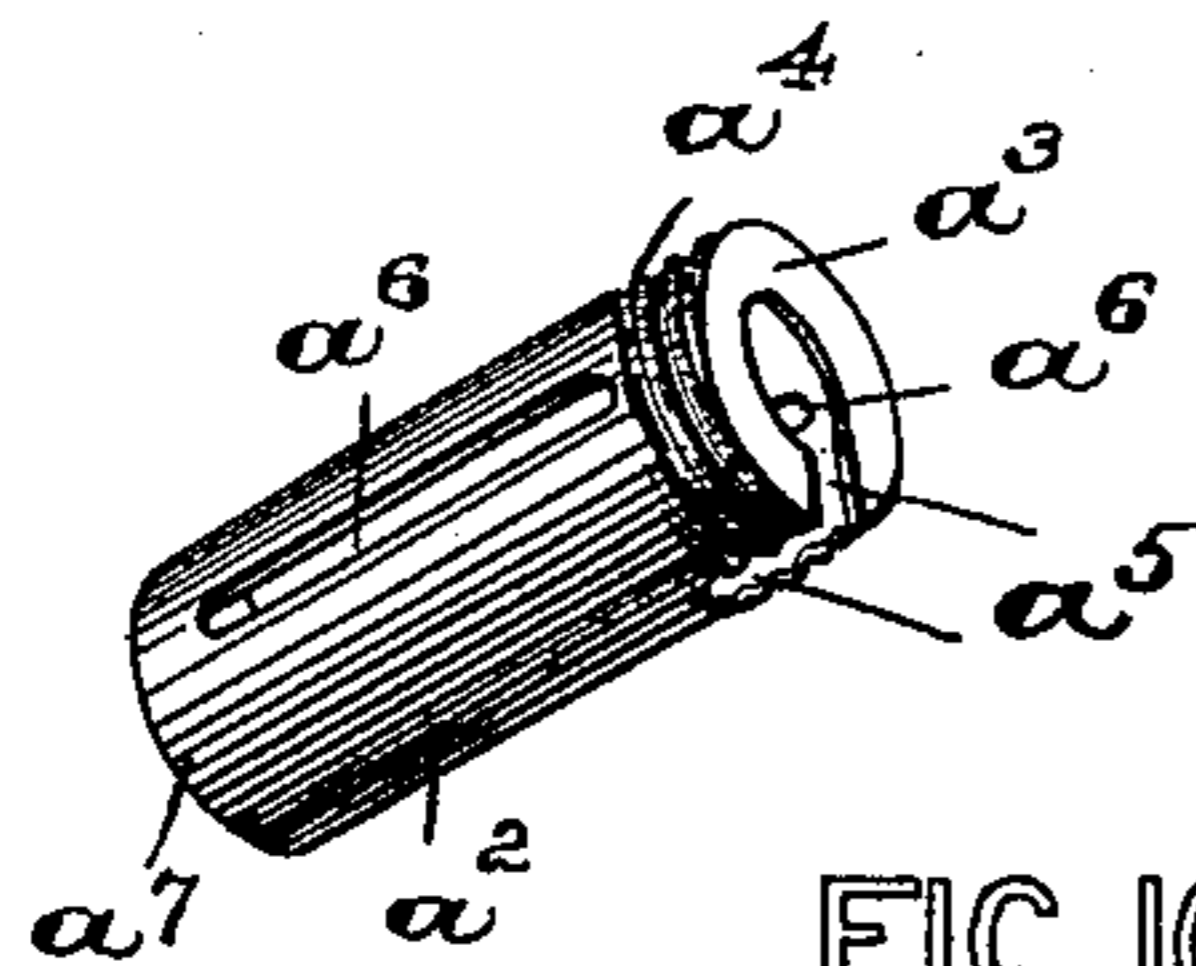


FIG. 10

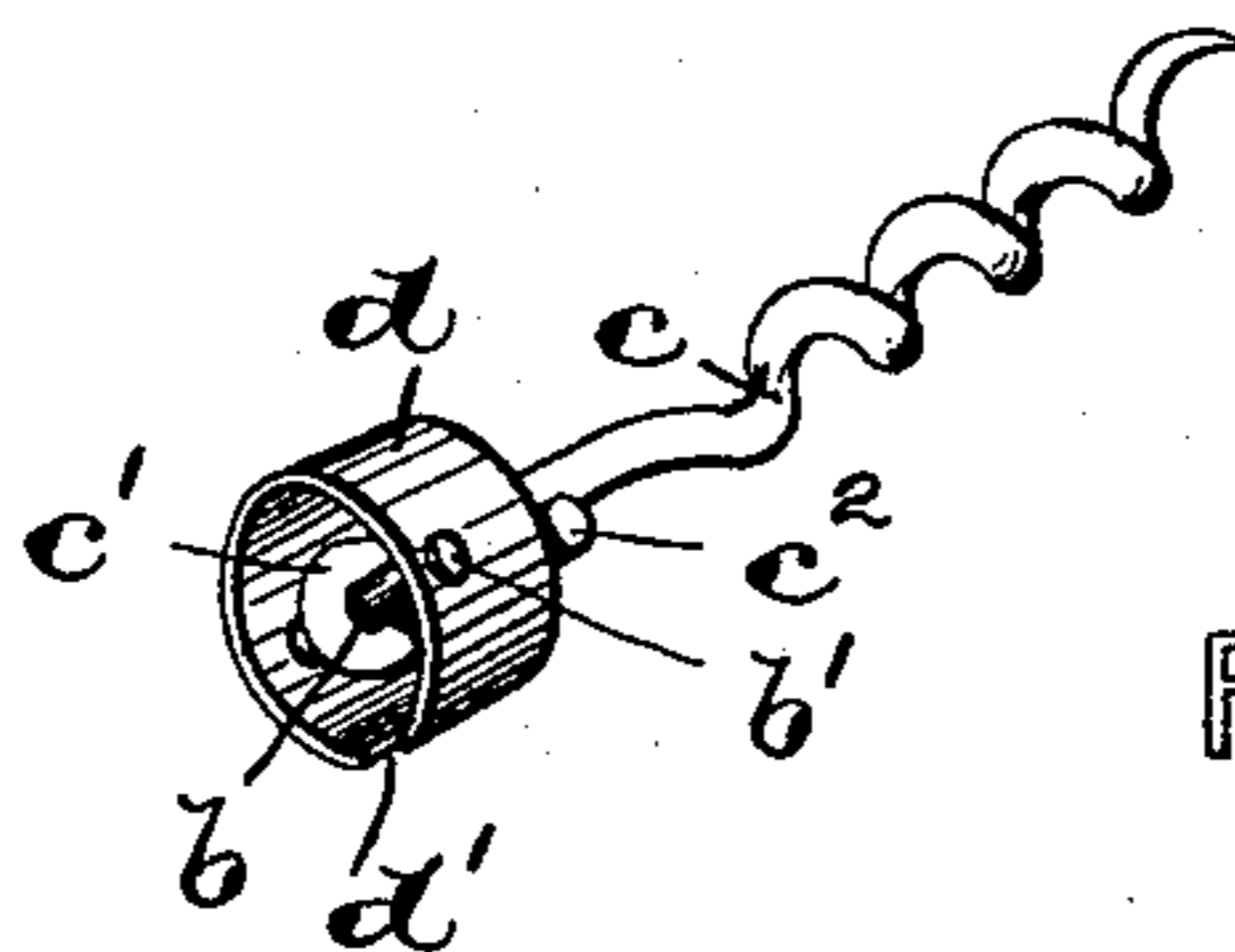


FIG. 11

WITNESSES:

Mary J. Drusdell

William H. Campfield Jr.

INVENTOR:

WILLIAM A. WILLIAMSON,

BY

Fred C. Fraentzel,
ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM A. WILLIAMSON, OF NEWARK, NEW JERSEY.

CORKSCREW.

SPECIFICATION forming part of Letters Patent No. 583,561, dated June 1, 1897.

Application filed January 11, 1897. Serial No. 618,750. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. WILLIAMSON, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Corkscrews; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention has reference to improvements in corkscrews, and has for its primary object to provide a folding corkscrew inclosed in a suitable casing provided with a removable cover, whereby the device can be carried in the pocket without inconvenience, the casing at the same time being capable of use as an advertising medium.

Further objects of this invention are to provide simplicity and cheapness of construction and greater strength and rigidity of the parts of the corkscrew, whereby the latter is rendered practicable when in use in pulling corks which are firmly held in the necks of bottles.

The invention therefore consists in the novel construction of corkscrew hereinafter set forth and also in the novel arrangements and details of construction of the several parts, such as will be fully described in the accompanying specification and finally embodied in the clauses of the claim.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the device made according to my invention, illustrating one form of casing and cover therefor. Fig. 2 is a similar view of the said device, showing the cover unscrewed from the casing, with the screw end of the corkscrew projecting from the open end of the casing. Fig. 3 is a longitudinal vertical section of the device, clearly illustrating the arrangement and construction of the parts within said casing; and Fig. 4 is a similar view with the corkscrew portion in position ready for use. Fig. 5 is an end view of the casing and corkscrew when the cover is removed, and Fig. 6 is a

similar view of the casing with the corkscrew turned in its proper position ready for use. Fig. 7 is a side view of a cylindrical shell to be secured in the casing of the device, illustrating in connection therewith the corkscrew pulled forward. Fig. 8 is a cross-section taken on line 8 8 in said Fig. 7, and Fig. 9 is a horizontal section taken on line 9 9 in said Fig. 7. Fig. 10 is a perspective view of said cylindrical shell; and Fig. 11 is a similar view of a plunger provided with the pivotally-arranged corkscrew, said views representing more clearly the shape and construction of the device illustrated in the other figures of the drawings.

Similar letters of reference are employed in all of the above-described views to indicate corresponding parts.

In said drawings, A indicates the complete device, which consists, essentially, of a casing a , made from sheet metal, said casing being preferably made cylindrical and closed at one end, as at a' . Within said casing is a cylindrical shell a^2 of a greater length than that of the casing a , having a partially-closed end a^3 , this forming a reinforced end which projects beyond the open end of said casing a , as will be clearly evident from an inspection of Figs. 2, 3, and 4. Said end of the shell a^2 is screw-threaded, as at a^4 , and in the closed portion of the end a^3 and extending part way down one side of said shell a^2 is an opening or slot a^5 . Said cylindrical shell a^2 is also provided with a pair of oppositely-arranged and longitudinal slots a^6 , into which extend and slide therein the ends b' of a pivotal pin or support b , for the looped end c' of the corkscrew portion c . Said screw portion extends through an opening or slot d' in a suitable piston or plunger d , adapted to slide back and forth in said cylindrical shell a^2 and also through the opening or slot a^5 in the end and a portion of one side of said shell a^2 . As will be seen from Figs. 3 and 4, said slot d' in the piston or plunger d extends down the side of said piston or plunger, which is made from sheet metal and is cup shape, and when said piston or plunger d has been pulled forward within the shell a^2 , by means of a pull on the corkscrew portion c , to the position indicated in Figs. 7 and 9 of the drawings then said corkscrew portion c can be turned on its piv-

otal pin b and into said openings or slots a^5 and d' , so that it will stand at a right angle to said casing a , as clearly indicated in Figs. 4 and 6. When these parts have all been assembled in their operative positions in said shell a^2 , then said shell is placed within the casing a , so that its screw end a and the corkscrew portion c will project from the open end of the said casing a . At the same time the end a^7 of the cylindrical shell a^2 is firmly secured to the closed end a' of the casing a by means of the use of solder or in any other well-known manner, and the parts of the device are then ready for use.

When the device is to be carried in the pocket, I screw upon the screw-threaded portion a^4 of the shell a^2 a collar e , made from heavier metal, in order to provide for the necessary rigidity and strength, said collar having an internal screw-thread, as illustrated. Firmly secured in an opening e' in the top of said collar e is the beaded flange e^3 of the sheet-metal part e^2 , as will be clearly seen from Figs. 3 and 4, but said parts e' and e^2 may be otherwise formed or connected with each other. Said parts e and e^2 form a suitable cover for the casing a , which can readily be unscrewed therefrom to enable the corkscrew portion c to be pulled forward into the position indicated in Fig. 7 and then turned into the positions illustrated in Figs. 4 and 6, in the manner as has been previously stated, and turning the end c^2 of said corkscrew portion into a slot a^8 in the casing a , as clearly shown. The collar e of the cover or cap of the casing is then again screwed down upon the end of the shell a^2 , bringing the edge of said collar tightly against the pivoted portion of the corkscrew and holding or locking the same in its operative position in said slot a^8 , when the corkscrew can be used to draw a cork from the neck of a bottle.

To return the corkscrew into the casing a when it is not to be used, all that is necessary is to unscrew the cap portion or cover and turn the corkscrew portion c from the position in Figs. 4 and 6 back to the position indicated in Fig. 7, when the plunger or piston d can be forced back into the shell a^2 to cause the corkscrew portion to assume the position indicated in Fig. 2. The cap portion can then be screwed back onto the threaded part a^4 of the shell a^2 and the device A is ready for carrying in the pocket.

In order to produce a very cheap device, all the parts are made from sheet metal, the collar e being preferably made from a heavier metal to produce additional strength at that point where the pull is exerted upon the casing a in drawing the cork. For the same reason the forward end of the shell a^2 is reinforced, as at a^3 , as also the piston or plunger d , which has a reinforced and slotted end fitting the interior of the shell a^2 to give strength and rigidity at or near the pivotal support of the corkscrew portion c , and thus it will be evident that when a pull is exerted

upon these parts they will not and cannot collapse, and an operative and very simple device for the purposes herein stated will be the result. Furthermore, owing to the cylindrical construction of the piston or plunger d , having the reinforced end bounded by the cylindrical surface of the plunger, these parts will snugly fit the surrounding interior surface of the shell a^2 , which not only strengthens the construction when a direct pull is exerted upon the screw portion, but also prevents the distortion or collapse of the thin shell when the torsional strain is exerted upon the parts during the screwing of the screw portion into or from the cork.

Of course it will be evident that the casing a and its cover may be made in any desirable shapes, and the several combinations and arrangements of the several parts may be varied without departing from the scope of my present invention. Hence I do not limit my invention to the exact arrangements and combinations of the parts and details of construction herein described and illustrated in the accompanying drawings.

Having thus described my invention, what I claim is—

1. A corkscrew, comprising, an outer casing, an interior shell, a cylindrical piston or plunger having a reinforced end fitting the interior of said inner shell to strengthen it at the point of pull, and to prevent distortion of the parts during the twisting or screwing operation, a corkscrew portion connected with said piston or plunger, and a cover adapted to be detachably secured on one end of said inner shell, substantially as and for the purposes set forth.

2. A corkscrew, comprising, in combination, with a casing a , a shell a^2 therein, having a screw-threaded end, and a cover adapted to be screwed on said end, consisting, essentially, of a screw-threaded collar e , of a heavy metal, and a sheet-metal portion e^2 secured thereto, of a piston or plunger adapted to slide in said shell a^2 , and a corkscrew portion pivotally connected with said plunger, substantially as and for the purposes set forth.

3. A corkscrew, comprising therein, a casing a , a shell a^2 therein, having a closed end a^3 , and a slot or opening a^5 in said end, longitudinal slots in the side of said shell, a pin b sliding in said slots, a cup-shaped plunger or piston d on said pin, having a slot or opening d' in its closed end and said slot extending down the side of said plunger, and a corkscrew portion pivotally arranged on said pin b , extending into and through said slots or openings in the shell a^2 and in said plunger, substantially as and for the purposes set forth.

4. A corkscrew, comprising therein, a casing a , a shell a^2 therein, having a screw-threaded end, a cover adapted to be secured on said end, consisting, essentially, of a screw-threaded collar e , of a heavy metal, and a sheet-metal portion e^2 secured thereto, said shell a^2 having a closed end a^3 provided with

a slot or opening a^5 extending part way down the side of said shell, longitudinal slots in the side of said shell a^2 , a pin b sliding in said slots, a plunger or piston on said pin, and a corkscrew portion pivotally connected with said plunger, substantially as and for the purposes set forth.

5. A corkscrew, comprising therein, a casing a , a shell a^2 therein, having a screw-threaded end, a cover adapted to be secured on said end, consisting, essentially, of a screw-threaded collar e , of a heavy metal, and a sheet-metal portion e^2 secured thereto, said shell a^2 having a closed end a^3 provided with a slot or opening a^5 extending part way down the side of said shell, longitudinal slots in the side of said shell a^2 , a pin b sliding in said slots, a cup-shaped plunger or piston d on said pin, having a slot or opening d' in the closed end of said plunger and said slot extending down the side of said plunger, and a corkscrew portion pivotally arranged on said pin b , extending into and through said slots in the shell a^2 and said plunger, substantially as and for the purposes set forth.

6. A corkscrew, comprising therein, a casing a , having a slot a^8 , a shell a^2 in said casing, having a screw-threaded end, a cover adapted to be secured on said end, consisting, essentially, of a screw-threaded collar e , of a heavy metal, and a sheet-metal portion e^2 secured thereto, said shell a^2 having a closed end a^3 provided with a slot or opening a^5 extending part way down the side of said shell a^2 , longitudinal slots in the sides of said shell a^2 , a pin b sliding in said slots, a cup-shaped

plunger or piston d on said pin, having a slot or opening d' in the closed end of said plunger and said slot extending down the side of said plunger, and a corkscrew portion pivotally arranged on said pin b , extending into and through said slots in the shell a^2 and said plunger, and adapted to be held in its operative position in the slot a^8 in the casing a , all substantially as and for the purposes set forth.

7. A corkscrew, comprising a casing a , having a slot a^8 , a shell a^2 in said casing, having a screw-threaded end, a cover adapted to be secured on said end, consisting, essentially, of a screw-threaded collar e , said shell a^2 having a closed end a^3 provided with a slot or opening a^5 extending part way down the side of said shell a^2 , longitudinal slots in the sides of said shell a^2 , a pin b sliding in said slots, a cup-shaped plunger or piston d on said pin, having a slot or opening d' in the closed end of said plunger and said slot extending down the side of said plunger, and a corkscrew portion pivotally arranged on said pin b , extending into and through said slots in the shell a^2 and said plunger, and adapted to be held in its operative position in the slot a^8 in the casing a , all substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 7th day of January, 1897.

WILLIAM A. WILLIAMSON.

Witnesses:

FREDK. C. FRAENTZEL,
WM. H. CAMFIELD, Jr.