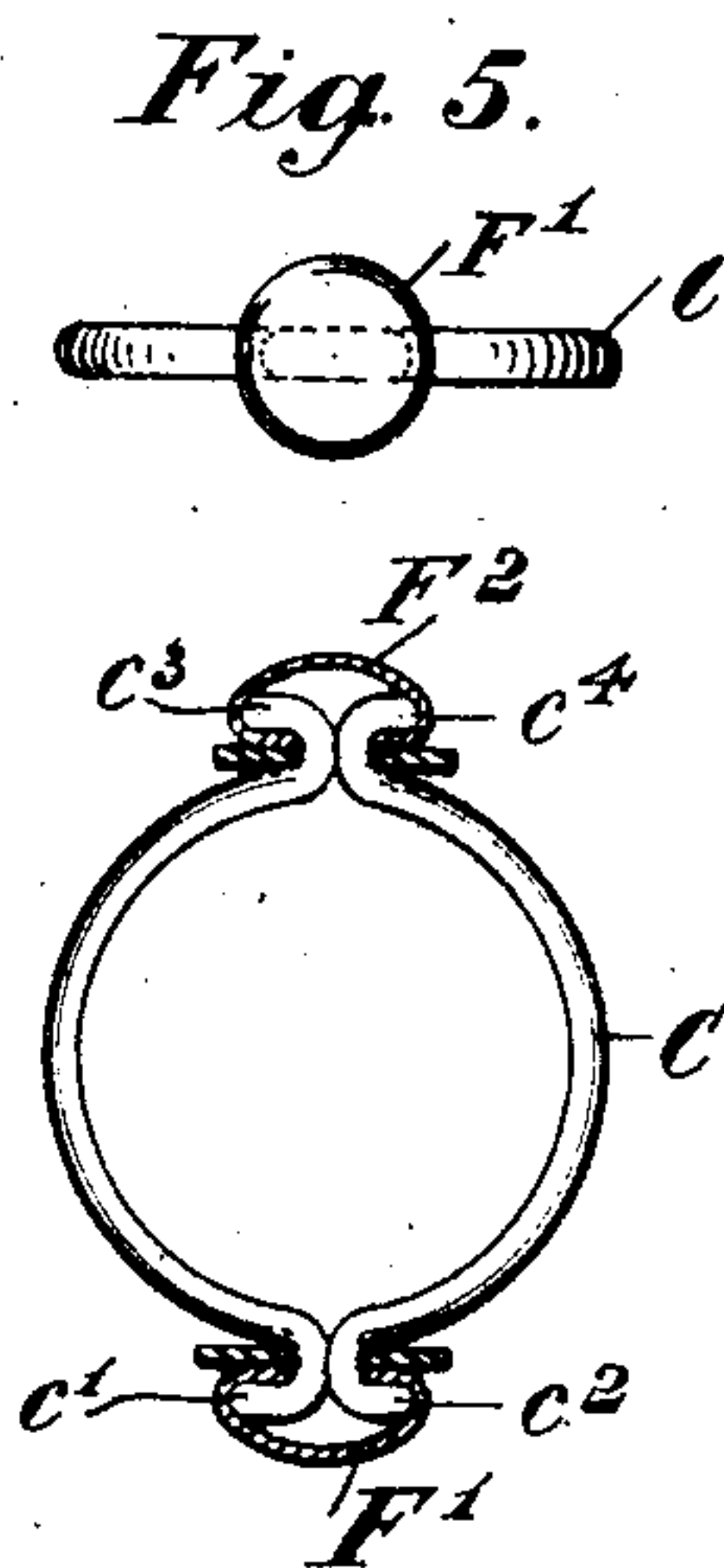
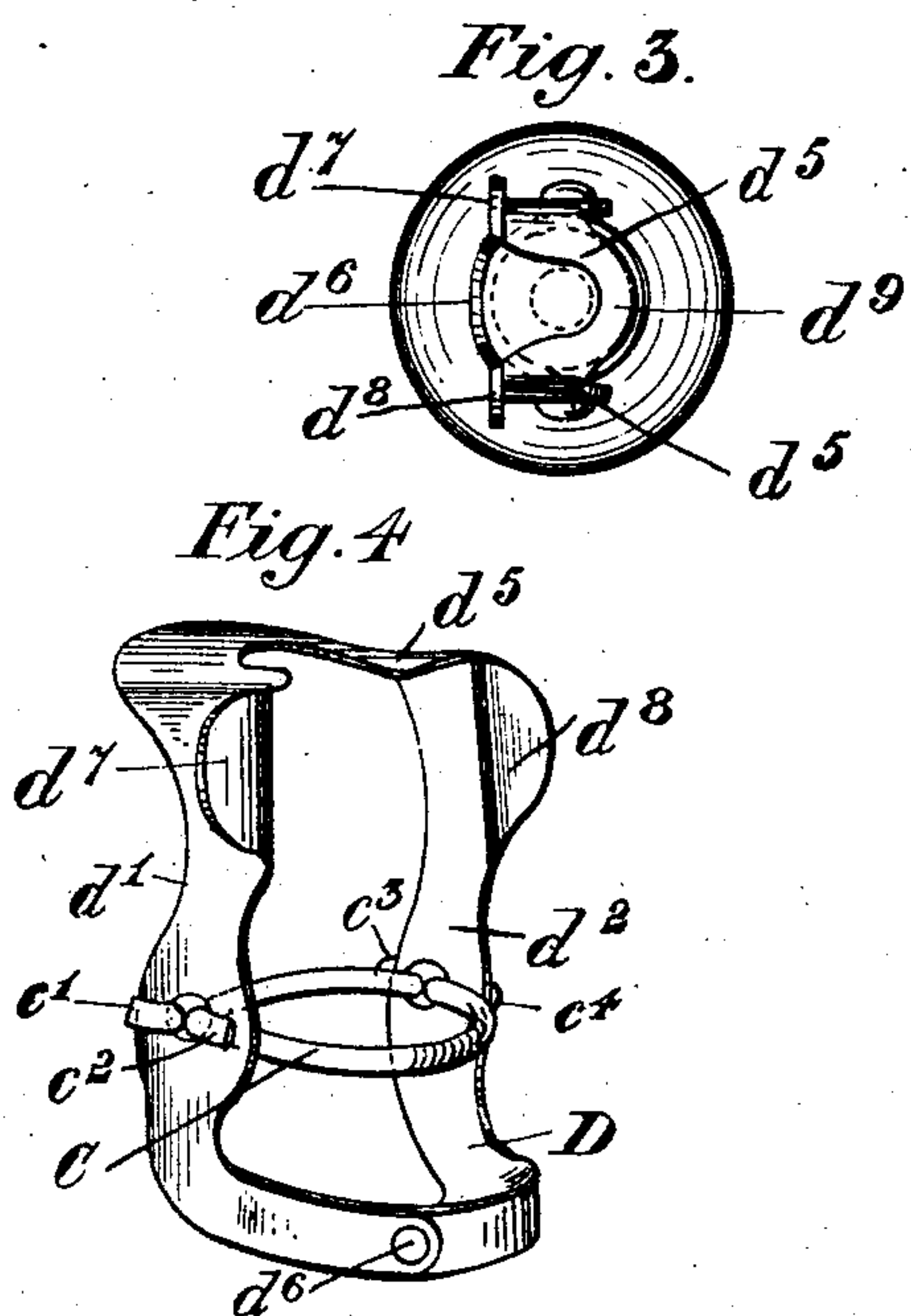
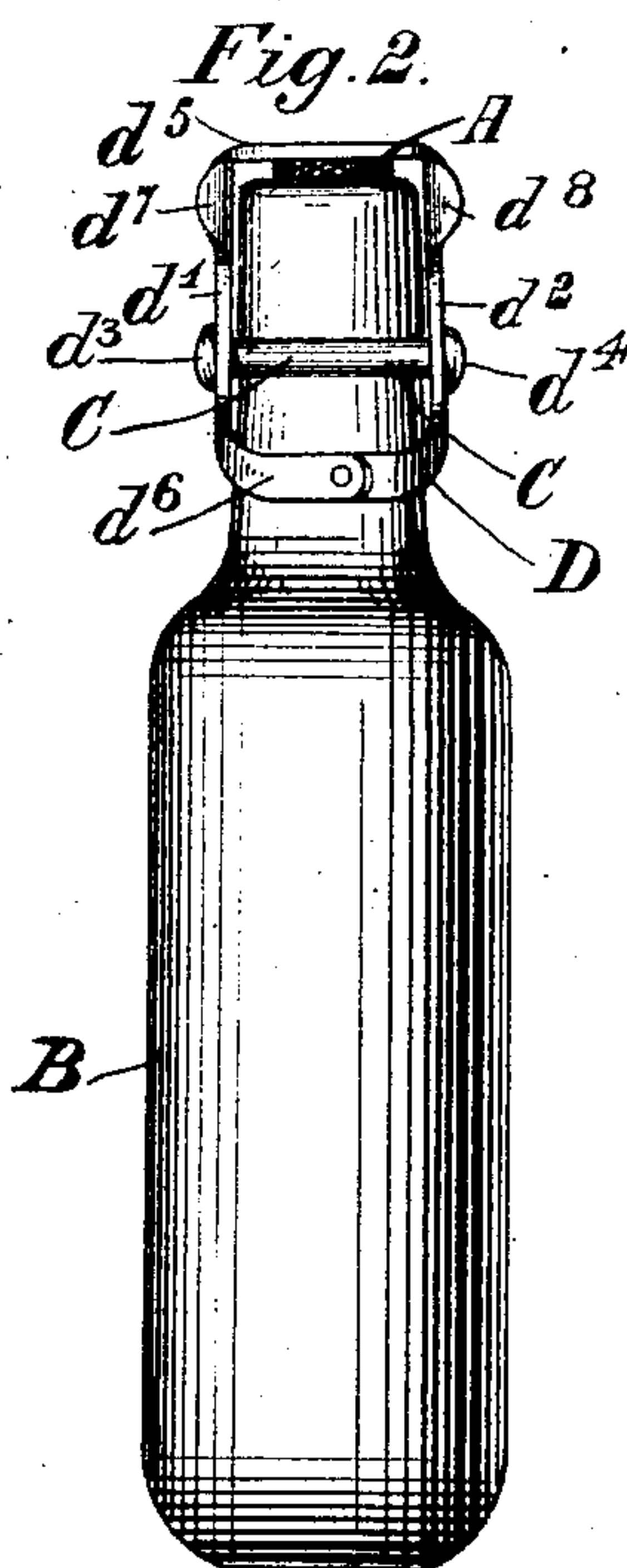


J. J. CHAVASSE.

MEANS FOR SECURING CORKS OR LIKE STOPPERS IN BOTTLES.

APPLICATION FILED JUNE 19, 1903.

2 SHEETS—SHEET 1.



WITNESSES.

*Amialetto*  
*Edward Sartor*

INVENTOR  
*James J. Chavasse.*

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No. 785,859.

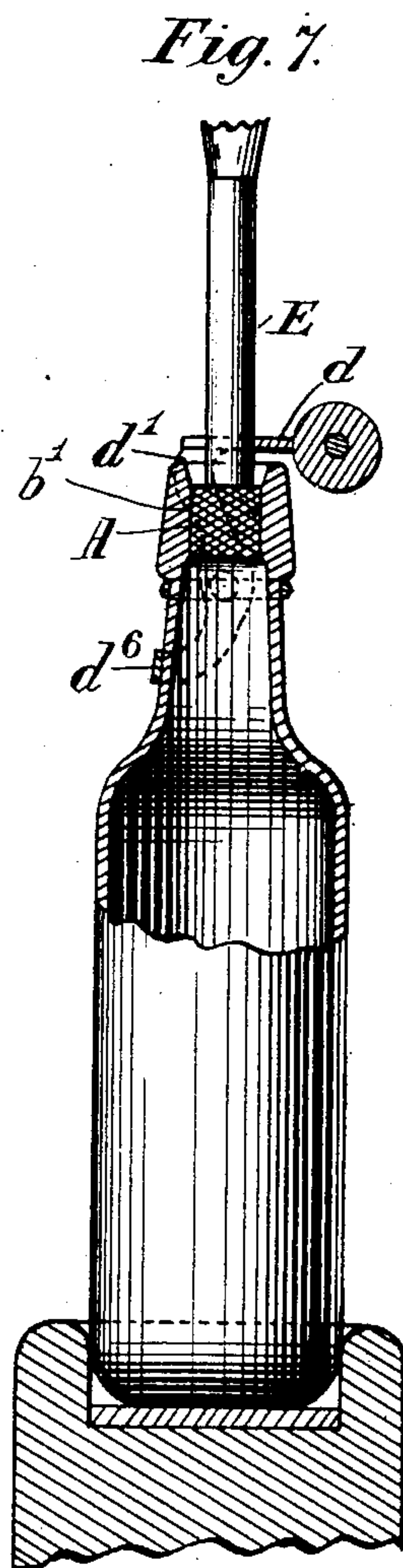
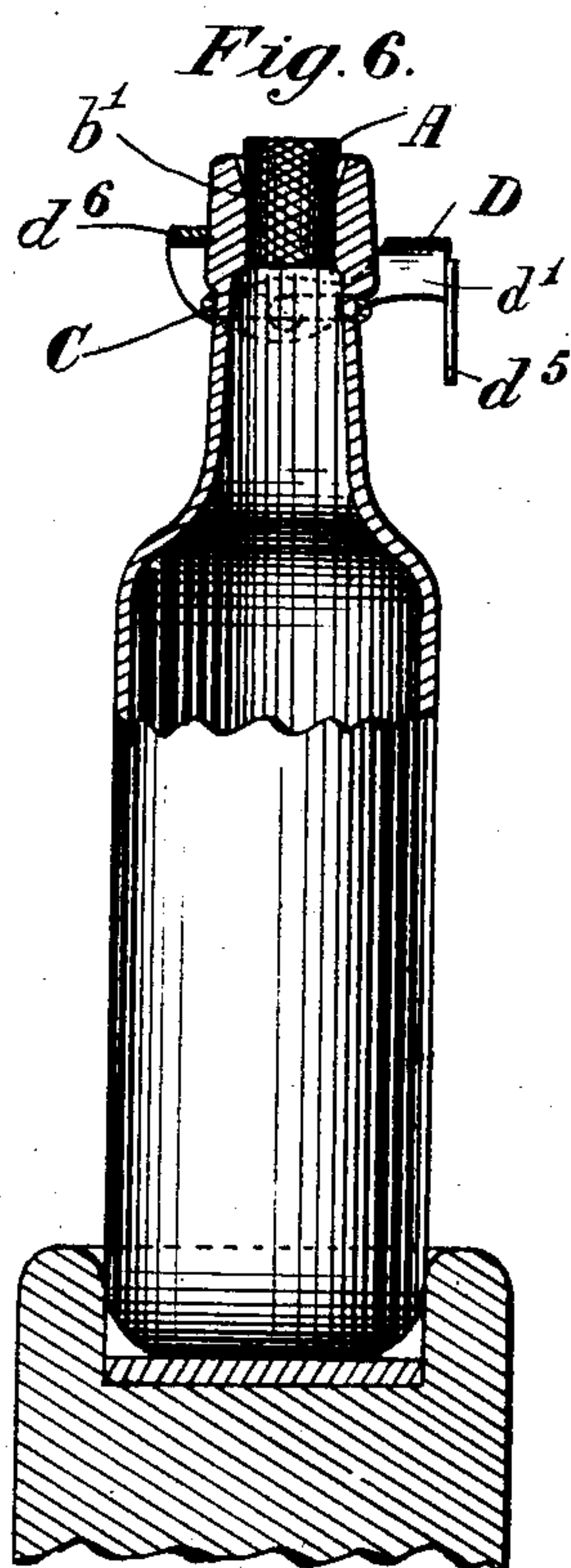
PATENTED MAR. 28, 1905.

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2 SHEETS—SHEET 2.



WITNESSES.

*Amialeton*

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# UNITED STATES PATENT OFFICE.

JAMES JOHNSON CHAVASSE, OF BIRMINGHAM, ENGLAND.

## MEANS FOR SECURING CORKS OR LIKE STOPPERS IN BOTTLES.

SPECIFICATION forming part of Letters Patent No. 785,859, dated March 28, 1905.

Application filed June 19, 1903. Serial No. 162,223.

*To all whom it may concern:*

Be it known that I, JAMES JOHNSON CHAVASSE, mineral-water engineer, a subject of His Majesty the King of Great Britain and Ireland and of the British Dominions Beyond the Seas, Emperor of India, residing at 86 New street, in the city of Birmingham, England, have invented certain new and useful Improved Means for Securing Corks or Like Stoppers in Bottles, of which the following is a specification.

This invention consists of the herein-described improved means for securing corks or like stoppers in bottles, and particularly such bottles as contain aerated mineral waters or other liquids under pressure.

My invention enables a cork stopper to be properly secured in the bottle without wiring by hand, and the means which I employ for securing the cork in the bottle as aforesaid is so arranged to instantly be brought into position to secure the cork stopper either by hand or by the machine by which the bottle is filled and corked, and, moreover, the bottle can be opened without the use of a corkscrew and without any fear of breaking the bottle, as is often done in opening internally-stoppered bottles or when the cork is hard to draw.

My invention is illustrated by the accompanying drawings, on which—

Figure 1 is a side view of an aerated-water bottle with my invention applied. Fig. 2 is a front view of the same. Fig. 3 is a plan of the same. These views show the cork stopper in position in the bottle secured by my invention. Fig. 4 is a projected view of my invention separately from the bottle itself, and Fig. 5 is a side view and sectional plan of the portion of my invention which clips round the bottle-neck. Fig. 6 is a sectional elevation of the same bottle with my invention pressed back ready for the cork stopper to be blown out. Fig. 7 is a sectional side elevation of the same bottle, showing how this invention for securing the stopper permits of its being brought into operation to secure the cork stopper while the latter is held in position by the plunger of the bottle filling and stoppering machine.

The same letters of reference indicate the same parts in all the figures.

In carrying out this invention I use as a

stopper a short cork A, and the mouth  $b'$  of the bottle B is by preference made to taper slightly outwardly, so as to facilitate the blowing out of the cork by the pressure of the internal gases in opening the bottle, as hereinafter described. Clipped round the bottle-neck under the usual shoulder  $b^2$  of the same is a wire or band C, to which is jointed the hoop or bail D, which is by preference formed of sheet metal and is made with two side limbs  $d'$   $d^2$ , which at  $d^3$   $d^4$  are jointed to the band C and which are made in one piece with the top portion  $d^5$  of the bail, which is made just high enough to clear the top of the bottle when the bail is turned about its side pins  $d^3$   $d^4$ , and this top part  $d^5$  is by preference made flat to take upon the top of the cork stopper A, so as to afford a proper bearing on the same. The sides  $d'$   $d^2$  of the bail are extended below the joints  $d^3$   $d^4$  and are bent round at  $d^6$  at the front of the bottle in the form of a lever-like loop, so that by pressing down this lever-like loop part  $d^6$  of the bail or by pressing upwardly the top part  $d^5$  of the bail the said top part will be turned to the position shown in Figs. 1 and 2 immediately above the cork, so as to secure the same in the bottle. When it is desired to open the bottle, the sides  $d'$   $d^2$  are pressed back, as shown in Fig. 6, so as to turn the upper part  $d^5$  of the bail off the cork stopper A, which is then forced out of the bottle by the internal pressure. To facilitate the pushing back of the sides  $d'$   $d^2$  as aforesaid, each of the said sides is made with a lateral projection for the operator's thumbs to bear against, these lateral projections being marked respectively  $d^7$   $d^8$ . When the bottle is filled and corked, the cork A is secured by turning the upper part  $d^5$  of the bail over the top of the cork A, as shown in Figs. 1, 2, and 3, thereby securing the same, and when the bail is in this position the lever-like loop part  $d^6$  lies on or against the lower part of the bottle-neck, as shown, and thus prevents the bail from being turned over too far. When the bail has been turned back, as shown in Fig. 6, and the cork has been blown out, the bottle is perfectly free and open for the insertion of a rotary brush for cleaning the same, and the loop part  $d^6$  takes against



the upper part of the bottle-neck, as shown, and thus prevents the upper part of the bail from being turned down too far for the roller or part of the filling-machine to catch onto the bail and raise it over the cork.

In order to enable the upper part of the bail  $d^5$  to clear the plunger E, which in a bottle filling and corking machine presses the cork A down into the bottle, the upper part  $d^5$  of the bail is bent or formed into a central loop  $d^9$ , as shown in Fig. 3, just sufficient to clear the plunger E, but leaving sufficient of the top part  $d^5$  for the top of the cork to bear against. Thus the bail C can be turned up into position over the cork while the latter is held down by the plunger E, as in Fig. 7.

The band or wire C, which secures the bail D round the bottle-neck, can be made in one or more pieces, as most convenient, but is by preference made in two pieces, as shown in Figs. 4 and 5, and each of which forms one half of the band, the two halves being closed together at the sides of the bottle and passing through holes  $d^3 d^4$  in the sides of the bail D, the extreme end portions  $c' c^2 c^3 c^4$  of the wire being bent outwardly outside the side arms

$d' d^2$  so as to keep the latter in position. If desired, these projecting ends  $c' c^2 c^3 c^4$  of the wires can be inclosed by metal caps F' and F'', as shown in Fig. 5.

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

1. In combination with a band encircling a bottle-neck a sheet-metal cork-holder pivoted thereto having a portion to rest on the cork and having a loop part below said pivots adapted to come in contact with the bottle-neck to form a stop to prevent the cork-holder from being turned up or down too far.

2. In combination with a band encircling the bottle-neck a sheet-metal holder pivoted thereto having arms below said band and having a portion to rest on the cork said holder having also projections  $d^7 d^8$  to be pressed by the fingers.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JAMES JOHNSON CHAVASSE.

Witnesses:

CHARLES BOSWORTH KELLEY,  
THOMAS JOHN ROWE.