

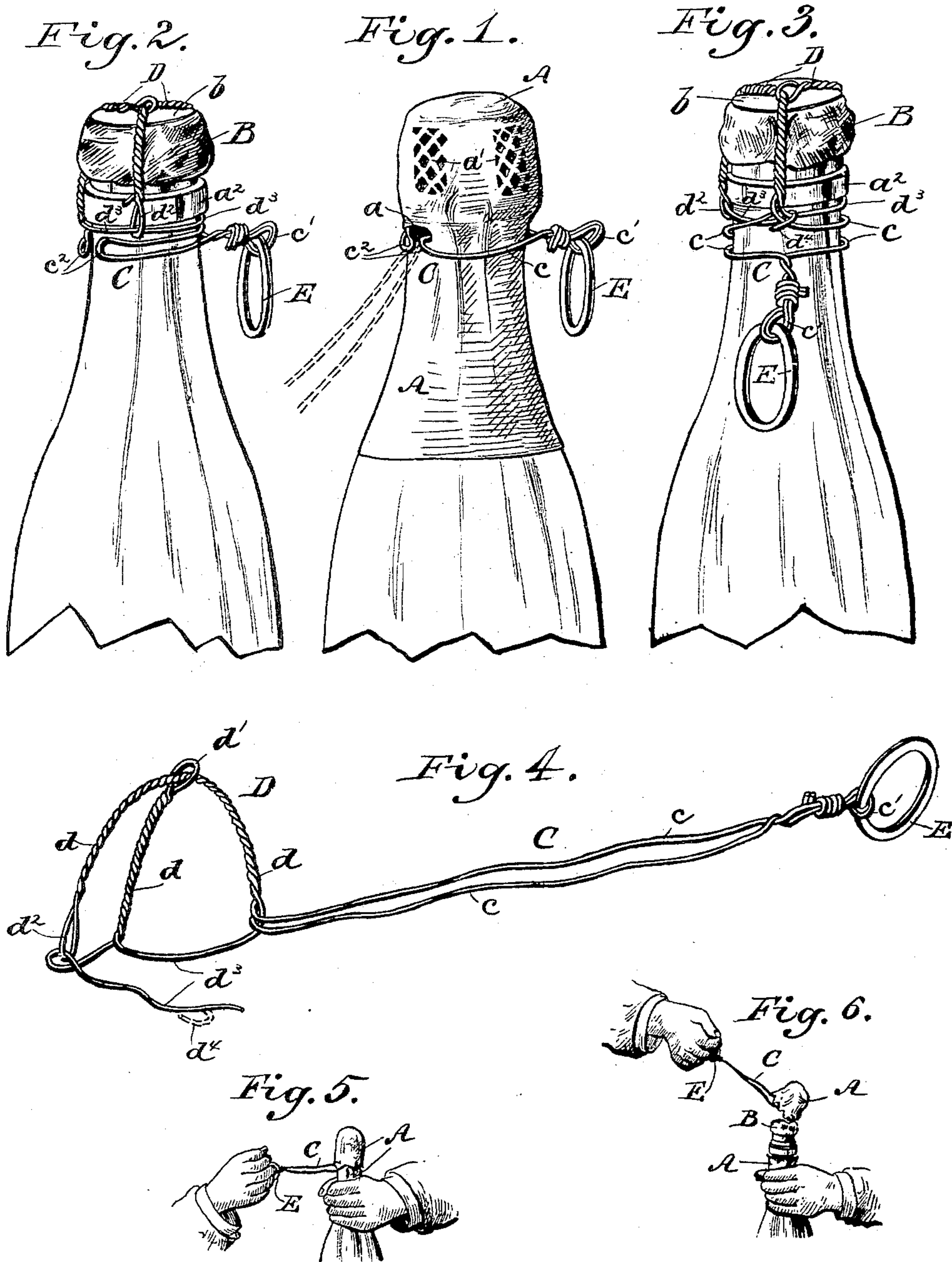
(No Model.)

L. PICARD.

BOTTLE CAPSULE DETACHER AND CORK UNFASTENER.

No. 450,891.

Patented Apr. 21, 1891.



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# UNITED STATES PATENT OFFICE.

LOUIS PICARD, OF RHEIMS, FRANCE.

## BOTTLE CAPSULE-DETACHER AND CORK-UNFASTENER.

SPECIFICATION forming part of Letters Patent No. 450,891, dated April 21, 1891.

Application filed July 28, 1890. Serial No. 360,207. (No model.) Patented in France December 29, 1883, No. 159,468.

*To all whom it may concern:*

Be it known that I, LOUIS PICARD, of Rheims, France, have invented a new and Improved Bottle Capsule-Detacher and Cork-Unfastener, (which has been patented in France December 29, 1883, No. 159,468,) of which the following is a full, clear, and exact description.

My invention relates to capsule-detaching and cork-unfastening devices for bottles or receptacles holding champagne or other liquids or substances, and has for its object to provide simple, inexpensive, and efficient devices of this character which in their preferred combination or adaptation allow any person of ordinary intelligence to easily and quickly uncapsule a bottle-cork and remove its fastenings by one simple and natural pulling operation.

The invention will first be described, and then will be particularly defined in the claims hereinafter set forth.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the neck portion of a bottle as it appears when capped and adapted for being uncapped and for removal of the cork-fastenings in accordance with my invention. Fig. 2 represents the bottle as it appears with the capsule removed. Fig. 3 is a perspective view of the bottle with the capsule removed and, as seen, turned about one-quarter around from the position shown in Fig. 2. Fig. 4 is a perspective view of the uncapsuling and cork-fastening wire device as it appears after the operation and when removed from the bottle. Fig. 5 is a perspective view illustrating how the bottle is uncapped, and Fig. 6 illustrates the complete operation when the capsule top is cut from the bottle and the cork-fastenings are removed.

In carrying out the invention in the preferred manner I apply to the neck of a bottle a capsule A, preferably made of a thin ductile metal sufficiently strong, it may be, to securely confine a cork or stopper B within the neck of the bottle. This capsule is bent down over the bottle-cork and crimped around the bottle-neck and is perforated at  $a'$  next the cork for ornamental effect. The capsule is pro-

vided with a side aperture  $a$  immediately below the top enlargement or collar  $a^2$ , formed on the neck of the bottle, and for a purpose hereinafter explained.

I prefer to use a wire C for the capsule-severing device; but a suitable cord or gut-string may be employed, as the only requisite is that it shall have sufficient strength when pulled to cut through the metal or other material of the capsule. I use a cork-fastening wire D in conjunction with the capsule-severing wire or device C and connect the two together, so that after pulling the wire C to sever the capsule the cork-fastening wire D will also be pulled or removed from the cork to unfasten it.

The drawings clearly show the cork-fastening wire D, made with three twisted strands or parts  $d d d$ , one having a loop  $d'$  at its upper end, through which that portion of the fastener forming the other two parts  $d d$  passes, and one of these last two parts  $d$  is provided with a fixed or permanent loop  $d^2$  at its lower end, through which is passed the base-wire  $d^3$  of the fastener, which encircles the bottle-neck below its collar  $a^2$ . This wire or part  $d^3$  thus connects with the ends of all three parts  $d d d$  of the cork-fastener device. At its free end the part  $d^3$  is bent into a temporary fastening-loop  $d^4$ , (shown in dotted lines in Fig. 4,) and which, when the device C D is applied to the bottle and its cork and capsule, is engaged with the other end of the part  $d^3$  at the point of junction of the parts C D. I make the capsule-severing wire C in two separate strands  $c c$ , which when applied to the bottle are twisted together at their outer ends to form a loop or eye  $c'$ , into which is caught or held a ring E, making a very convenient device into which one finger of the hand may be passed to give a firm grasp of the wire to pull it for severing the capsule and removing the cork-fastening. I prefer to use a metal cap-plate  $b$  on top of the cork to guard it against being cut by the retaining or fastening wire device D.

In applying my improvement to a bottle filled with champagne or other liquid or substance the cork B is first forced into the bottle-neck, and when overlaid by the guard-plate  $b$  the fastener device D is applied over the guard-plate, and the base  $d^3$  of the fastener is



bent around the bottle-neck, and its extremity is bent into the temporary fastening loop or hook  $d^4$ , which engages its other end portion at the point of junction of the two strands  $c c$  of the capsule-severing device C. This looped end  $d^4$  of the base of the cork-fastening D makes the latter effective in retaining the cork against any gaseous pressure from within the bottle; but as said loop  $d^4$  also incloses one strand or part  $c$  of the capsule-severing wire or device C the loop will be drawn open by pulling on said device C, as presently described.

It will be understood that when the fastener D is thus secured over the cork the ends of the strands  $c c$  of the device C are not twisted together to form the loop  $c'$ , and the ring E is not on said device. Hence after the cork-fastener D is applied and its loop  $d^4$  is engaged with its base ring or part  $d^3$  and one strand or part  $c$  of the capsule-severing device C the strands  $c c$  of said device are then bent about half-way around opposite sides of the bottle-neck, and the free ends of said parts  $c c$  (indicated by dotted lines in Fig. 1 of the drawings) are passed through the aperture  $a$  of the bottle-capsule A as it is being applied over the cork and to the neck of the bottle, and when the capsule is smoothly crimped around and closely upon the cork and bottle-neck the parts  $c c$  of the device C are then bent upon themselves in loops  $c^2 c^2$ , and the parts are carried back again outside the capsule about to the cork-retainer loop  $d^4$ , where they are then twisted together to form the loop  $c'$ , to which the pull-ring E is attached. It is manifest, when the bottle is thus corked and the cork is fastened by the wire D and the device C is applied partly within and partly outside the capsule, that by grasping the bottle-neck with one hand and putting one finger of the other hand within the ring E and pulling on the wire device C its looped side parts  $c c$  will be drawn through the capsule A to sever it at or below the collar or enlargement  $a^2$  of the bottle-neck, and as indicated in Fig. 5 of the drawings. A continuation of this pull upon the wire device C will, after severing the capsule, draw open the loop or hook  $d^4$  of the cork-retaining-wire device D and remove the latter from the bot-

tle with the severed top of the capsule, thereby leaving the cork exposed and free to allow its removal either by the gaseous pressure from within the bottle or otherwise. This completion of the single pulling operation, which thus most conveniently severs the capsule and removes the cork-fastening, is illustrated in Fig. 6 of the drawings and will readily be understood therefrom.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the corked bottle or other vessel having a capsule provided in its side with an opening, of the fastening consisting in the branched frame D, crossing the cork and having a separable neck or base strand uniting the lower ends of the said branches and embracing the bottle-neck, and strands  $c c$ , extending from the base or neck strand in opposite directions around the bottle-neck and then through the capsule-aperture, bent thereat in opposite directions about the capsule, and united at their free ends and provided with a handle or finger-grasping device, substantially as set forth.

2. In a bottle-wiring and capsule-removing device, the branched frame D, formed of the short branch having a loop at its upper end, a long branch passed through the said loop and having a loop  $d^2$  at one lower end, a double strand extending from the other end of the longer branch, and a base or neck grasping strand  $d^3$ , connecting the lower ends of the branches  $d$  and passing at its free end through loop  $d^2$ , substantially as set forth.

3. In a bottle-wiring and capsule-removing device, a three-branched frame to embrace the bottle-neck and cross the cork, a strand uniting the lower ends of the branches integral therewith and having one end free, and the two capsule-removing strands extending from the point where the end of the base strand opposite its free end joins the adjacent branch and formed integral with said branch, substantially as set forth.

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Witnesses:

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