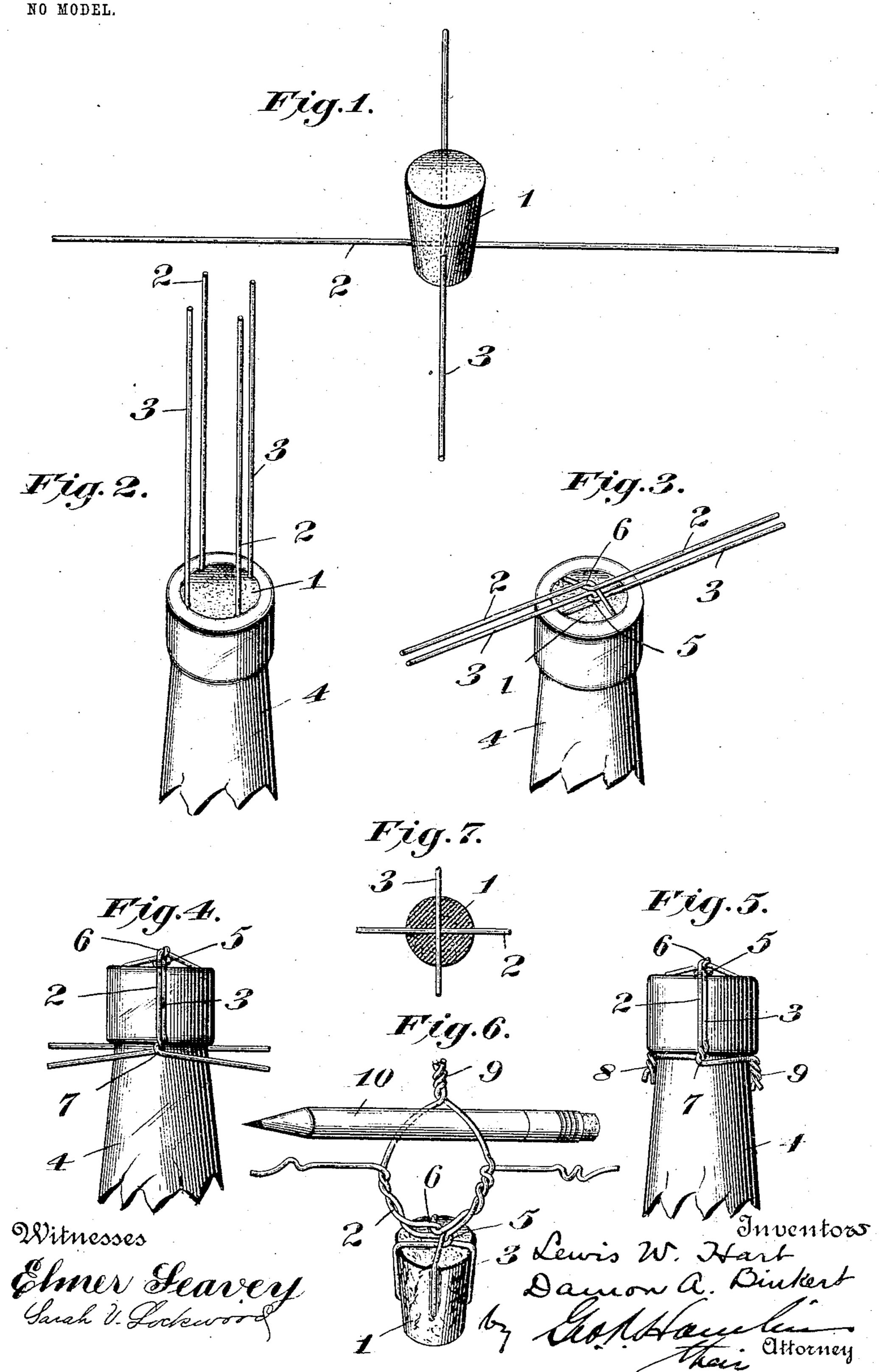
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COMBINATION CORK OR STOPPER FASTENER AND EXTRACTOR. APPLICATION FILED FEB. 11, 1904.



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COMBINATION CORK OR STOPPER FASTENER AND EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 765,891, dated July 26, 1904.

Application filed February 11, 1904. Serial No. 193,165. (No model.)

To all whom it may concern:

Be it known that we, Lewis W. Hart and Damon A. Binkert, citizens of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Combination Cork or Stopper Fasteners and Extractors, of which the following is a specification.

Our invention relates to combination cork

10 or stopper fasteners and extractors.

The object of our invention is the provision of an improved fastener for securing corks or stoppers to bottle-necks which will be so constructed that when the fastener is detached from the neck of the bottle it will afford a convenient means for the insertion of the finger or of any handy implement, such as a pencil or pocket-knife, for purposes of extracting the cork or stopper.

The present invention also contemplates the provision of a novel manner of employing wire passing through the body of the cork or stopper, thereby obviating the use of a button or other means below the cork or stopper, as commonly used with devices of this class, which is twisted in a peculiar manner across the top of the cork or stopper and thence wired in a novel manner to the bottle-neck, whereby when certain portions of the wire around the neck are disengaged the wire can be spread back and forms a loop for the insertion of the finger or the device to be used

The invention also has in view the provision of a device of the class described wherein the manner of wiring is simple, capable of cheap wiring, secure and strong, and arranged so that the cork or stopper will be reinforced or strengthened and tearing or splitting obvi-

in removing the cork or stopper.

4° ated.

The invention comprises those improved features and novel combinations of parts set forth fully hereinafter, and recited in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a cork or stopper equipped with the fastening-wires and showing them in their first position prior to the insertion of the cork or stopper in the neck of

the bottle; Fig. 2, a view showing the cork 50 in position and illustrating the next step in connecting the cork to the bottle; Fig. 3, a view showing how opposite wires are twisted and led in opposite directions from the center of the top of the cork, illustrating the next step; Fig. 55 4, a side elevation showing how the pairs of wires are bent down over the sides of the bottle-neck and twisted preparatory to the fastening of the ends of the wires; Fig. 5, a view showing the ends of the wires fastened together 60 by twisting and illustrating the operation when it is completed; Fig. 6, a perspective detail showing how the cork can be removed by unfastening two of the twisted ends and bending the wire upwardly above the cork, so 65 that the loop formed is ready for the reception of a pencil or other article to be used in extracting the cork; and Fig. 7, a cross-section through the cork of Fig. 1, showing how the wires cross at right angles.

The invention will be described in the order of the steps taken to fasten the cork to the bottle-neck, and the manner of removing

the stopper will then be explained.

Referring first to Figs. 1 and 7, 1 repre- 75 sents the cork or stopper, through the body of which wires 2 and 3 are passed at right angles to each other. The bottle-neck of an ordinary bottle is shown at 4. The cork is forced down into the bottle-neck, and the wires 80 2 and 3, being located above the lower end of the cork, are by their engagement with the neck of the bottle during the operation of inserting the cork bent upwardly and brought to the position shown in Fig. 2. The up- 85 wardly-projecting ends of the wire 3 are then led across the top of the cork and given a tight half-twist 5, as shown in Fig. 3, and a quarter-twist 6 is then given the wire 2, which brings the respective ends of the wires 2 and 90 3 to a position where they lie side by side, one end of the wire 2 and one end of the wire 3 extending in one direction and the other ends of said wires extending in the opposite direction.

Reference being had to Fig. 4, it will be seen that each pair of wires 2 and 3 are brought down opposite sides of the bottle-