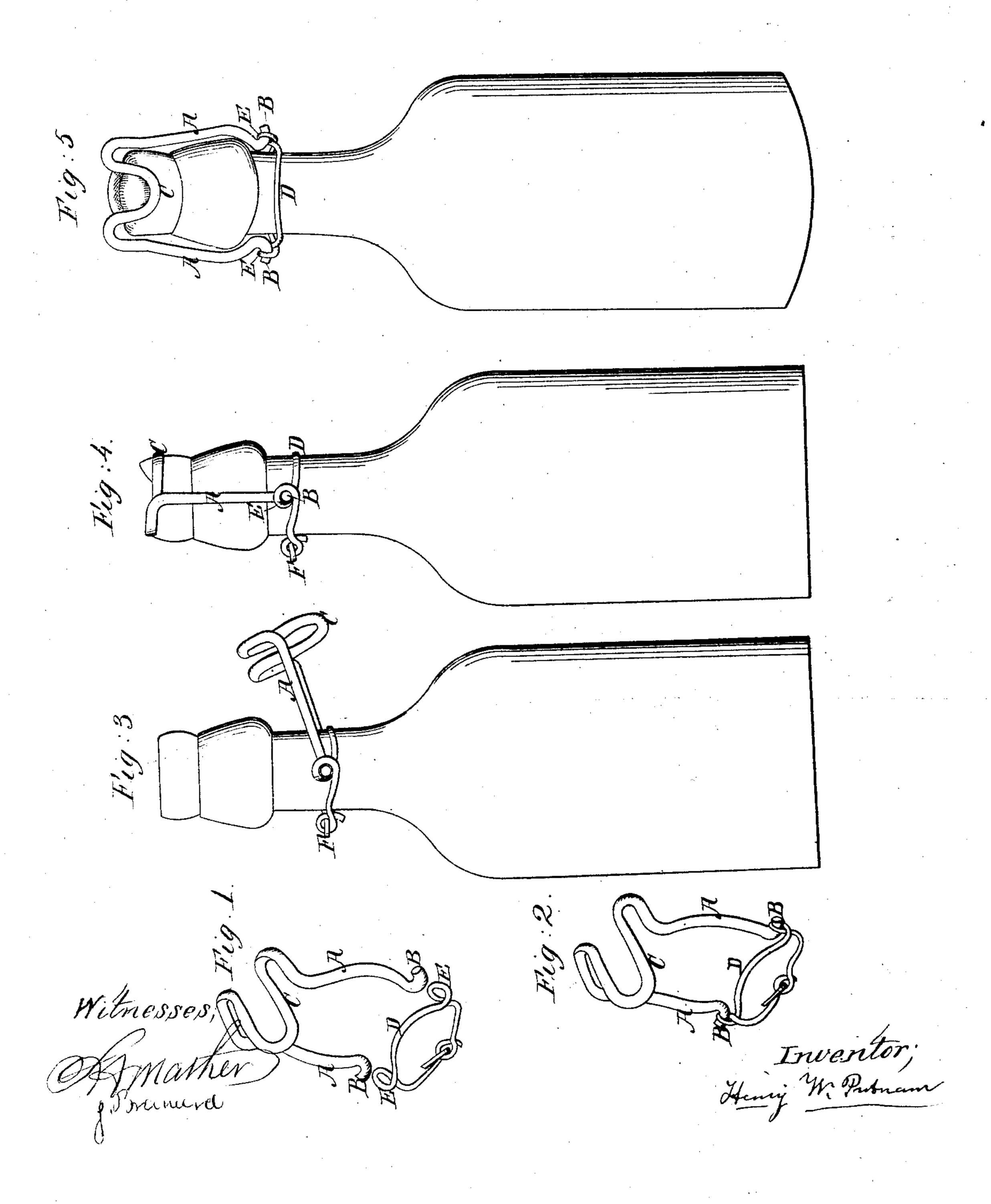


Stomer Fastening.

1 23,263.

Faternted Mar. 15, 1859.



United States Patent Office.

HENRY W. PUTNAM, OF CLEVELAND, OHIO.

IMPROVEMENT IN BOTTLE-STOPPER FASTENINGS.

Specification forming part of Letters Patent No. 23,263, dated March 15, 1859.

To all whom it may concern:

Be it known that I, Henry W. Putnam, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Bottle-Stopper Fastenings; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification.

My invention relates to forming a fastener of two pieces of wire, one of which is bent into a peculiar form, and embracing the top of the stopper or cork, the two extremities being turned at right angles to the uprights or sides and forming a pivot or hinge joint, the other wire encircling the neck of the bottle, and, being bent into a loop upon each side of the bottle-neck, forms with the other part a hinge-joint, as seen in the several figures.

Figure 1 represents the fastener with the two parts separated from each other. Fig. 2 represents the fastener with the two parts united. Fig. 3 represents the fastener with one part loosely encircling the neck of the bottle, and Figs. 4 and 5 show the fastener in different positions.

A in the several figures represents the bent wire that embraces the stopper or cork of the bottle. This piece is made of wire that is about one-tenth of an inch in diameter, more or less, according to the strength required. The two sides A A are nearly straight, being curved a little in one direction to fit the enlargement upon the neck of the bottle. The lower ends are turned outward, as seen at B B, and in this manner forming the pin for the hinge. The middle part of this wire is bent, so as to stand nearly at right angles to the sides, as seen at C in the several figures, the horizontal parts being nearly parallel, and a space between them being left sufficient for the piston that forces the cork into the neck of the bottle, for it will be understood that the bottles are filled under a pressure of two or three atmospheres, for the purpose of holding the carbonic-acid gas in solution, with which the liquid is charged.

D in the several figures represents the wire that surrounds the neck of the bottle.

At E E are shown loops, into which the ends B B of the wire A are inserted, and which, together form a hinge upon each side of the

neck of the bottle, allowing the wire A to be turned back, as seen in Fig. 3, thus leaving the stopper free. In fitting the ends of the wire A into the loops E E of the wire D care should be taken to so fit these ends that the part C of the wire A should be to the right hand of the bottle, as by thus fitting wire A the ends of that wire, or rather the bend or turn constituting the hinge, and which fits into the loops, will, when the part C is turned to the right hand, press against the outer strand or wire of the loop, and when turned to the left hand will press against the inner part of the loop, the object of thus fitting the wire A being to make it easy to turn the wire to the right hand and difficult to turn it to the left, so that mistakes in turning it may be avoided, and that it may always be in the proper position when turned off when the rod or plunger is upon the cork, to allow the bent part of the wire A to embrace the plunger and cover the cork. If this instruction be disregarded, it will be perceived that the wire A might be wrongly fitted and the U-shaped part of the wire would come against the rod or plunger and the wire could not be put over the cork. This wire D, after being properly adjusted around the neck of the bottle, is fastened by twisting the ends together, as seen at F, Figs. 3 and 4.

The manner of using this fastening is as follows: The bottle is placed under the fountain and its neck encircled at the top by the tube that conveys the saturated water or other liquid into the bottle. The cork being placed in the tube above the side pipe that admits the fluid into the bottle, by turning a stop-cock the bottle becomes filled with the liquid, and by means of the piston above the cork the cork is forced into the neck of the bottle, the fastening being turned aside, as seen in Fig. 3. When the bottle is full and the cork inserted, the pipe is elevated, the piston still holding the cork, the fastener is then forced over the end of the cock, as seen in Figs. 4 and 5, in which position it is held from being pressed out by the expanding gas. Whenever it is desirable to uncork a bottle, the thumbs are placed upon the sides A A and the fastener shoved from off the top of the cork, which is instantly forced out by the expanding gas.

The advantages gained in my improvement are cheapness of construction, durability, and

convenience in using, for they contain no sharp edges to cut the fingers or mar the cocks. They can also be changed from one bottle to another without injury.

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

The bottle-stopper fastening formed of two pieces of wire, the same being united by means of the points B B, passing through the loops E E, constructed and having the wire A adapted

to them, as herein described, thus forming a hinge, and securing the same to the neck of the bottle by looping together the ends of the wire D, the several parts being constructed in the manner and operating as herein set forth.

HENRY W. PUTNAM.

Witnesses:

C. H. MATHER,
J. BRAINERD.