

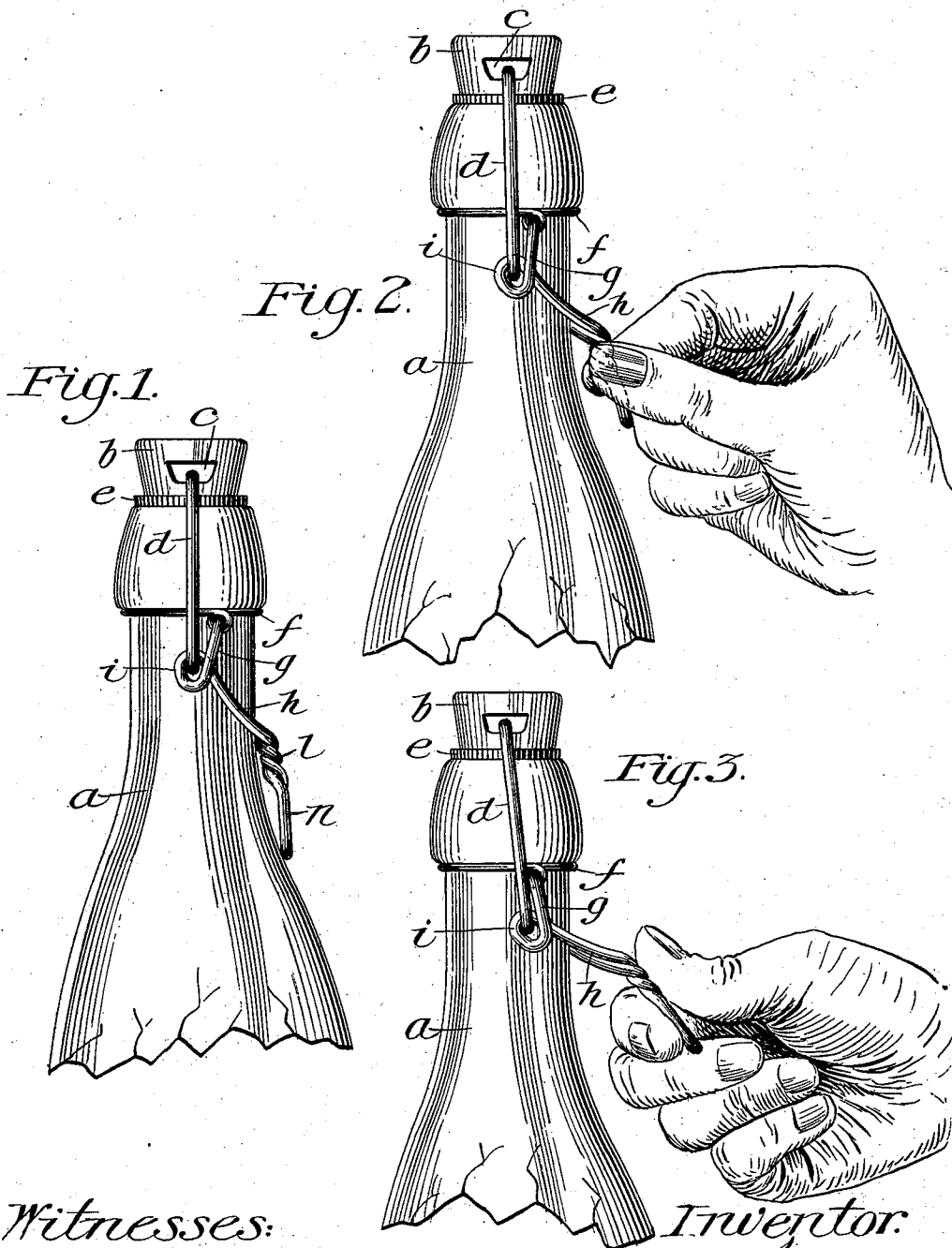
No. 692,702.

Patented Feb. 4, 1902.

H. PENNIE.
BOTTLE STOPPER FASTENER.

(Application filed Aug. 8, 1900.)

(No Model.)



Witnesses:
O. W. Edlin.
J. I. Hutchinson &

Inventor:
Henry Pennie,
by Pennie & Goldbrock
attys.

UNITED STATES PATENT OFFICE.

HENRY PENNIE, OF BROOKLYN, NEW YORK.

BOTTLE-STOPPER FASTENER.

SPECIFICATION forming part of Letters Patent No. 692,702, dated February 4, 1902.

Application filed August 8, 1900. Serial No. 26,263. (No model.)

To all whom it may concern:

Be it known that I, HENRY PENNIE, a citizen of the United States, residing at Brooklyn, in the county of Kings, State of New York, have invented certain new and useful Improvements in Bottle-Stopper Fasteners; 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.

The type of fasteners to which the invention relates is not new; but considerable difficulty has been encountered with the previous constructions in promptly releasing the fastener, owing to the fact that the bail hugs the neck of the bottle so closely that it is difficult to get a good hold on it in order to start it and the further fact that considerably more force is required to release the fastener than merely to start it and that no provision has heretofore been made for obtaining an increased leverage on the bail at the time when the greatest force is required.

The invention is particularly applicable to the toggle-lock type of fasteners, where, either through the intermediacy of an elastic washer or stopper or from the inherent elasticity of the wire forming the fastener, the bail is held with a yielding pressure against the side of the bottle-neck and is releasable by lifting the bail away from the neck into a horizontal or upwardly-inclined position.

The improvement is illustrated in the accompanying drawings, forming part of this specification, wherein—

Figure 1 shows the fastener in locked position. Fig. 2 is a similar view, the fastener having been grasped by the fingers and just started; and Fig. 3, a view like the other views, showing how the increased leverage of the bail necessary to easily release it after starting is obtained.

Referring to the views, *a* denotes the neck of a bottle of ordinary construction intended to hold beer or other beverages.

b is a stopper made of glass, porcelain, or other suitable material having a perforation *c* therein, through which the wire hoop *d* of the ordinary toggle-lock fastener passes. The stopper *c* rests on a rubber washer *e*; but the

hoop *d* may be so shaped as to secure sufficient resilience to enable the washer to be dispensed with.

Around the neck of the bottle just below the head is a wire loop *f*, to which is pivoted in the usual manner the upper ends *g* of a bail *h*. The bail is provided with eyes *i* at a point some distance below its pivoted end, and the lower ends of the hoop *d* are hooked into these eyes. The bail is pivoted at its upper end to the wire loop *f* at diametrically opposite points of the bottle-neck and at its opposite end contacts with the neck and is held thereagainst by the resilience of the washer or the elasticity of the hoop *d*. The outer end of this bail contacts with the neck of the bottle and forms a stop for the toggle-lock. It also constitutes a lever by means of which the toggle is unlocked and the fastener released. As heretofore constructed this bail conforms generally to the contour of the bottle-neck and hugs the neck so closely that it is difficult to get a sufficient hold upon it to start it. In order to afford a more extended surface and a better hold for the fingers, I twist or coil the outer portion of the loop in the manner best indicated at *l* in Fig. 1. This greatly increases the amount of the holding-surface for the fingers, and the coils in the wire form a character of surface from which the fingers are not liable to slip and which provides a good firm hold.

The manner of starting the bail is illustrated in Fig. 2. The usual way is to grasp the bail between the thumb and forefinger of the right hand, and the advantage of the improvement over the old form of plain bail is obvious from the illustration. After the initial movement of the bail in unlocking the fastener the resilience of the hoop *d* or washer *e* increases the tension and interposes an additional resistance to the further upward movement of the bail. It is desirable, however, that after once starting the stopper should be instantly and fully released, and in order to overcome the difficulty due to this increased resistance I provide the bail with a further extension *n*, beyond the twist or coiled part *l*. This permits the fingers to be slipped from the coil *l* farther out on the end *n* of the bail, as indicated in Fig. 3, and greater lev-

erage is thereby obtained upon the bail at a time when the greatest resistance to the unlocking of the fastener has to be encountered.

As indicated in Fig. 1, the extreme end of
 5 the extension n contacts with the bilge of the bottle-neck when the fastener is locked. The portion of the bail above the extension lies in the hollow of the neck, and if constructed in the manner heretofore commonly resorted
 10 to it would be difficult to secure a sufficient or firm enough hold upon it to raise the bail; but by giving this part of the bail the twist or coil l , bending it just above said twist or coil inwardly or toward the bottle-neck, and
 15 thereby providing a short length of double thickness of the wire, I furnish a better and greater holding-surface standing out from the bottle-neck and considerably facilitate the operation of releasing the stopper.

20 I do not desire to be limited to any particular number of twists in the bail or to any

particular length of the conformation of the extension n ; but

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

25 In a toggle-lock stopper-fastener, the combination of the stopper as b , and the hoop, as d , of a bail h having a rigid interlocking twist l , and a flat loop n beyond said twist to form
 30 a handle, said bail having a bend adjacent said twist to cause the handle to lie parallel with the bottle-neck, with the end of said handle in contact with the bottle, whereby a space is left between the handle and the bilge
 35 of the bottle to permit the handle to be grasped by the fingers.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY PENNIE.

Witnesses:

AMELIA B. COOK,
 WM. F. C. MAY, Jr.