

(No Model.)

K. HUTTER.  
BOTTLE STOPPER.

No. 491,113.

Patented Feb. 7, 1893.

Fig. 1.

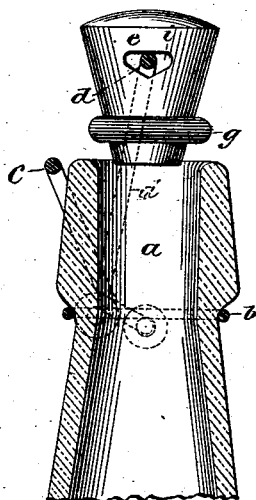


Fig. 2.

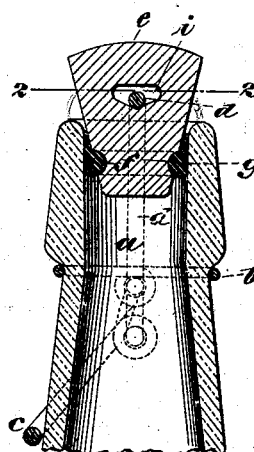
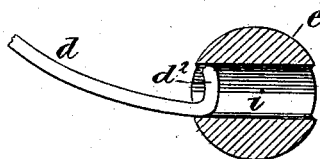


Fig. 3.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

KARL HUTTER, OF NEW YORK, N. Y.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 491,113, dated February 7, 1893.

Application filed April 6, 1892. Serial No. 427,987. (No model.)

*To all whom it may concern:*

Be it known that I, KARL HUTTER, of the city, county, and State of New York, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a full, clear, and exact description.

The chief object of the invention is to provide a bottle-stopper with a plug so constructed that the bent ends of the bail can be passed through it, and also to provide such a plug with means for hermetically sealing the bottle.

The invention consists more especially in providing the tapering plug with a substantially triangular or heart-shaped slot, through which the inwardly bent ends of the bail-wire can be inserted.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts, Figure 1 is a side view of my improved plug; Fig. 2 is a vertical section through the plug and its elastic ring, showing same within the neck of the bottle; Fig. 3 is a horizontal section on the line 2—2 of Fig. 2.

In said drawings, *a* represents the neck of a bottle provided with a neck-wire *b*, to which is pivotally connected a lever *c*, and to this lever is pivoted a bail-wire *d*, having its ends *d*<sup>2</sup> bent inwardly for pivotal connection with the lever. A conical plug *e*, adapted to fit the bottle-neck and recessed or grooved horizontally, as shown at *f*, receives in said groove an elastic ring, band or washer *g*, as in Fig. 2. The upper part of the plug *e* is provided with an elongated substantially heart or triangular shaped slot *i*, the apex of said triangular shaped slot being lowermost and centered in the plug *e*, so that the upper part of the bail-wire is received within the slot and centered in the plug when the same is drawn down into the bottle, as shown in Fig. 2. This slot *i* is of such a size in cross-section, at its widest por-

tion, that the inwardly bent ends *d*<sup>2</sup> of the bail-wire can be passed through it as shown in Fig. 3. Rigid plugs as heretofore made for the combination of bail and lever had the holes small enough to admit the bail, and therefore if the plug had a diameter, where perforated, considerably in excess of the diameter of the bail-wire, the latter had to have its ends *d*<sup>2</sup> bent after passing through the plug. With the aid of my heart or triangular shaped slot *i* made as described I am enabled to readily pass through it, a bail-wire having its ends *d*<sup>2</sup> already bent onto it, and thus connect the bail-wire with the plug. When the lever *c* is raised to open the bottle, the heart-shaped slot permits the stopper to swing aside and upward in either direction, and to be reinserted from either side. When the bottle is closed, as shown in Fig. 2, the bail-wire will exactly center in the plug and will automatically find its seat.

This plug can be made of wood, porcelain or any analogous material. It is easily applied to the ordinary mechanism of the bottle-stopper, and can be made to present an upper surface of considerable extent, for the application of trade-marks or other inscriptions.

What I claim as my invention is:

The combination of the bottle-stopper-plug *e* having substantially heart-shaped slot *i*, the apex of said slot being lowermost and centered in said plug *e*, with the bail-wire *d* having bent ends *d*<sup>2</sup> and means substantially as described for connecting said bail-wire to the bottle, the slot *i* being wider than the bend *d*<sup>2</sup> of the bail-wire is long, as and for the purposes described.

KARL HUTTER.

Witnesses:

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