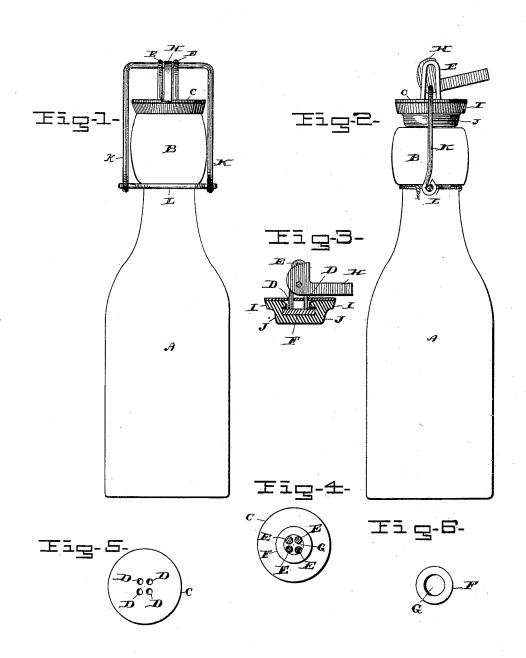
H. HALVORSON. Bottle-Stopper Fastener.

No. 205,546.

Patented July 2, 1878.



WITNESSESalbin Moong, 1412, 1220 um Halvor Kalvorson.

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UNITED STATES PATENT OFFICE.

HALVOR HALVORSON, OF NASHUA, NEW HAMPSHIRE, ASSIGNOR TO G. W. WHITTEMORE, OF SAME PLACE.

IMPROVEMENT IN BOTTLE-STOPPER FASTENERS.

Specification forming part of Letters Patent No. **205.546**, dated July 2, 1878; application filed May 22, 1878.

To all whom it may concern:

Be it known that I, HALVOR HALVORSON, of Nashua, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Bottle-Stoppers; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to certain improvements in bottle-stoppers; and the invention consists in the construction and arrangment of parts which will be hereinafter more fully

set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, which form a part of this specification, and in which—

part of this specification, and in which—
Figure 1 is a front view. Fig. 2 is a side view. Fig. 3 is a central section taken on a line between the two staples. Fig. 4 is a bottom view with the rubber cap removed. Fig. 5 is a plan view of the top plate or disk, and Fig. 6 is a plan view of the bottom plate

or disk.

This invention is designed as an improvement on that class of stoppers having the plate and shank, to which latter the rubber cap is secured, made of cast metal. The objections to this construction of the plate and shank are numerous, among which appear the trouble and expense in properly affixing the cam, as well as the consequent necessary enlargement of parts, which not only mars the appearance, but renders the stopper cumbersome, or difficult to be properly manipulated.

In my stopper the plate and all of the parts (except the cap, which is formed of rubber) are made of wrought-iron—that is, stamped from sheet or other metal—thereby providing the stopper with the required strength and lightness of parts, insuring durability and easy manipulation.

In the drawings, A represents an ordinary bottle formed with a head, B, provided with the usual mouth, in which the stopper is placed.

In constructing my stopper I take a plate or disk, C, stamped from wrought metal, and centrally provide the same with four perforations, D, as shown in Fig. 5 of drawings. Through these perforations D protrude the ends of staples E E, to which is secured a disk, F. I prefer passing the ends of the staples into a central opening, G, and spreading them out, as shown in Fig. 4 of drawings. If desired, the staples may be soldered to give additional strength.

The staples serve the double purpose of a guide for the cam H and the axis of said cam.

The disk F serves to hold the upper or flanged edge I of the rubber cap J up against the top plate or disk C.

The stopper is held in place by the usual yoke K passing through the staples E and cam H, and is secured to the bottle by a wire, L, passing around the neck of the bottle, as shown in Figs. 1 and 2 of drawings.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A bottle-stopper provided with two staples, E, and an upper disk, C, and a lower disk, F, constructed and arranged as set forth.

2. A bottle-stopper consisting of the two disks C and F, staples E E, and rubber cap J, in combination with the cam H, yoke K, and securing-wire L, all constructed and operating substantially in the manner shown and described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of

two witnesses.

HALVOR HALVORSON.

Witnesses:

FRED. WHITTEMORE, CHARLES H. KELLOGG.