

G. W. GOMBER.
Bottle-Stopper

No. 202,434.

Patented April 16, 1878.

47
1895

Fig. 1

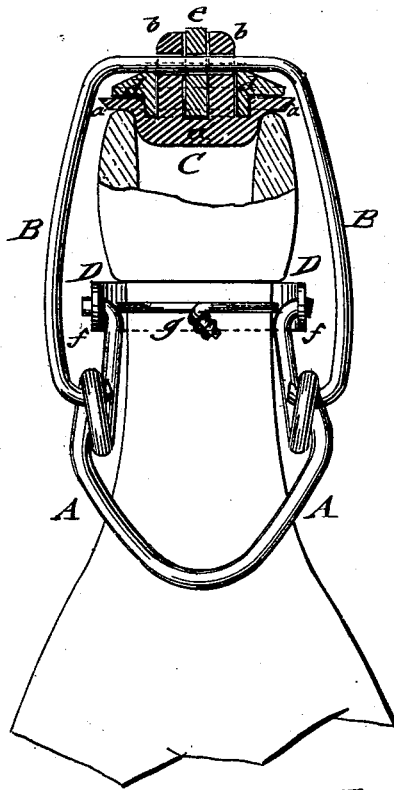


Fig. 2

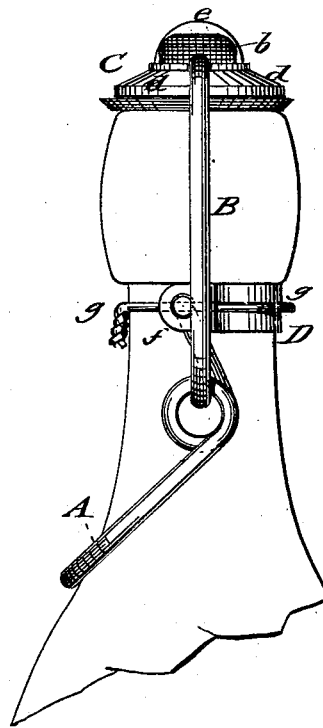
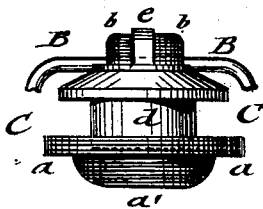


Fig. 3



WITNESSES:

Francis McArdle.
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INVENTOR:

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UNITED STATES PATENT OFFICE.

GEORGE W. GOMBER, OF HAZLETON, PENNSYLVANIA.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **202,434**, dated April 16, 1878; application filed March 1, 1878.

To all whom it may concern:

Be it known that I, GEORGE W. GOMBER, of Hazleton, in the county of Luzerne and State of Pennsylvania, have invented a new and Improved Bottle-Stopper, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved bottle-stopper, being partly in section through the stopper-head and cap. Fig. 2 is a side view of the same, and Fig. 3 is a detail side view of the flexible stopper.

Similar letters of reference indicate corresponding parts.

This invention has reference to such improvements in the well-known De Quillfeldt bottle-stopper patented January 5, 1875, that the same works with greater efficacy, swings with greater reliability, and is more durable and more easily worked than heretofore.

The invention consists of a diametrical partition in the metallic cap-piece hung to the lever-acted yoke, in connection with a flexible stopper whose shank has a recess corresponding to the partition.

It consists, secondly, of a semicircular neck-band with bent ends or ears, to which the outwardly-bent pivot ends of the eccentric-lever are applied, the neck-band being retained by a wire passing through perforations of the band back of the ears.

Referring to the drawing, A represents an eccentric-lever, B the yoke, and C my improved compound stopper. The eccentric-lever is hung to a metallic neck-band, D, and the compound stopper C to the horizontal top part of the yoke. The compound stopper is constructed of an elastic stopper-disk, *a*, with laterally-perforated stem or shank *b*, and of a rigid cap-piece, *d*, that is provided with a lateral perforation and diametrical partition, *e*. The partition is perforated for the passage of the yoke, in line with the lateral perforation of the stem of the stopper-disk, the stem being furthermore centrally recessed, so that the partition of the cap-piece fits into the stem, and the symmetrical sections of the stem enter into the cavities at both sides of the partition. The upper rounded-off part of the partition projects slightly above the upper part of the stem-sections, and protects the same

against injury at that point where the De Quillfeldt stopper has its weakest part, and where it begins soonest to wear out and necessitate the replacing of a new elastic disk and stem.

By the use of my partition in the cap-piece the stem of the elastic stopper-disk is fully protected against exterior influences, such as blows, &c., and also against the strain exerted in operating the stopper, it forming thus an essential feature of rendering the compound stopper more durable and effective.

The stopper-disk *a* is provided at the under side with a bulged or raised portion, *a'*, that corresponds in size to the mouth of the bottle, and admits thereby the closing of the bottle in easier and quicker manner, as the stopper assumes always the same position in the center of the mouth of the bottle. The bulge of the stopper-disk is forced into the mouth of the bottle when the stopper device is closed, so as to produce a perfectly tight connection therewith.

The neck-band D is made of a metallic band, of semicircular shape, provided with slightly-bent or offset ends or ears *f*, to which the outwardly-bent ends of the eccentric-lever A are pivoted. The neck-band is perforated back of the ears, and a fastening-wire, *g*, drawn through the perforations and twisted at the ends in the usual manner, so as to rigidly retain the neck-band on the bottle. The eyes of the eccentric-lever, to which the yoke B is pivoted, are bent in such a manner as to place two thicknesses of wire sidewise of each other at the rear part of the eyes, and furnish thereby a better bearing for the thumbs on opening the stopper. The perforated ears of the neck-band form a superior support for the pivots of the eccentric-lever.

The stopper is operated in the same manner as the De Quillfeldt stopper, but is more durable, on account of the improved construction of the compound stopper and the superior hanging of the eccentric-lever on the neck-band.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A bottle-stopper consisting of the elastic disk *a*, having vertical recess and lateral per-

forated stem *b*, and the cap *d*, having laterally-perforated diametrical partition *e*, raised a little above the stem, as shown and described.

2. The metallic neck-band consisting of semicircular piece D, provided with bent ears *f*, perforated to receive the end of lever A, and a twisted wire, *g*, drawn through perforations in the piece D back of said ears, as and for the purpose set forth.

3. In a bottle-stopper, the combination, with the stem-disk *a b* and cap *d*, of the partition *e*, supported in a slot of said stem, as and for the purpose specified.

GEORGE W. GOMBER.

Witnesses:

JOHN FOSTER BARBER,
SPENCER F. BARBER.