

(No Model.)

F. SCHMIDT.
BOTTLE STOPPER.

No. 469,095.

Patented Feb. 16, 1892.

Fig III

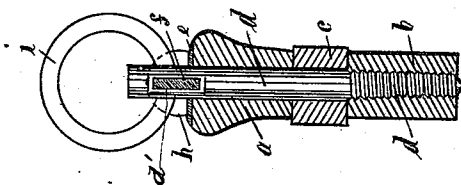


Fig II

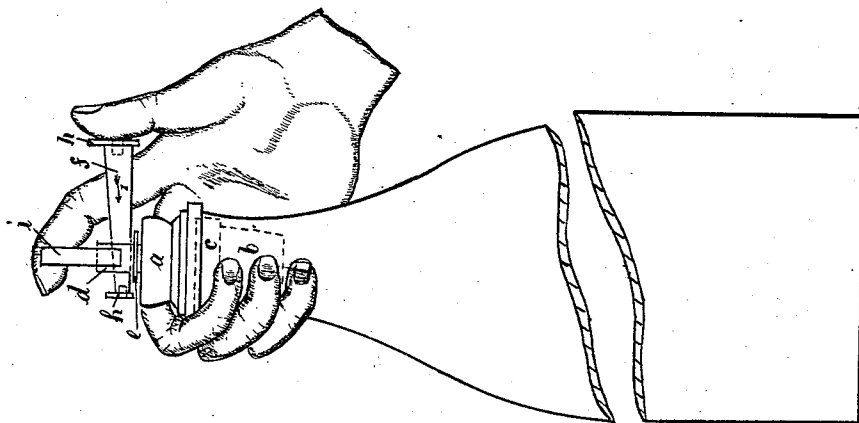
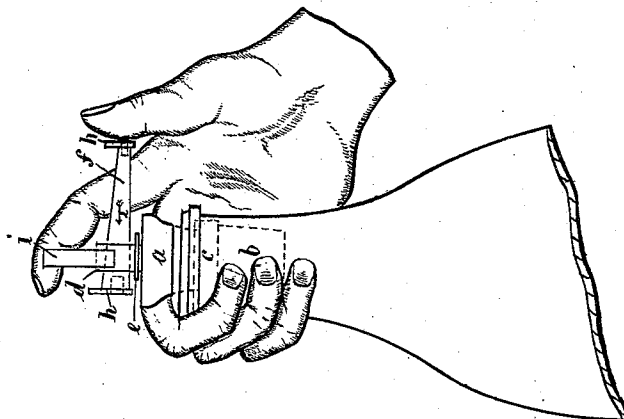


Fig I

Attest:
Walter Allen
Harry E. Rohrer

Inventor:
Ferdinand Schmidt
By Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

FERDINAND SCHMIDT, OF BERLIN, GERMANY.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 469,095, dated February 16, 1892.

Application filed August 5, 1891. Serial No. 401,808. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND SCHMIDT, manufacturer, of Berlin, in the Kingdom of Prussia and German Empire, have invented
5 new and useful Improvements in Bottle-Stoppers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in
10 bottle-stoppers or devices for closing bottles, vessels, &c.; and it consists in features of novel construction hereinafter described and claimed.

In order that my invention may be fully
15 understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a side elevation of a bottle provided with my improved bottle-stopper, illustrating the position of a hand in securing the stopper. Fig. II is a similar view illustrating the position of a hand in releasing the stopper. Fig. III is a vertical longitudinal section of the stopper at right angles to that
25 shown in Figs. I and II.

In stoppering bottles and other vessels according to the invention hereinafter described the stopper proper consists of two parts *a* and *b*, between which is arranged a ring *c* of india-rubber. A screw-threaded bolt *d* is passed
30 through the part *a* and ring *c* and is screwed into the lower part *b* and turns in the part *a* of the stopper. Above the part *a* is placed a bearing-disk *e*, upon which the wedge *f* bears. This wedge *f* can be moved within a slot *d'*,
35 formed in the bolt *d*, and bears against the upper part thereof, being further provided at each end with a disk *h h*, riveted thereon and serving as pressure-pieces to close and open
40 the stoppering device, while at the same time preventing the wedge from leaving the bolt *d*.

z is a ring at the upper end of the bolt to facilitate the withdrawal and insertion of the stopper. When applying this stoppering device to a receptacle—such as a bottle, for instance, Fig. I—the stopper is inserted in the neck of the bottle and the ring *c* is compressed or expanded as the wedge is pressed forward in the direction of the arrow, whereby the wedge comes to bear against the disk
50 *e* by means of its straight under surface, and thus lifts the bolt with the part *b* and presses the ring *c* upon the part *a*, and presses the ring *c* against the neck of the bottle.

To release the device the wedge is moved
55 in the direction of the arrow, Fig. II, and the stopper is withdrawn. Each time the wedge is pushed in the direction of the arrow, Fig. I, the india-rubber ring is compressed.

What I claim, and desire to secure by Letters Patent of the United States, is—

A bottle-stopper consisting of a bolt having a screw-threaded lower end and a longitudinal slot in its upper end, the lower part of the body surrounding the screw-threaded portion of the bolt, the compressible and expansible ring surrounding the bolt and located above the lower part of the body, the upper part of the body surrounding the bolt and located above the ring, and the wedge working
65 in the slot of the bolt above the upper part of the body, having finger-disks at the ends thereof, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FERDINAND SCHMIDT.

Witnesses:

PAUL FISCHER,
ALBERT ITZIGSOHN.