

F. SCHLICH.  
Bottle-Stoppers.

No. 153,380.

Patented July 21, 1874.

Fig. 1.

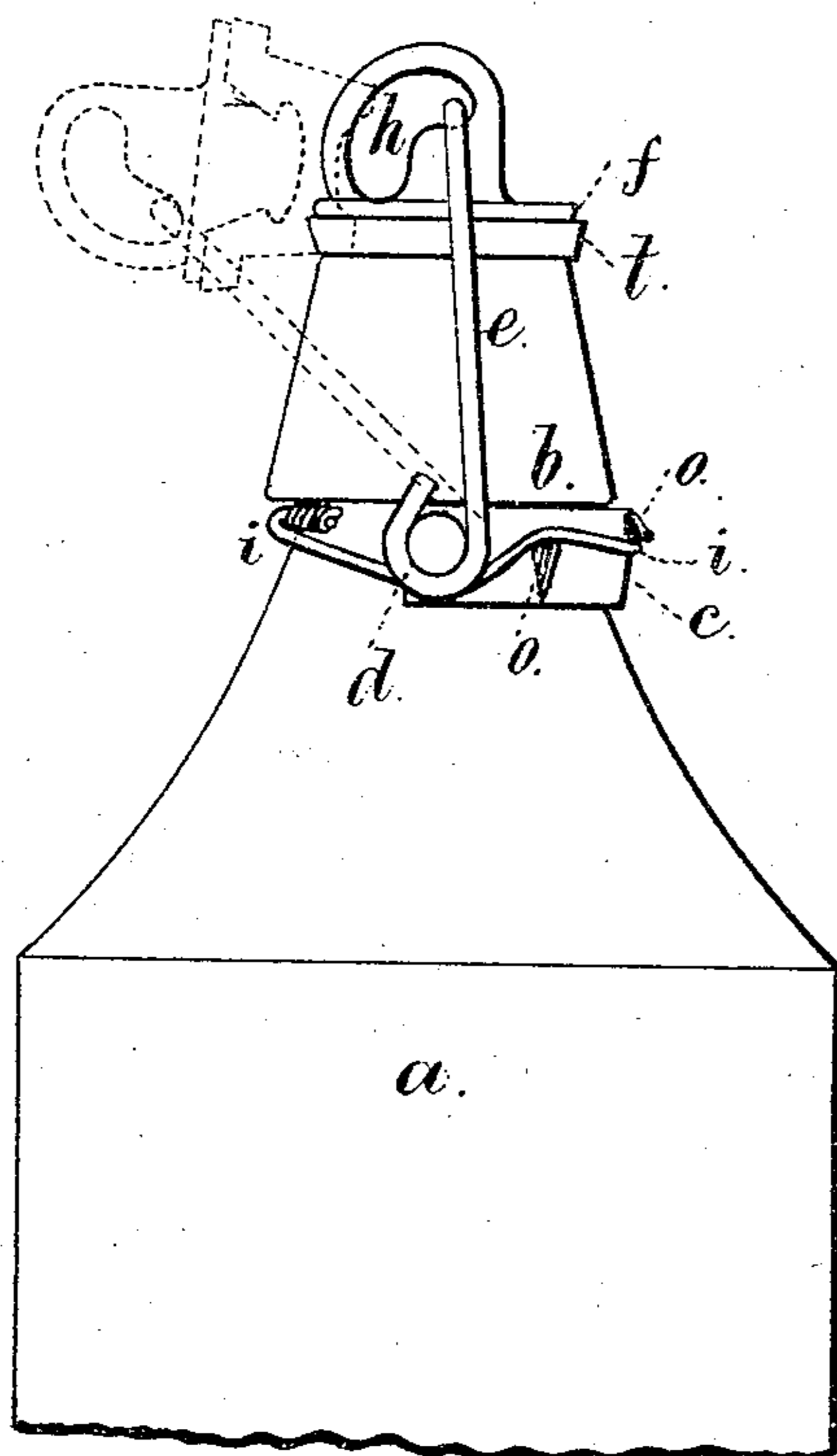


Fig. 3.

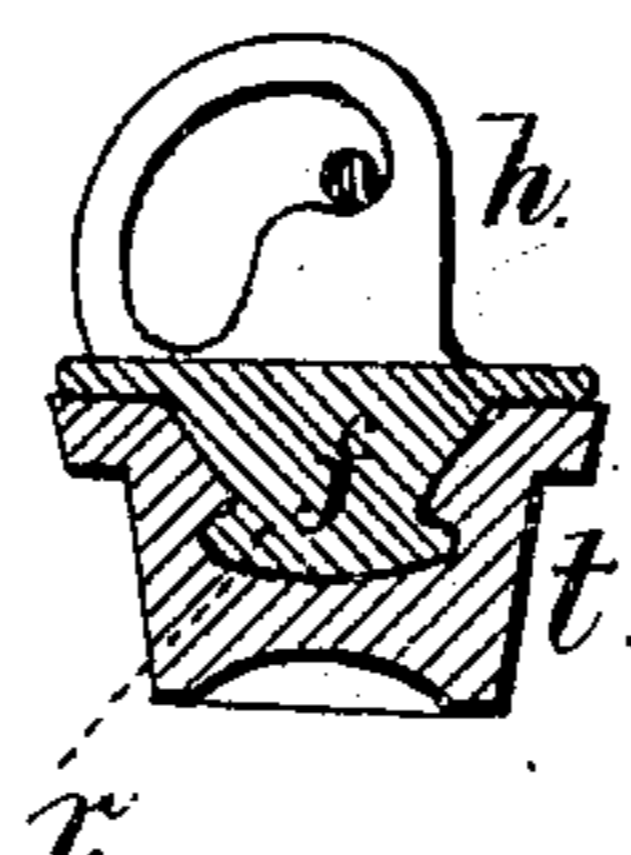
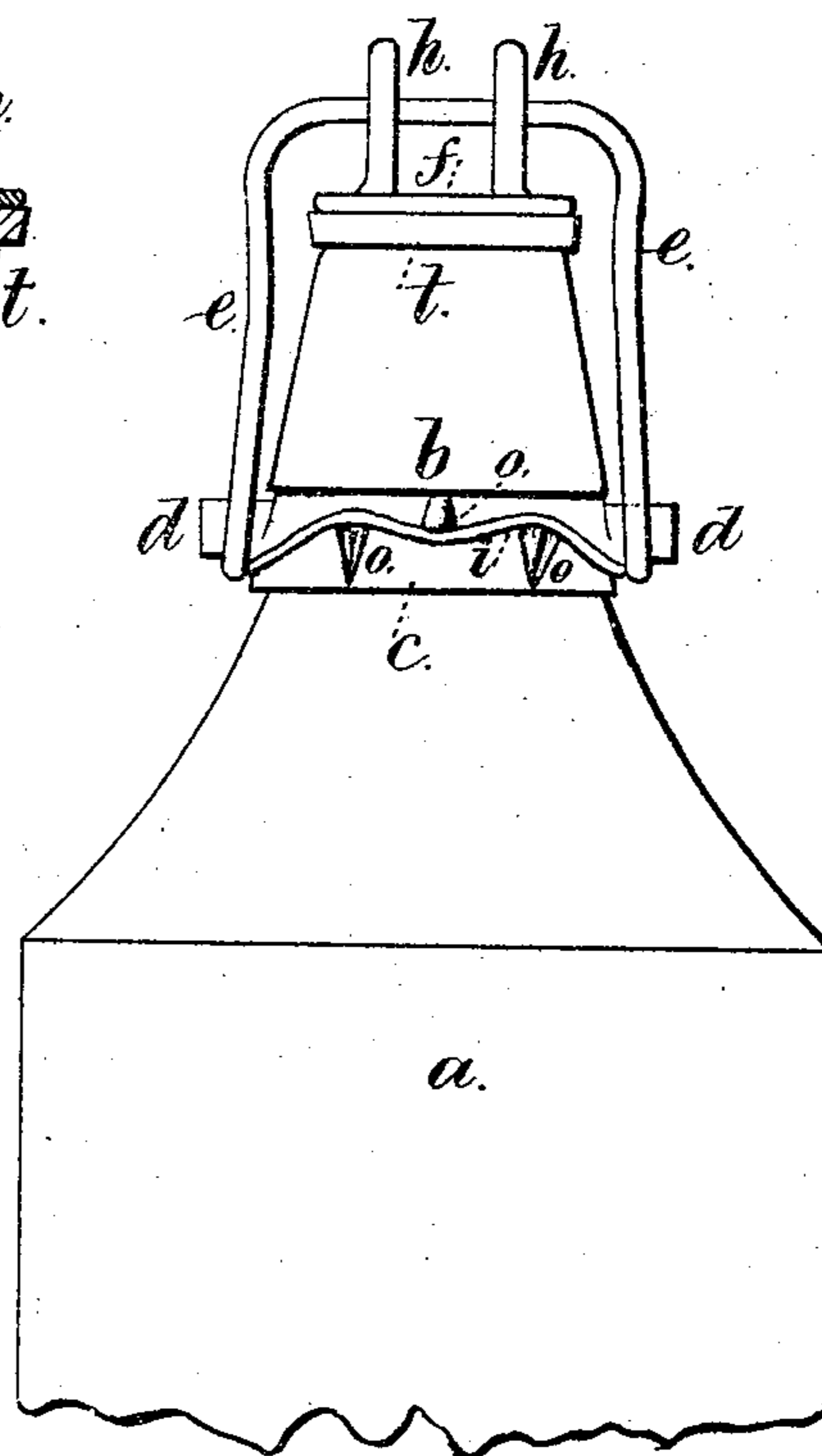


Fig. 2.



Witnesses,

Chas. H. Smith,  
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for Lemuel W. Serrell  
att'y.

# UNITED STATES PATENT OFFICE.

FREDERICH SCHLICH, OF NEW YORK, N. Y.

## IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **153,380**, dated July 21, 1874; application filed March 27, 1874.

*To all whom it may concern:*

Be it known that I, FREDERICH SCHLICH, of the city and State of New York, have invented an Improvement in Bottle-Stoppers, of which the following is a specification:

In Letters Patent No. 49,793 a metal plug is shown with wings having cam-slots for the swinging bail. In my present invention I make use of a similar metallic plug; but I attach the india-rubber stopper to the same by providing a metallic head upon the plug, entering a molded cavity in the elastic stopper, the stopper by its elasticity contracting around the head after it has been forced on.

In my patent 112,185 the collar or band for the neck of the bottle is of malleable cast metal, with projecting studs. I make a half-band of cast metal, having the studs for the swinging bail, and provide projections for keeping in place upon such half-band a wire that passes around the neck of the bottle and retains the same. By this construction the neck-band can be more easily fitted to bottles, and there is but a very slight projection beyond the shoulder of the bottle.

In the drawing, Figure 1 is an elevation of the neck of the bottle with my stopper applied thereto. Fig. 2 is a similar view at right angles to Fig. 1, and Fig. 3 is a section of the stopper.

The bottle *a* is made with a head or shoulder at *b*, as usual, beneath which the half-band *c* is placed. This band *c* has near its ends the projecting studs *d* for the eyes of the wire bail *e*, and the band *c* is secured to the bottle-neck

by the wire *i*, that passes above or below the lugs or projections *o*, so that it cannot slip off the band, and such wire *i* passes below the studs *d*, and the ends are twisted together. The wire *i* serves, also, to strengthen the band *c*, by confining the ends to the bottle below the studs *d*; but the said band *c* might be placed the other edge upward. The metallic plug *f* is made with the wings or wing *h* having cam-shaped slots, through which the bail passes, as in aforesaid patent, and the stopper can be turned aside, as shown by dotted lines in Fig. 1. The india-rubber stopper *t* is molded with a central cavity that is considerably enlarged in the bottom, and it is curved while upon the mold, and there is sufficient elasticity to allow for removing the rubber from the mold and pressing it over the projecting button-head *r* upon the stopper, which is of the same shape as the mold.

By this construction the elastic stopper is made with great facility, and easily applied to place, and the amount of rubber required is but little increased.

I claim as my invention—

The half-band *c* of cast-metal, having the lugs *d* for the bail and the projections *o*, in combination with the attaching-wire *i*, substantially as set forth.

In witness whereof I have hereunto set my signature this 13th day of March, 1874.

FREDERICH SCHLICH.

Witnesses:

GEO. T. PINCKNEY,  
CHAS H. SMITH.

500 words.