

(No Model.)

F. W. KOEHLER.
BOTTLE LOCK.

No. 575,248.

Patented Jan. 12, 1897.

Fig. 1.

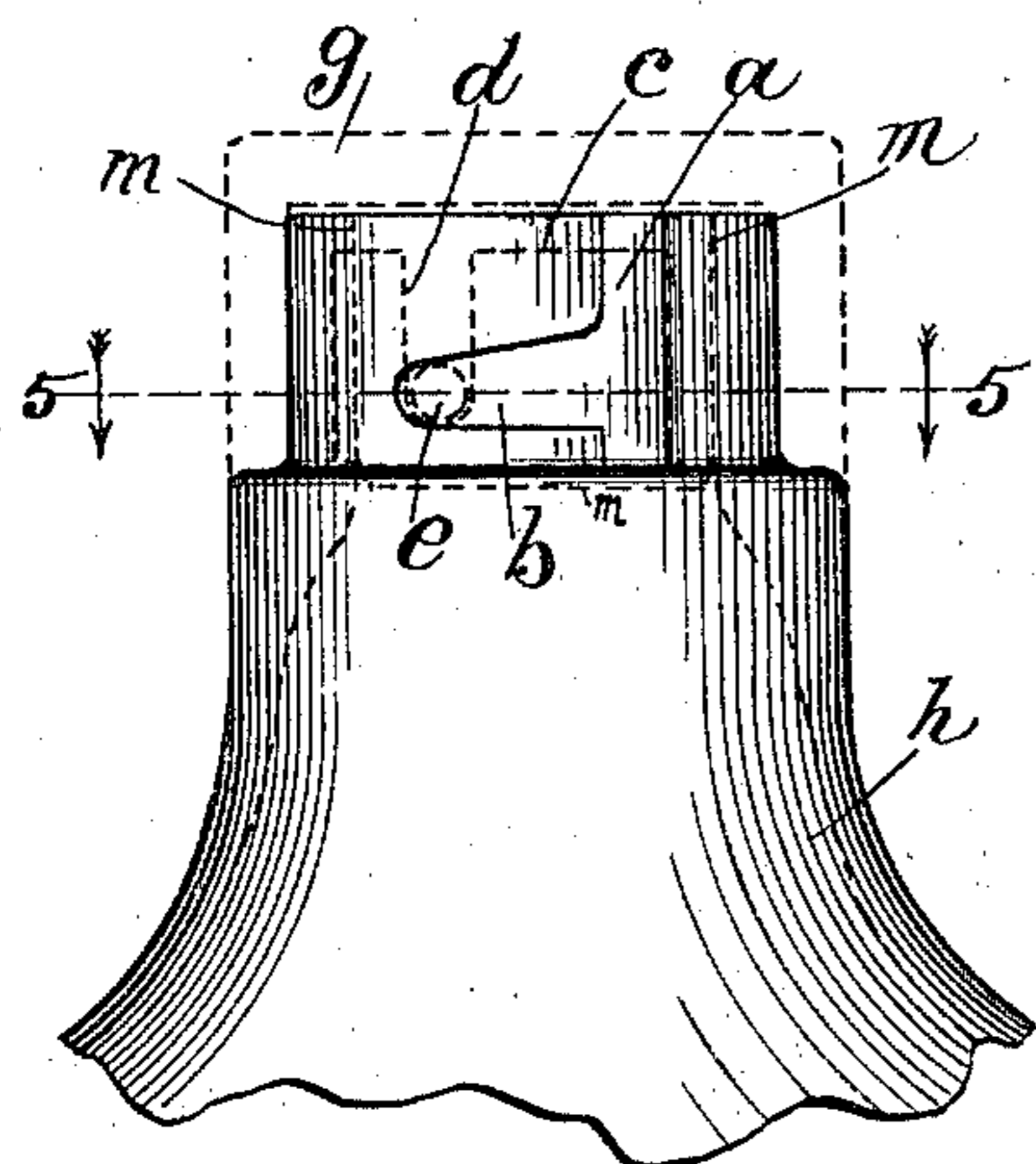


Fig. 2.

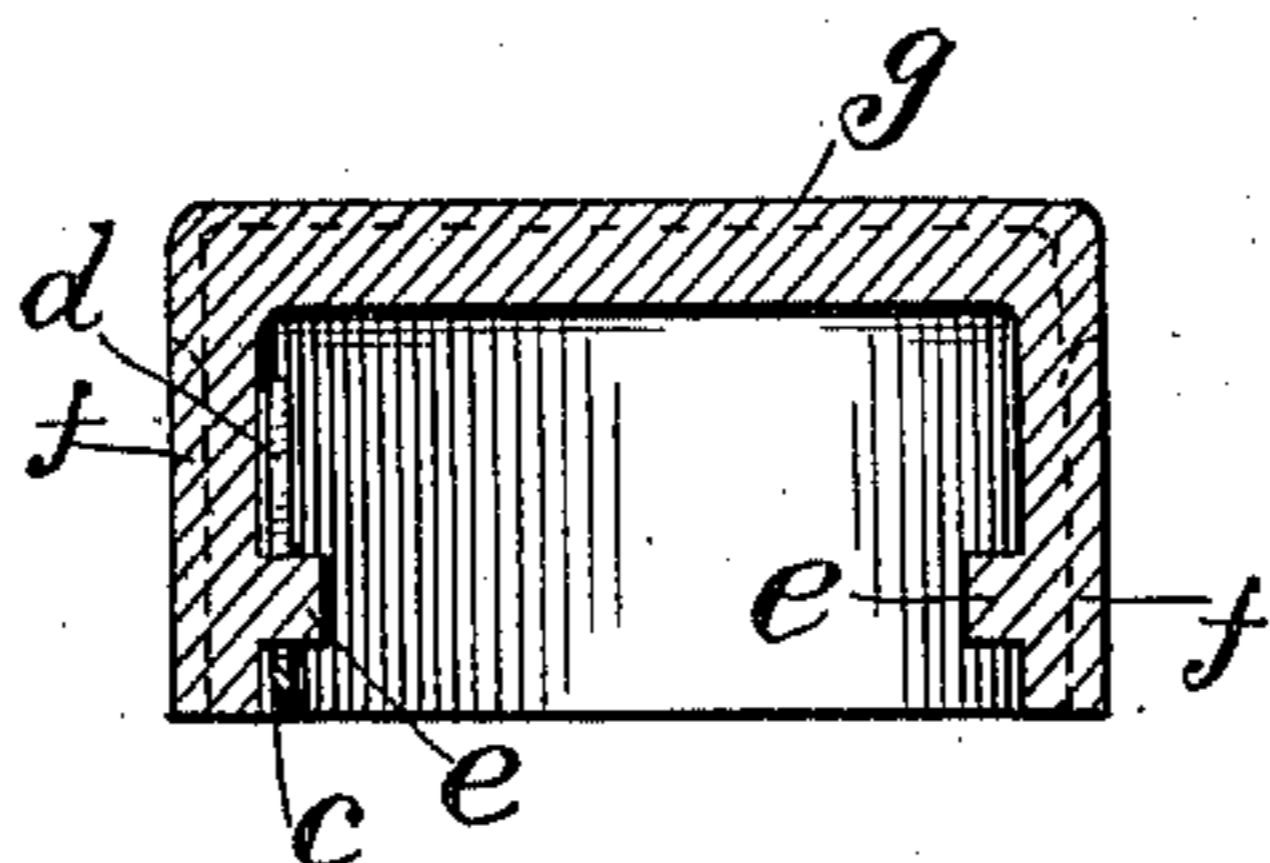


Fig. 3.

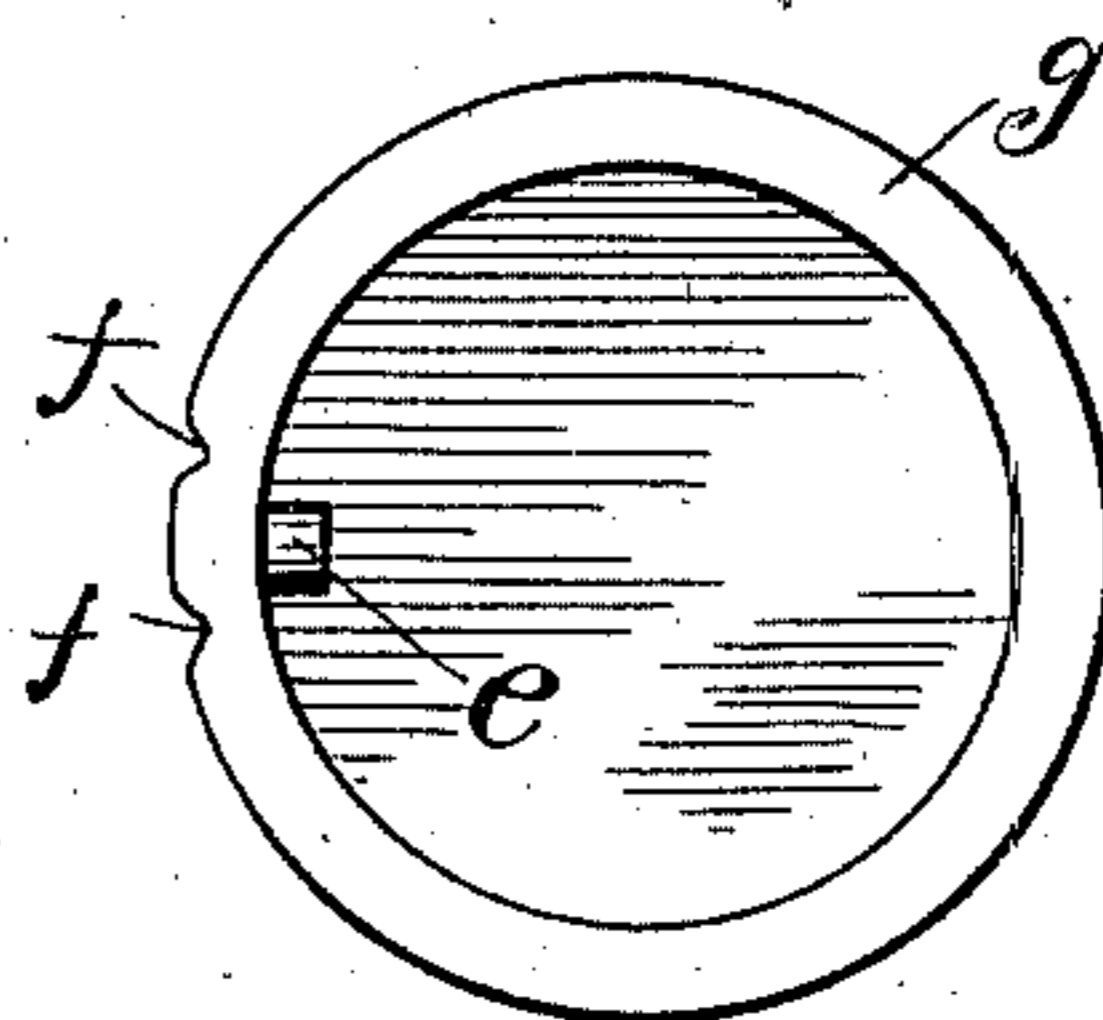


Fig. 5.

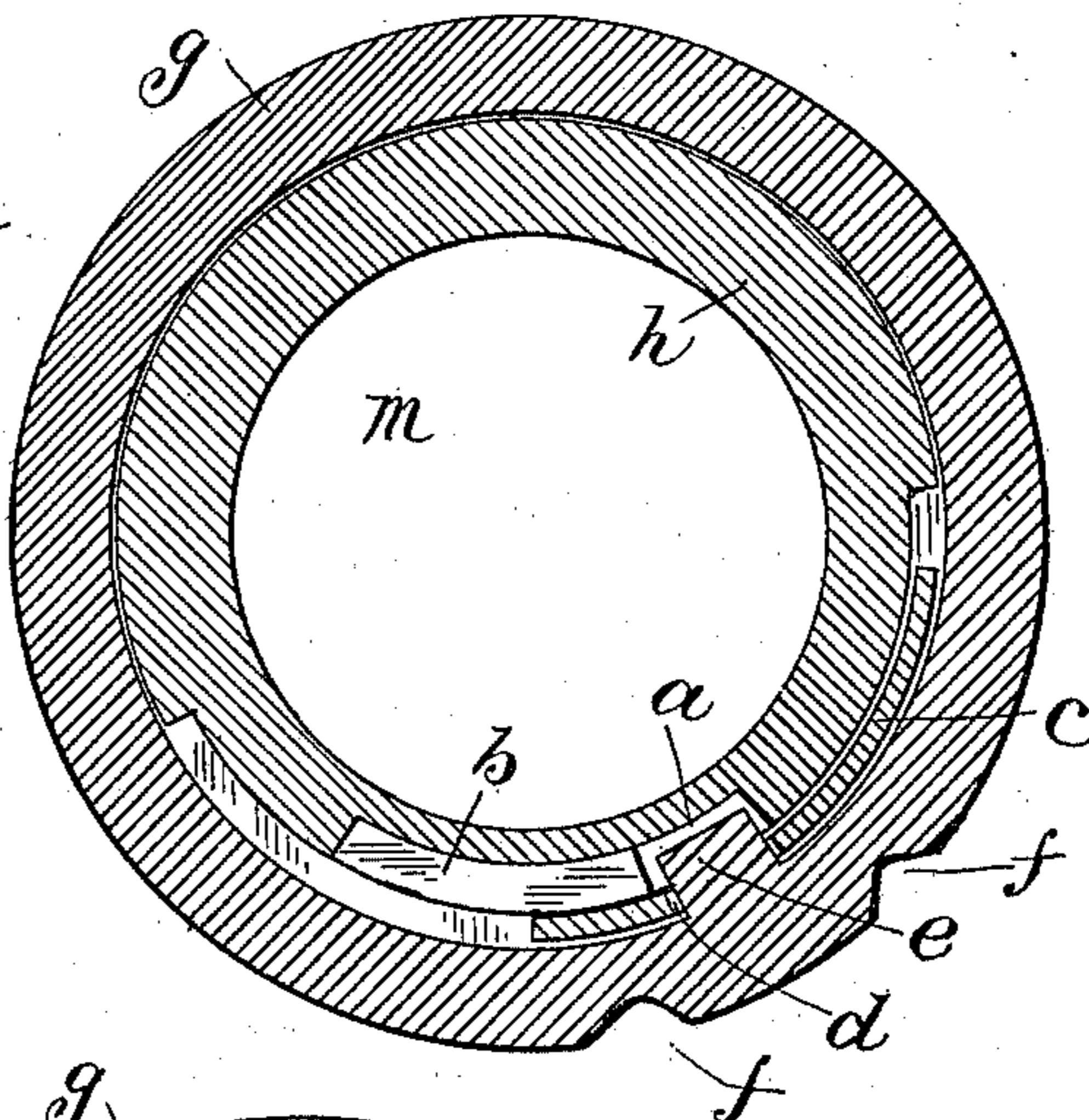


Fig. 4.

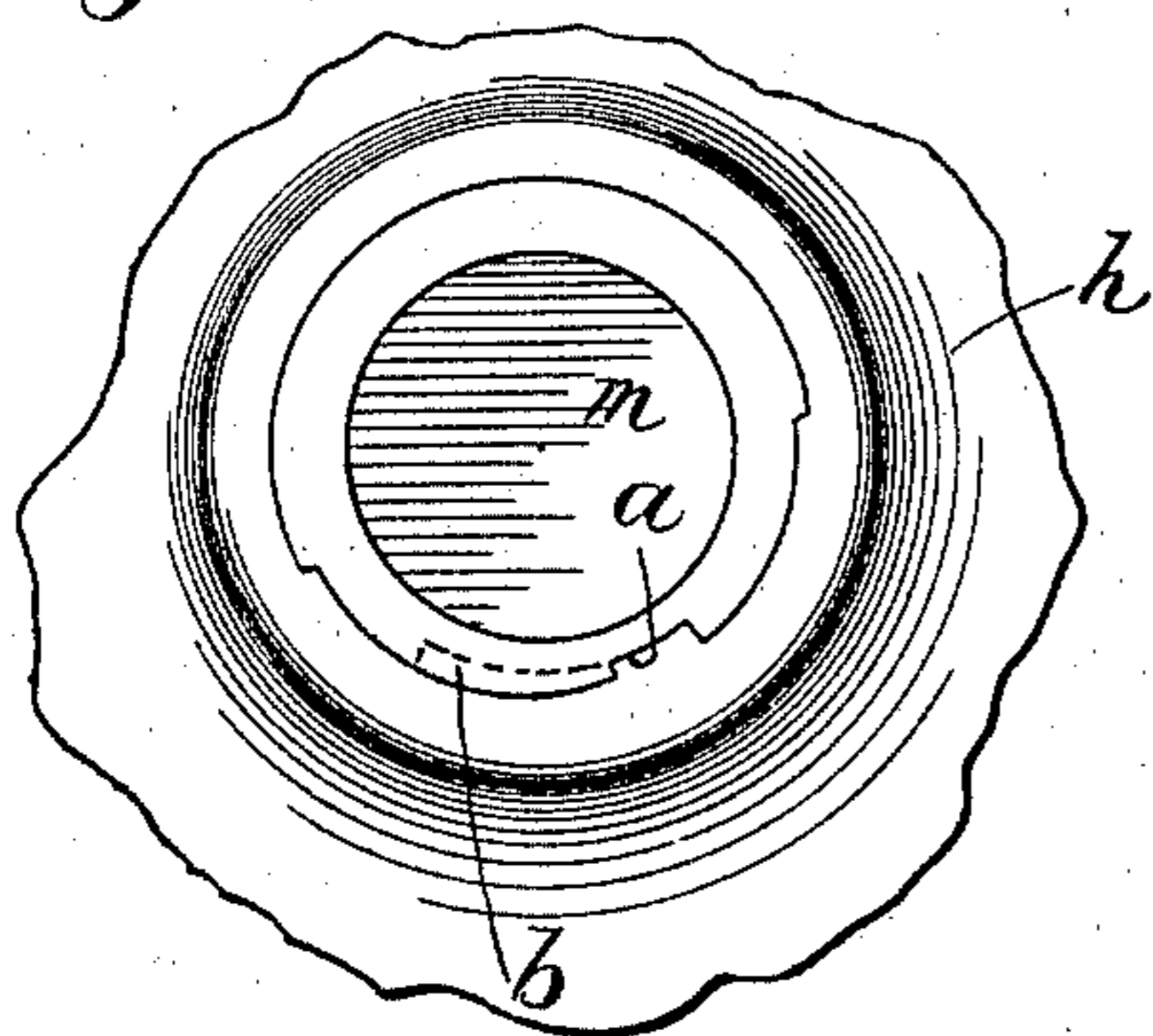


Fig. 7.

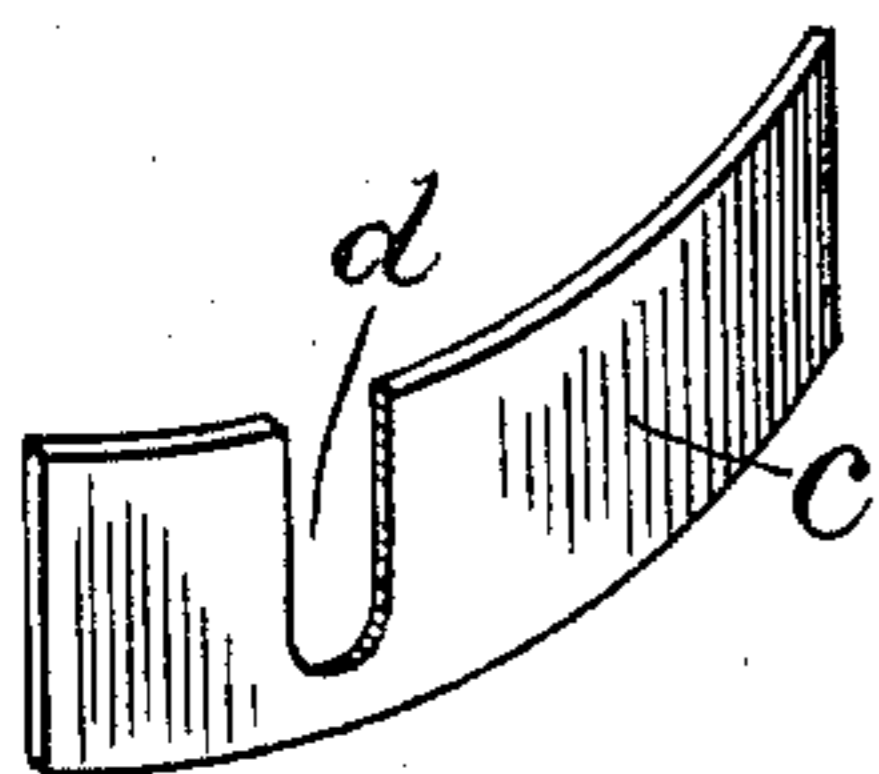
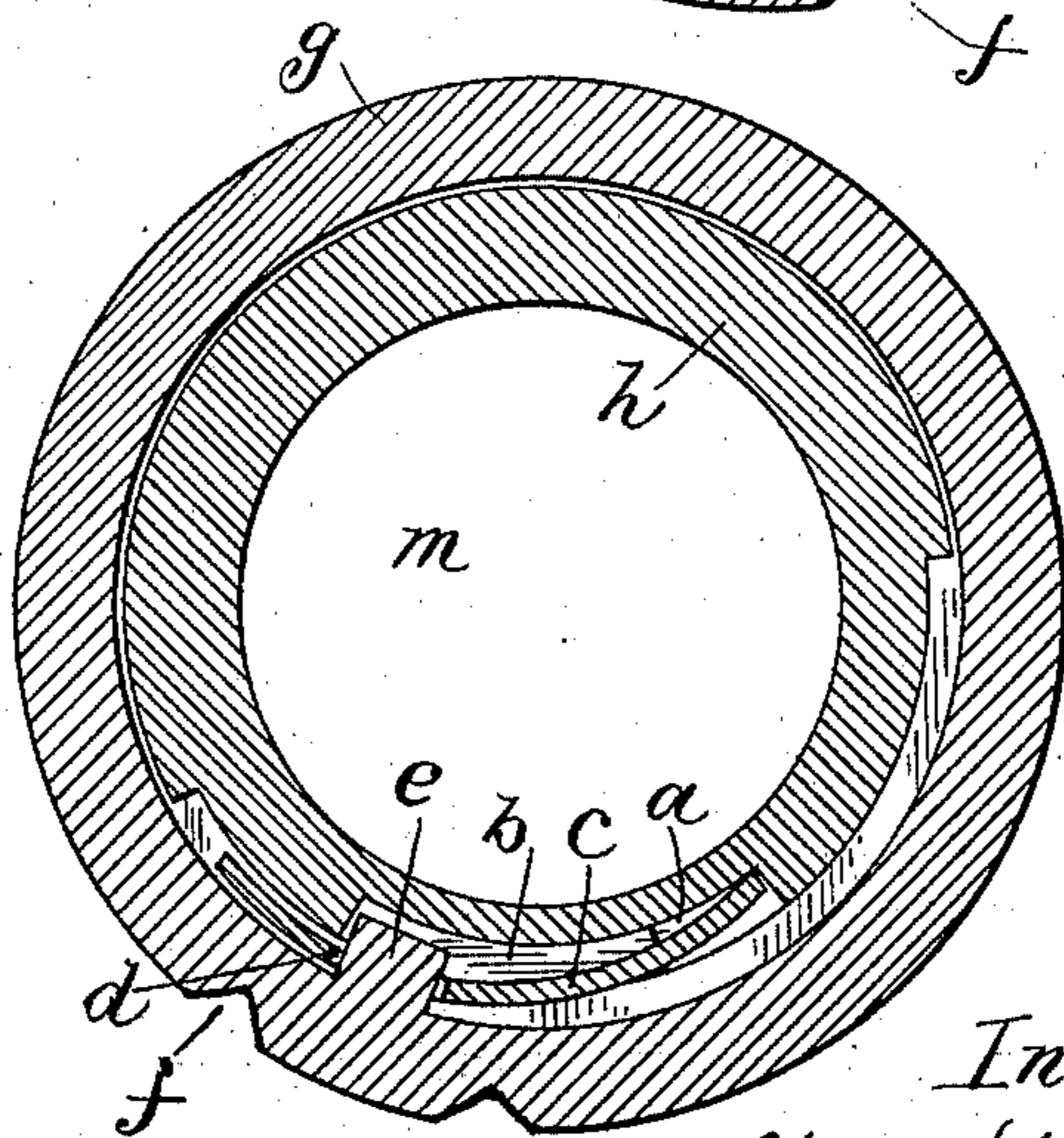


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRED W. KOEHLER, OF CHICAGO, ILLINOIS.

BOTTLE-LOCK.

SPECIFICATION forming part of Letters Patent No. 575,248, dated January 12, 1897.

Application filed July 28, 1896. Serial No. 600,744. (No model.)

To all whom it may concern:

Be it known that I, FRED W. KOEHLER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bottle-Locks, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, in which—

Figure 1 shows the neck end of a bottle closed with my lock, the removable part thereof being shown in broken outlines. Fig. 2 is a central vertical section of the cap and a transverse section of the locking-spring. Fig. 3 is a plan view of the cap as seen from below. Fig. 4 shows Fig. 1 in plan view with cap and spring removed. Fig. 5 is an enlarged scale of a transverse section on plane 5 5 of Fig. 1, with cap and spring in place, ready to close or lock. Fig. 6 shows the parts of Fig. 5 in locked position. Fig. 7 shows the locking-spring in perspective.

Like letters refer to like parts.

The object of my invention is to make a lockable bottle which will lock the mouth or cork when used and which can never be opened unless the cap or other locking mechanism is broken, but without injury to the bottle, then again ready to be filled and locked as before. To attain said desirable ends, I construct my said device in substantially the following manner, namely:

I provide the bottle with a short and, if desired, shouldered neck, which may be corked in the usual way with a cork *m*, shown flush with the top of the neck. The cap may, however, be made sufficiently close to dispense with the cork. Into the outer side of said neck is cut a vertical channel *a*, with a lateral branch channel *b*. The upper side of said branch channel is inclined so as to give a screw effect, and in fact said side may form the side of a short screw-thread. Thus constructed the bottle is complete. To lock the cork or mouth a cap *g* is provided, which may fit closely to the top of the neck and its sides. On the interior of said cap are spurs *e*, on opposite sides, or only one spur *e*, adapted to pass into said channels, and at a proper height to work suitably therein.

The bottom of the cap may be ground to be liquid-tight, or the interior top of the cap

may be made to fit tight upon the top of the neck, or both said parts may be made tight in any known way to dispense with the use of the cork. The use of the cork is optional. A spring *c*, with a notch *d* to receive the spur *e* and curved to a somewhat smaller radius than the outer cylindrical surface of the neck, is placed on neck and spur, as shown.

Either the side of the neck may be cut away, as shown, or in lieu thereof the cap may be cut away to make room for said spring. When the parts are assembled, as shown in Fig. 5, the cap *g* is turned into the position shown in Fig. 6, so that the rear end of the spring *c* may snap into the channel *a* when the spur *e* has about reached the end of the channel *d*. The bottle is thus locked, because the spur and spring will prevent turning the cap backward or forward or lifting it upward. Only one locking-spring is, however, necessary. There is then no way of opening the bottle except by breaking the cap. To facilitate such breaking, grooves *f f* on each side of the spur, or on opposite sides of the cap, which may be connected across the top, will best effect said purpose. The cap is preferably made of glass, because then writing on the cork or on paper placed inside of the cap can be read and every desired guarantee of genuineness of bottle contents secured and effectually preserved. After being broken open the bottle may be refilled and relabeled for any other material and secured in the same way. The cap and lock being very cheaply constructed will add but a small sum to the cost or the locking of the bottle.

The essential feature of this invention is that the bottle is securely locked, and it is immaterial how it is opened.

What I claim is—

The combination with a bottle-neck and cap therefor, of a vertical channel with a transverse branch, a spur to operate in said channels and a locking-spring, attached to said spur, to enter and hold on the side of said vertical channel, in locked position, substantially as specified.

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Witnesses:

WM. ZIMMERMAN,
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