

(No Model.)

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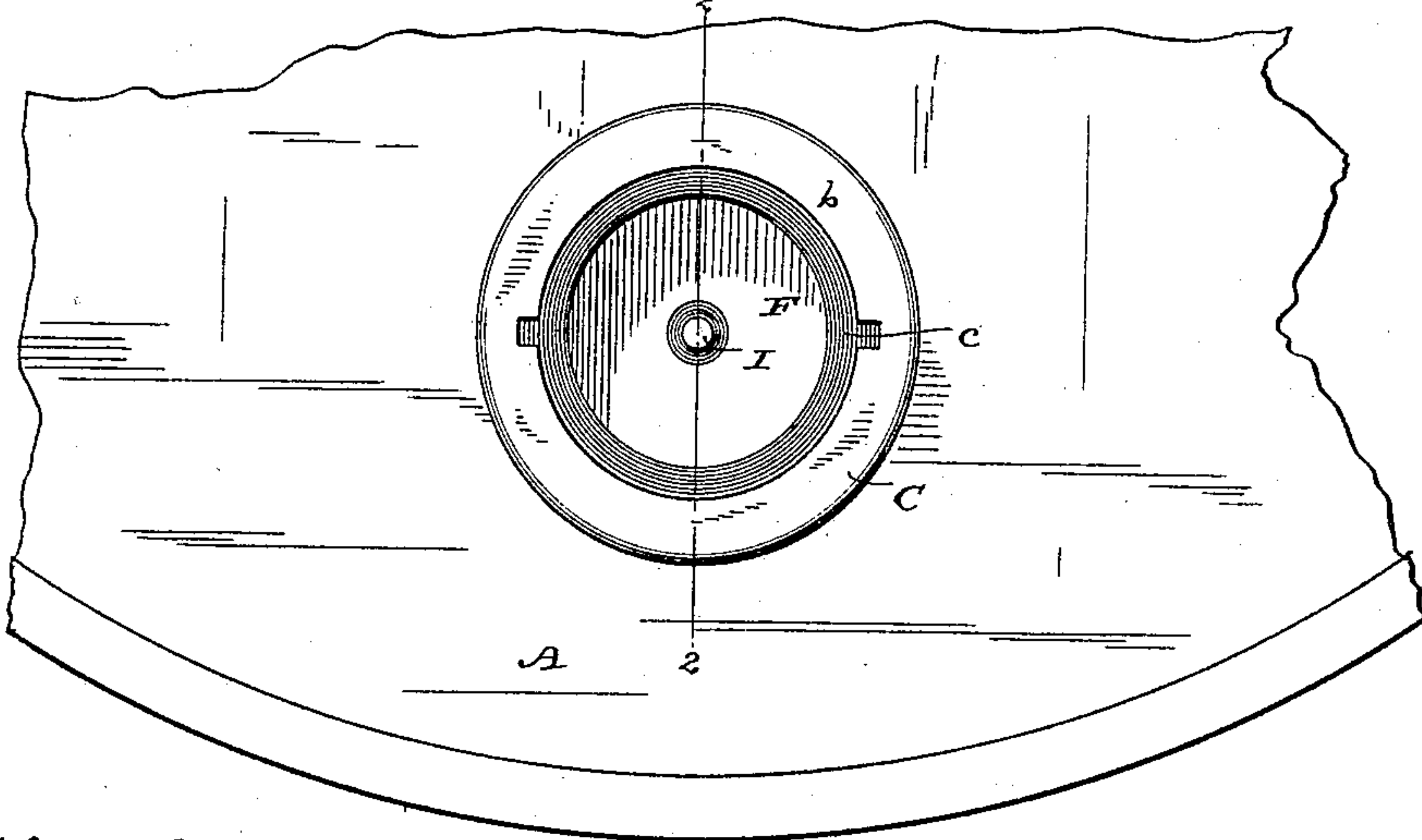
H. L. GATES.

STOPPER FOR BUNGS, TAP HOLES OF CASKS, &c.

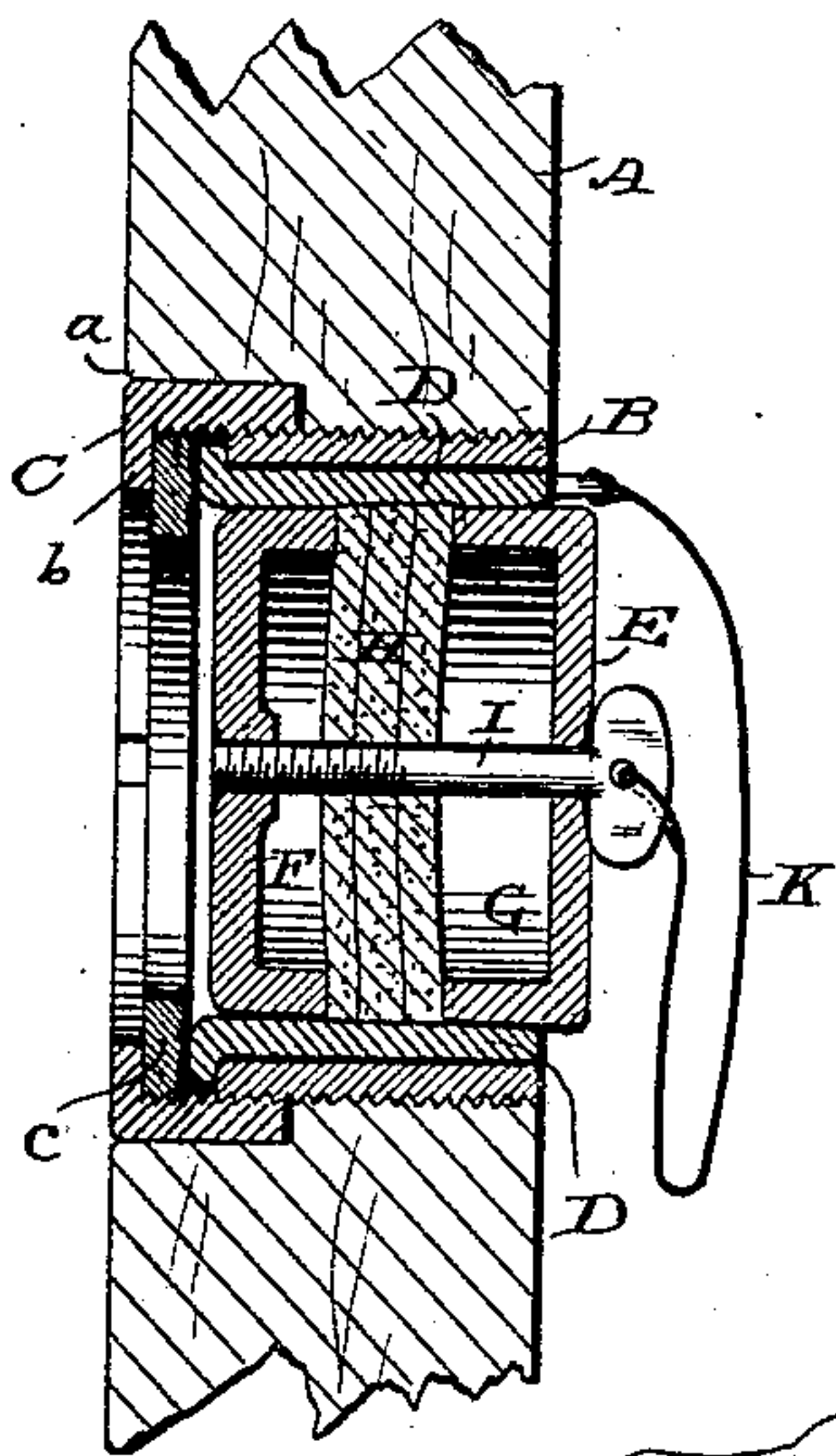
No. 397,795.

Patented Feb. 12, 1889.

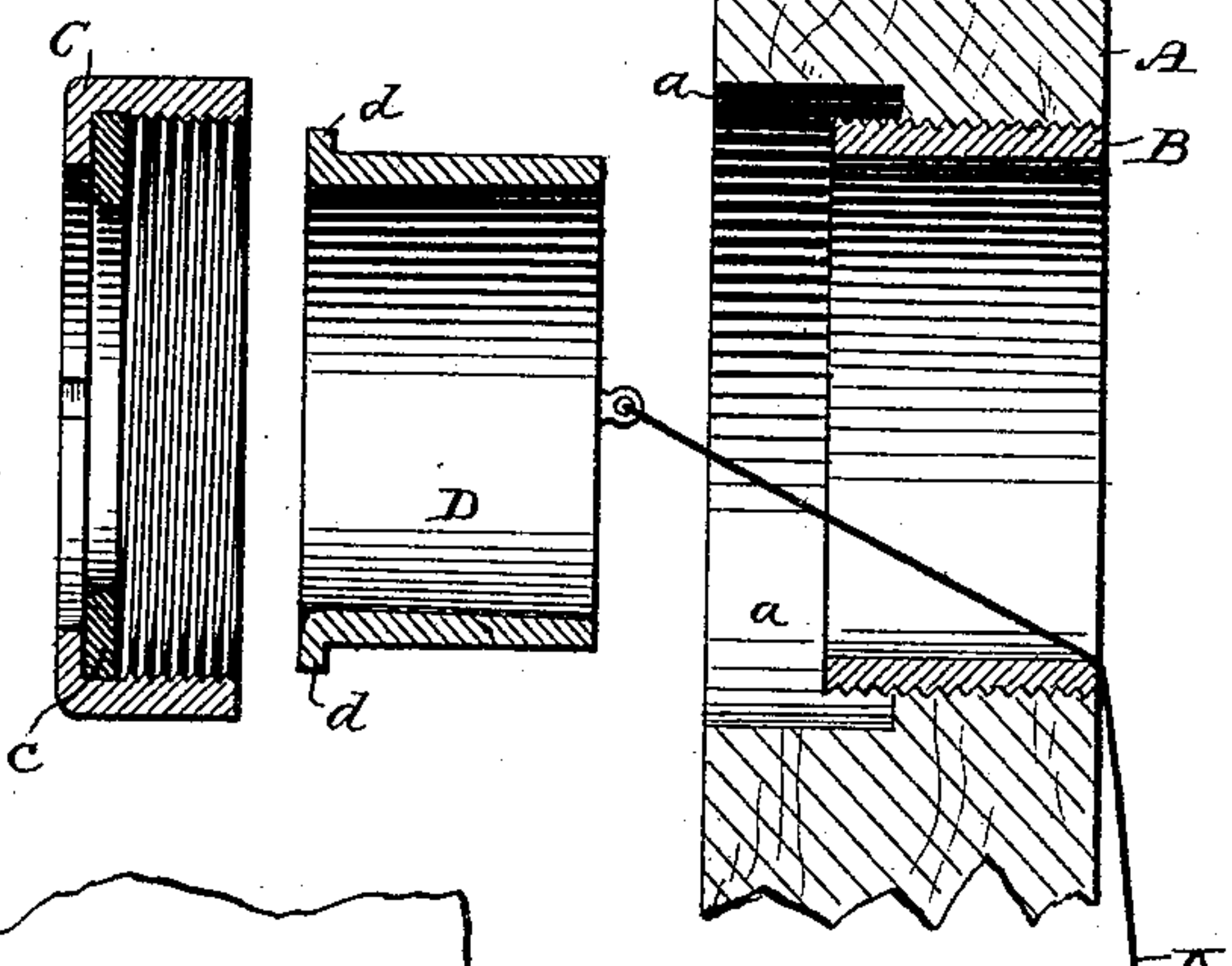
*Fig. 1.*



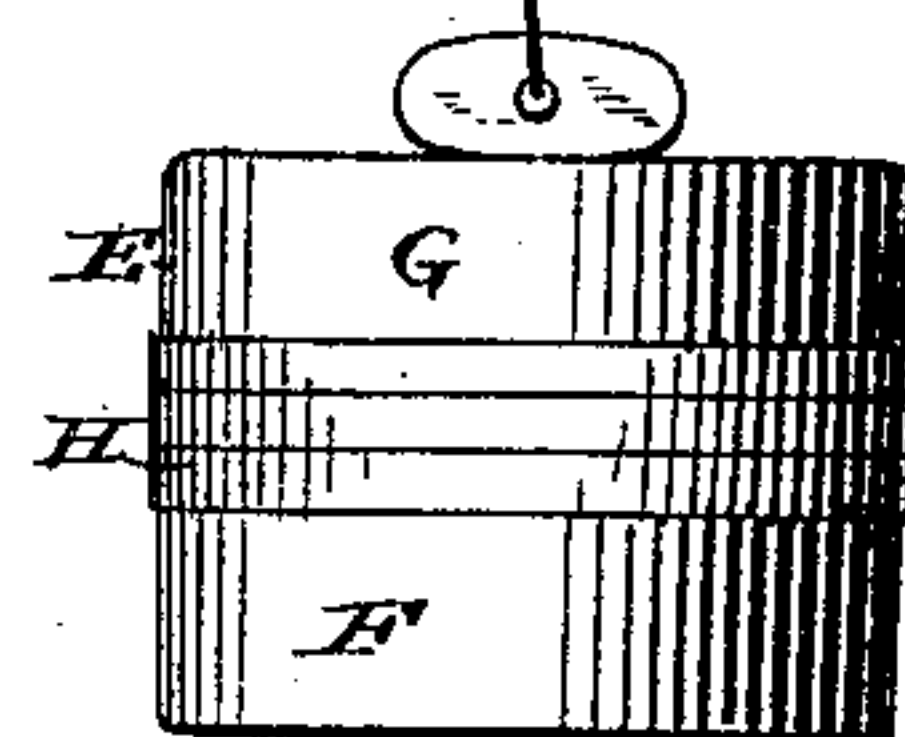
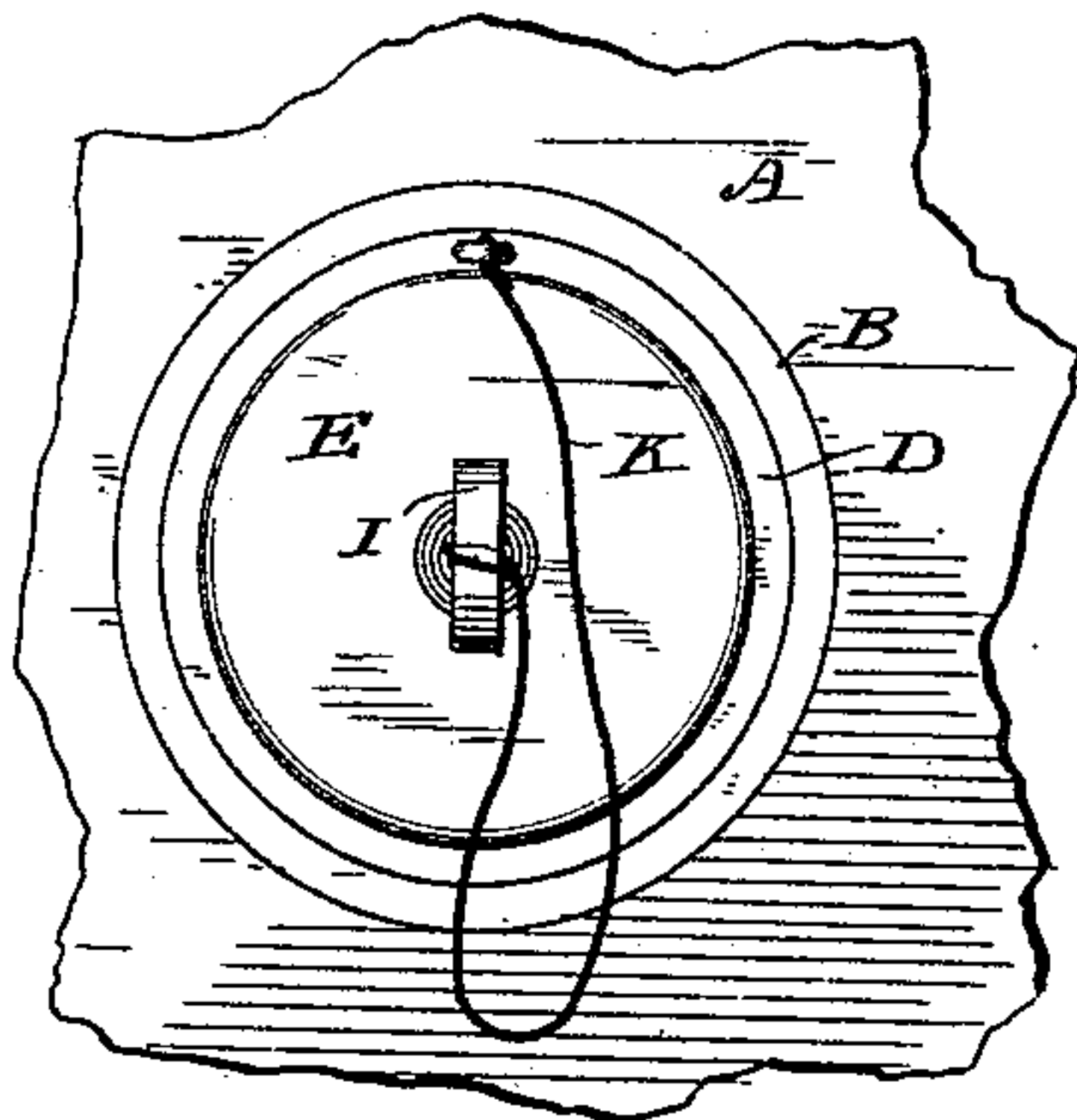
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses.  
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(No Model.)

2 Sheets—Sheet 2.

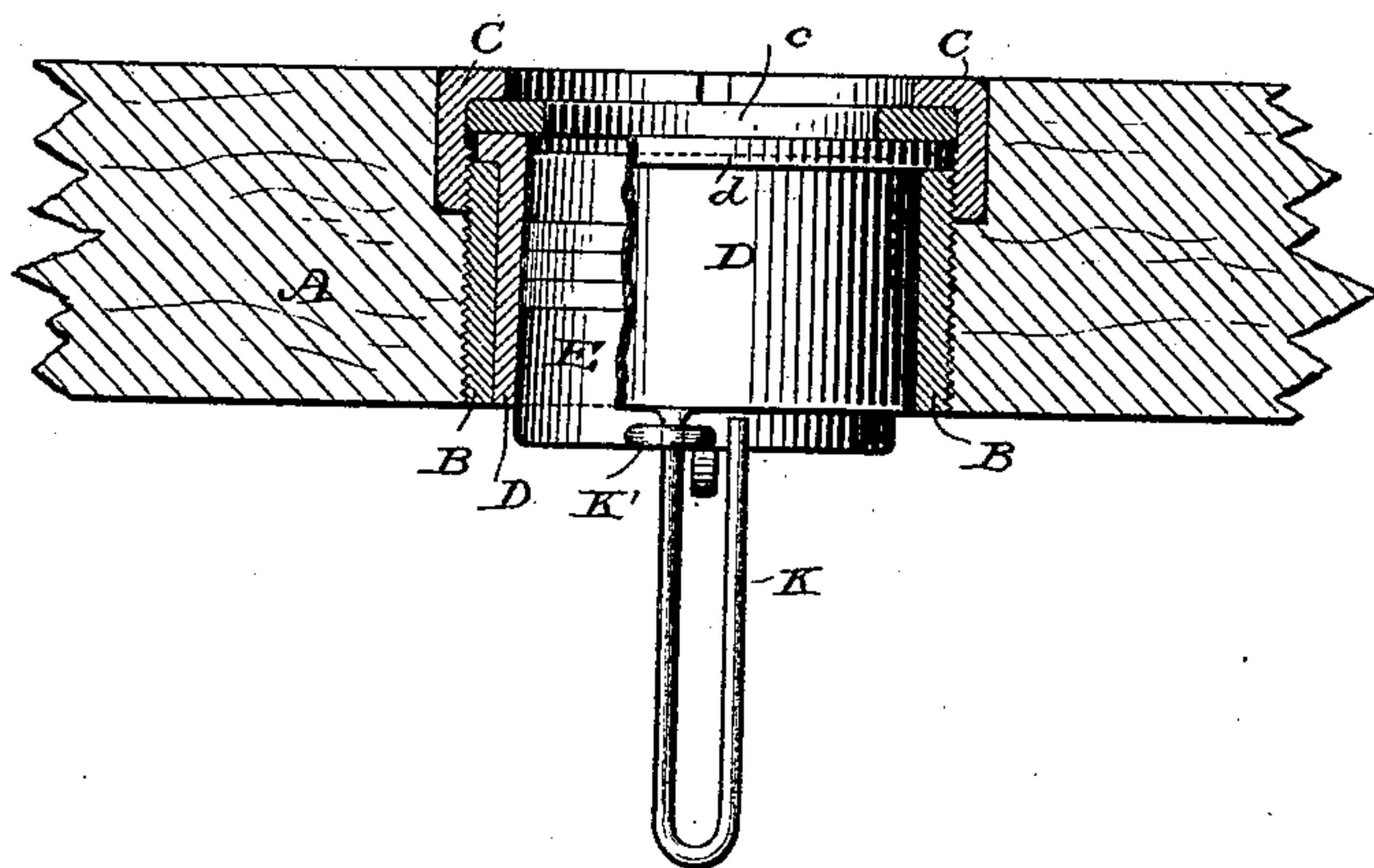
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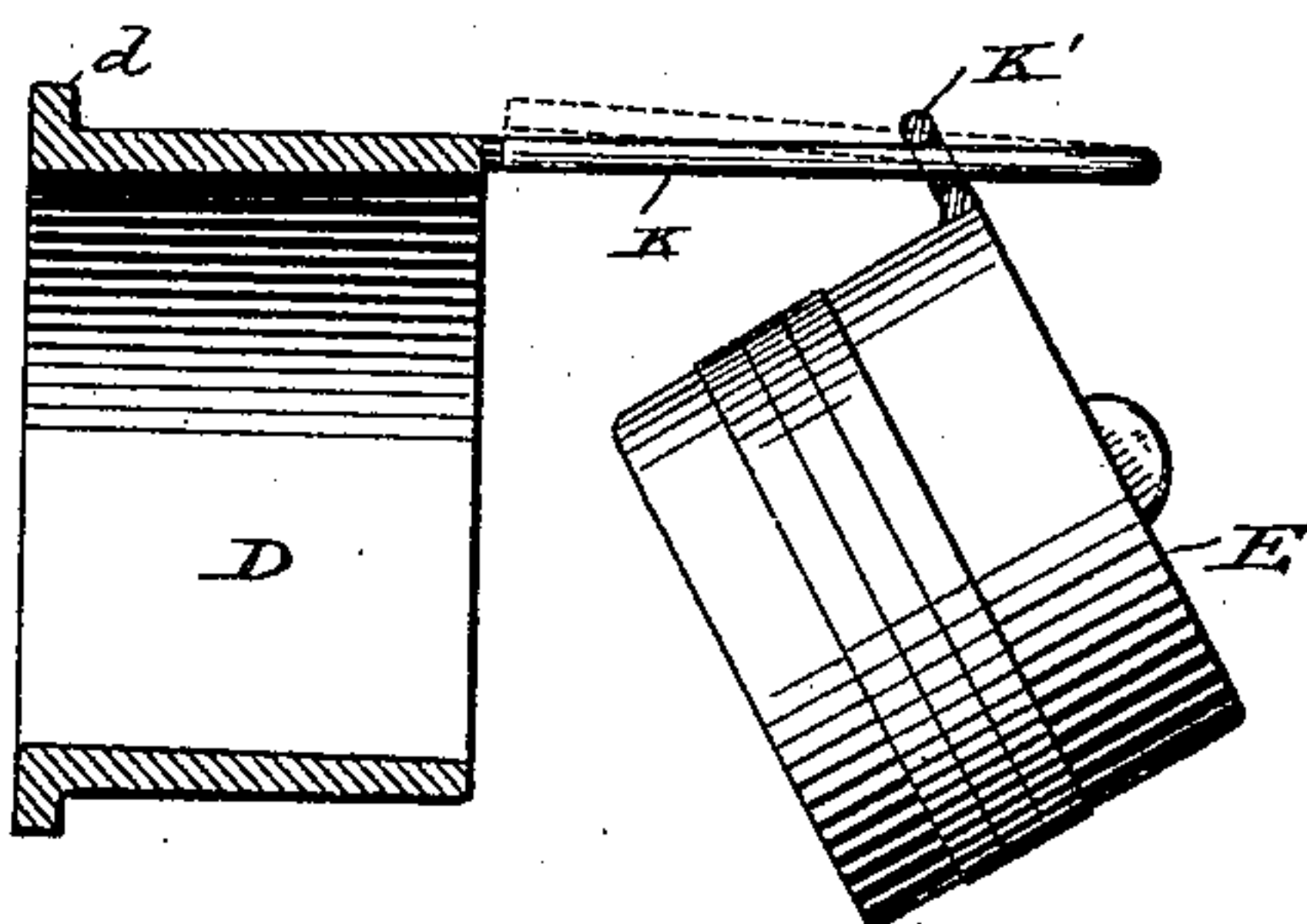
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*Fig. 5.*



*Fig. 6.*



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# UNITED STATES PATENT OFFICE.

HENRY L. GATES, OF MILWAUKEE, WISCONSIN, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO MATTHEW H. ESCOTT, OF SAME PLACE.

## STOPPER FOR BUNGS, TAP-HOLES OF CASKS, &c.

SPECIFICATION forming part of Letters Patent No. 397,795, dated February 12, 1889.

Application filed September 3, 1887. Serial No. 248,675. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY L. GATES, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, a citizen of the United States, have invented certain new and useful Improvements in Stoppers for Bungs, Tap-Holes of Casks, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to stoppers for bungs and tap-holes of casks, &c., and will be fully described hereinafter.

In the drawings, Figure 1 is an elevation of a portion of a cask-head with my device in place therein. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a section showing the parts detached from each other, and Fig. 4 is a view of my device from the inside of the cask. Figs. 5 and 6 show modifications.

A is the cask, and B is a bushing that fits in the inner portion of the tap or bung hole, while the outer portion of this hole is enlarged, as at *a*, to permit a cap, C, to be screwed onto the projecting end of the bushing.

D is a housing that fits in the bushing B and has a flange, *d*, to prevent it from being pushed through the housing into the cask and for engagement with a washer, *c*, that is interposed between it and the flange *b* of the cap.

E is the stopper, which consists, preferably, of two hollow cups, F G, which face each other, and between which are interposed a stuffing ring or rings, H, which may be of any suitable material, such as rubber or leather.

The cups F G are perforated in the center to receive a clamping-pin, I, which is screw-threaded at one end to correspond with the screw-threads in the perforation in cup F. The head of clamping-pin I is connected by a wire or cord, K, with the housing D.

The operation of my device is as follows: When a cask is to be closed, the stopper E is forced tightly into the housing D, and then housing D is placed in bushing B and the cap C is screwed into place, the washer bearing upon the flange *d* of the housing D and making an air-tight joint. When a cask is to be tapped, the faucet is driven in against the stopper E, which latter is forced into the cask, where it hangs suspended from bushing D

until the cask has been emptied and is to be prepared for refilling. When this is to be done, the cap C is screwed off and the housing, which fits loosely in the bushing, is taken out, and with it the stopper E, leaving an aperture sufficiently large through which to clean or pitch the cask.

When the stuffing H gets loose, it will be only necessary to turn the clamping-pin I so as to draw the caps together, and thus cause the stuffing to bulge out and take up the wear.

In the modifications shown in Figs. 5 and 6 I attach the stopper to the housing D by a wire loop, K, one end of which is secured rigidly to the housing, while the other is unattached, and as the loop is elastic the unattached end may be lifted, as shown in dotted lines, Fig. 6, and a ring, K', that projects from the stopper, slipped onto it.

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

1. In a closure for bungs, tap-holes of casks, &c., the combination, with a bushing fixed in the bung or tap-opening, of a housing removably fitting therein and provided with a stop on its outer end to prevent it from being forced through the bushing into the cask, a stopper fitting in and attached to said housing, and a screw-cap for confining the housing in place, formed with an inwardly-extending peripheral flange, substantially as and for the purpose set forth.

2. The combination, in a closure for bungs, tap-holes of casks, &c., of a screw-threaded bushing, a housing loosely fitting therein and having a stop to prevent it from being forced into the cask, a stopper attached to the housing, an annular screw-cap for confining the housing in place, and a washer interposed between the screw-cap and housing, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

HENRY L. GATES.

Witnesses:

S. S. STOUT,  
MAURICE F. FREAR.