

C. BUTCHER.

DISAPPEARING AND SAFETY HITING POST.

(Application filed Mar. 22, 1901.)

(No Model.)

2 Sheets—Sheet 1.

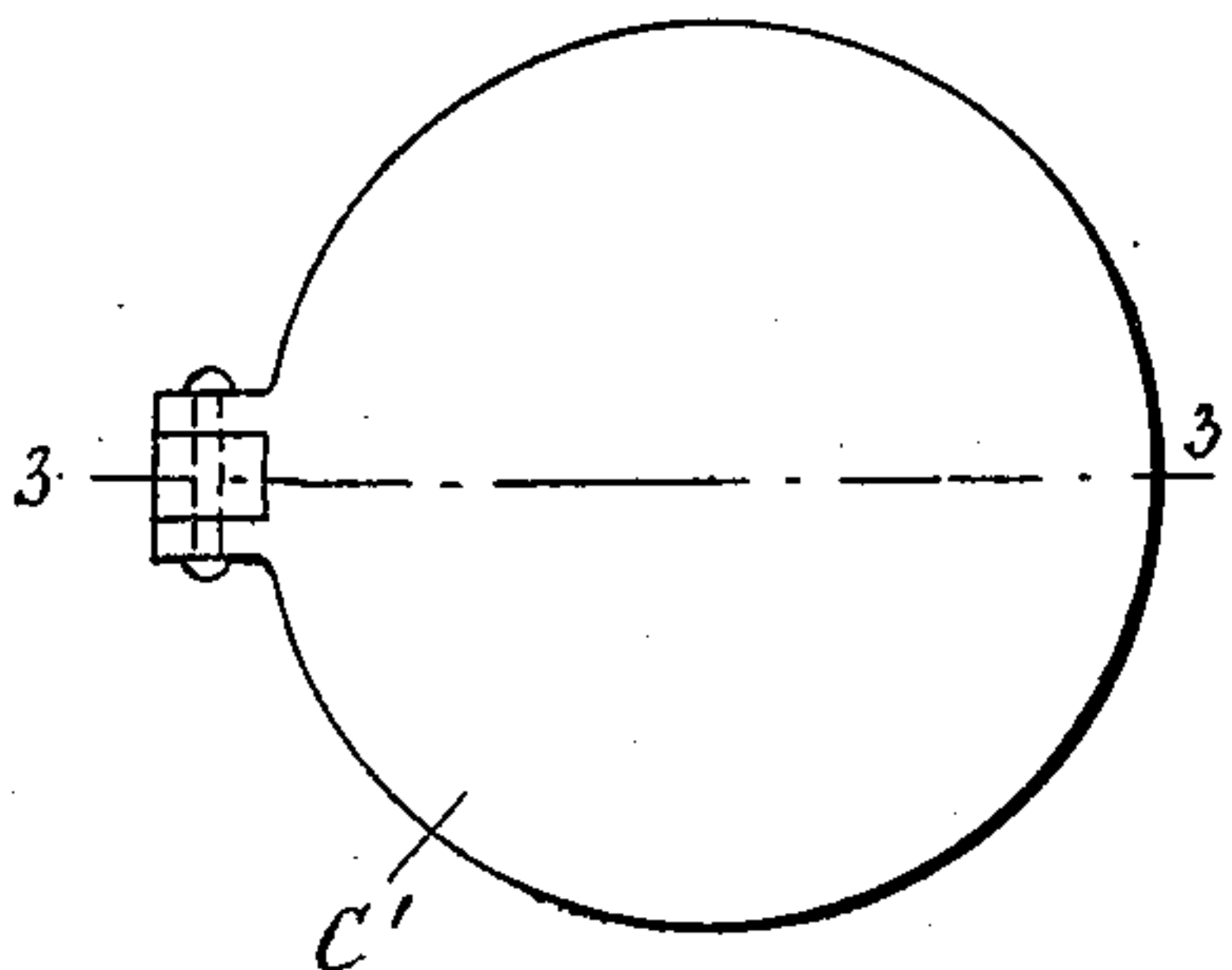


Fig. 1.

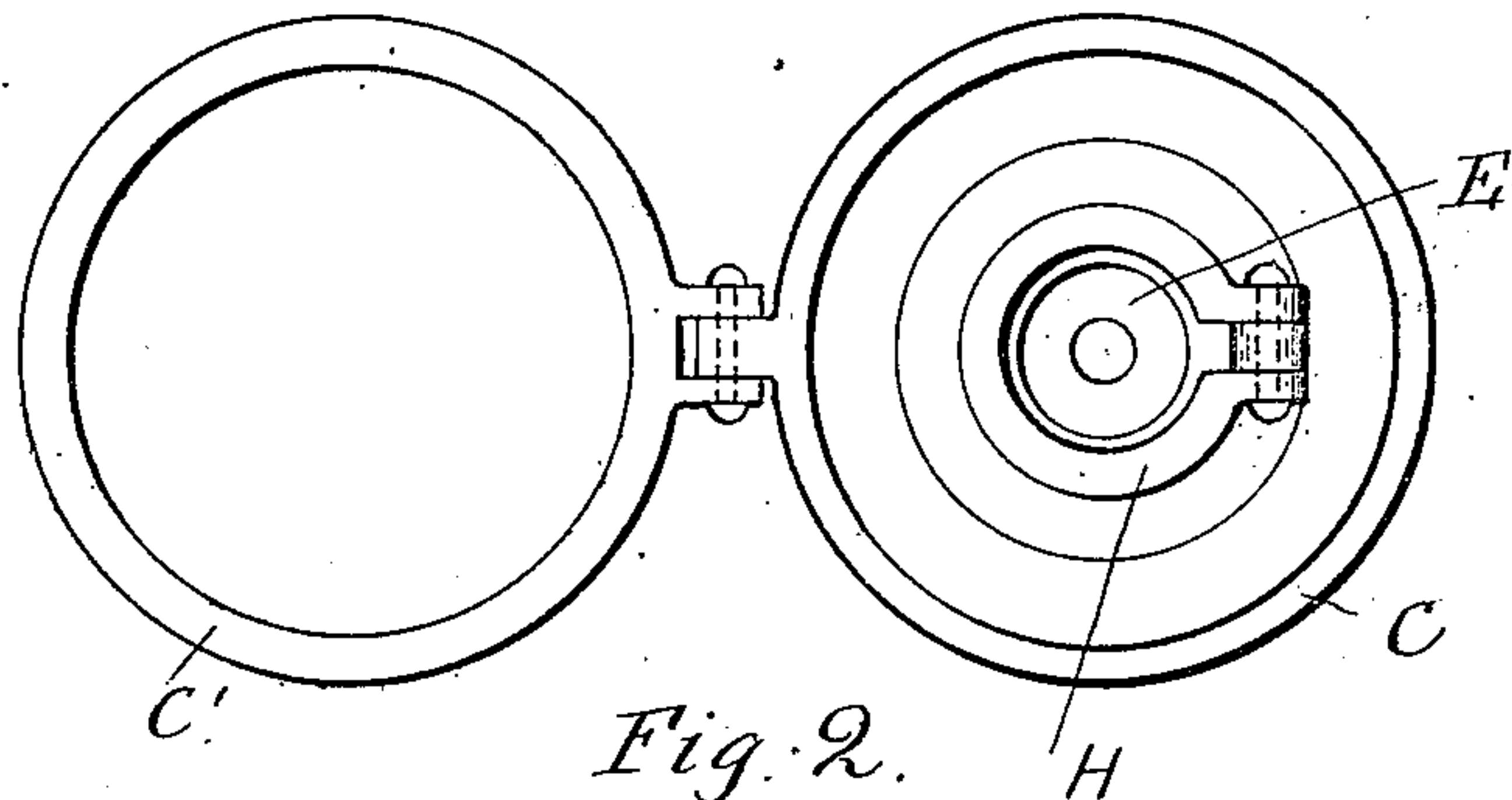


Fig. 2.

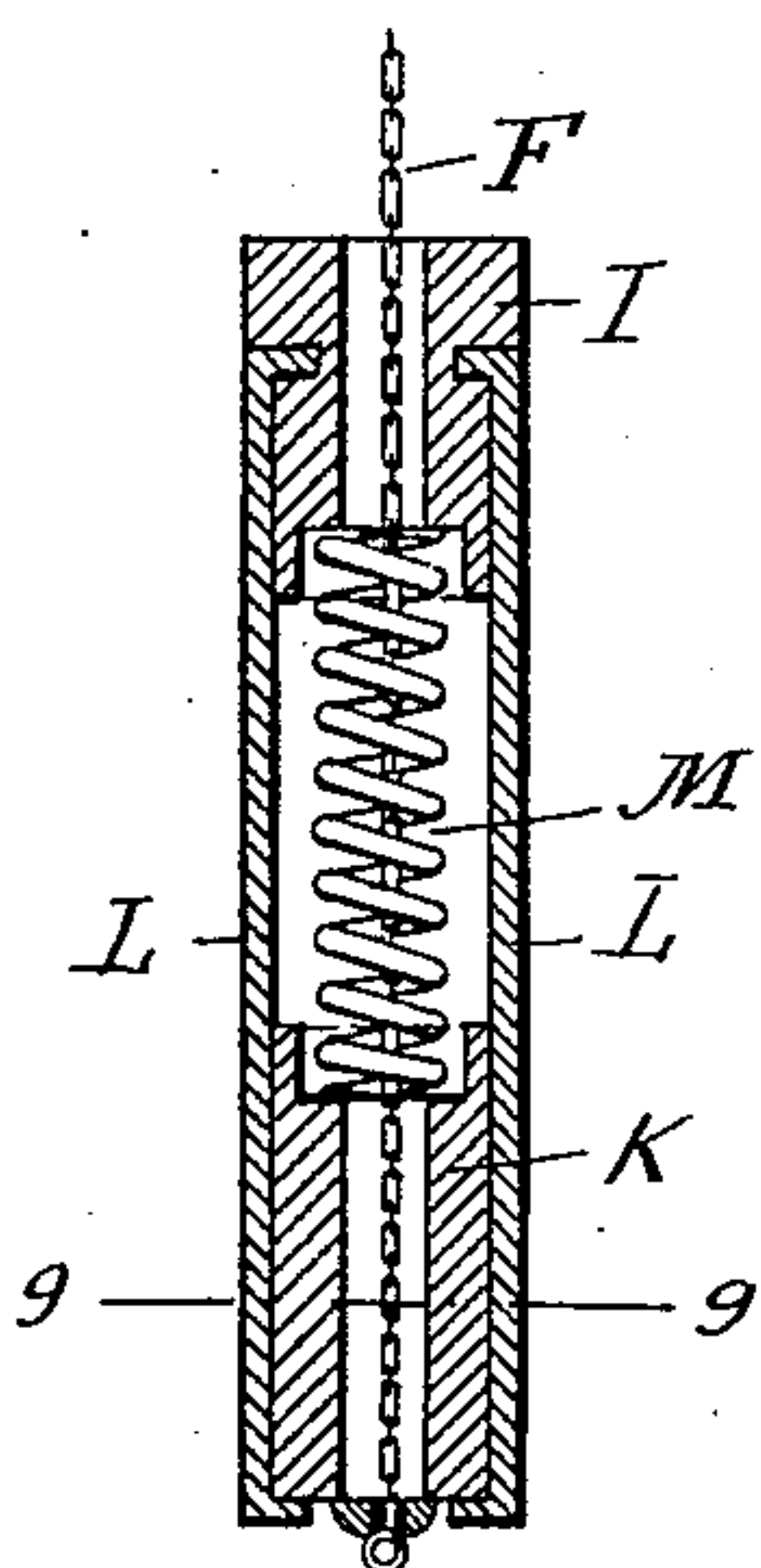


Fig. 8.

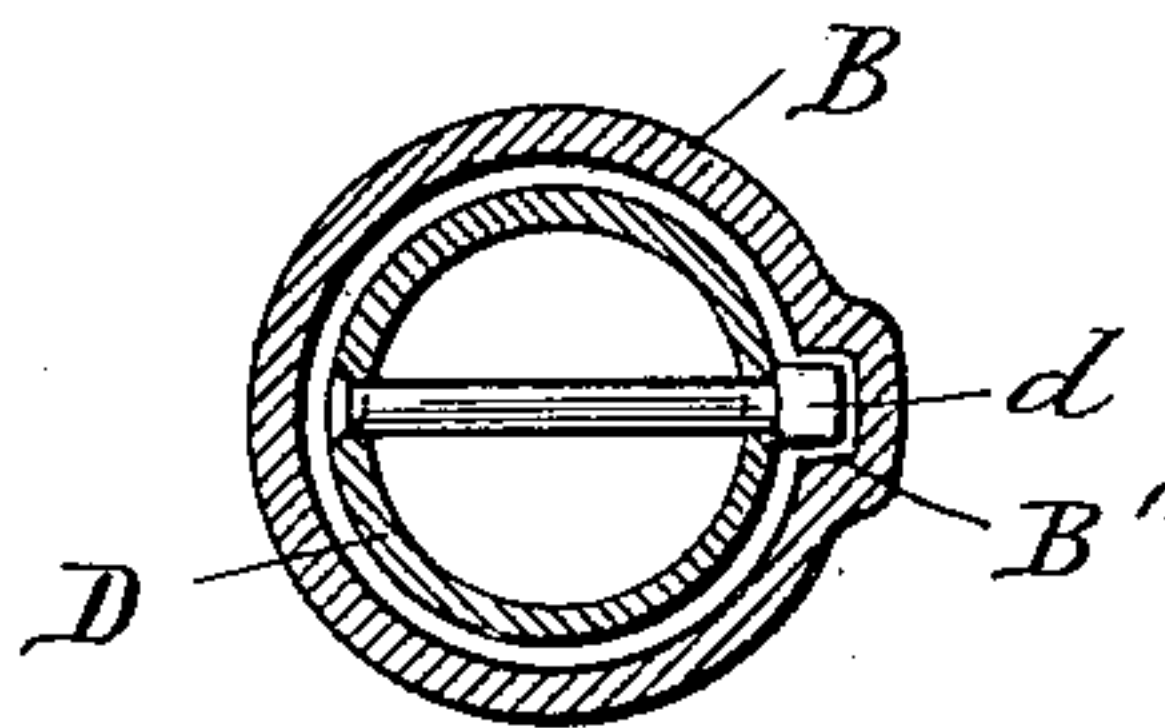


Fig. 5.

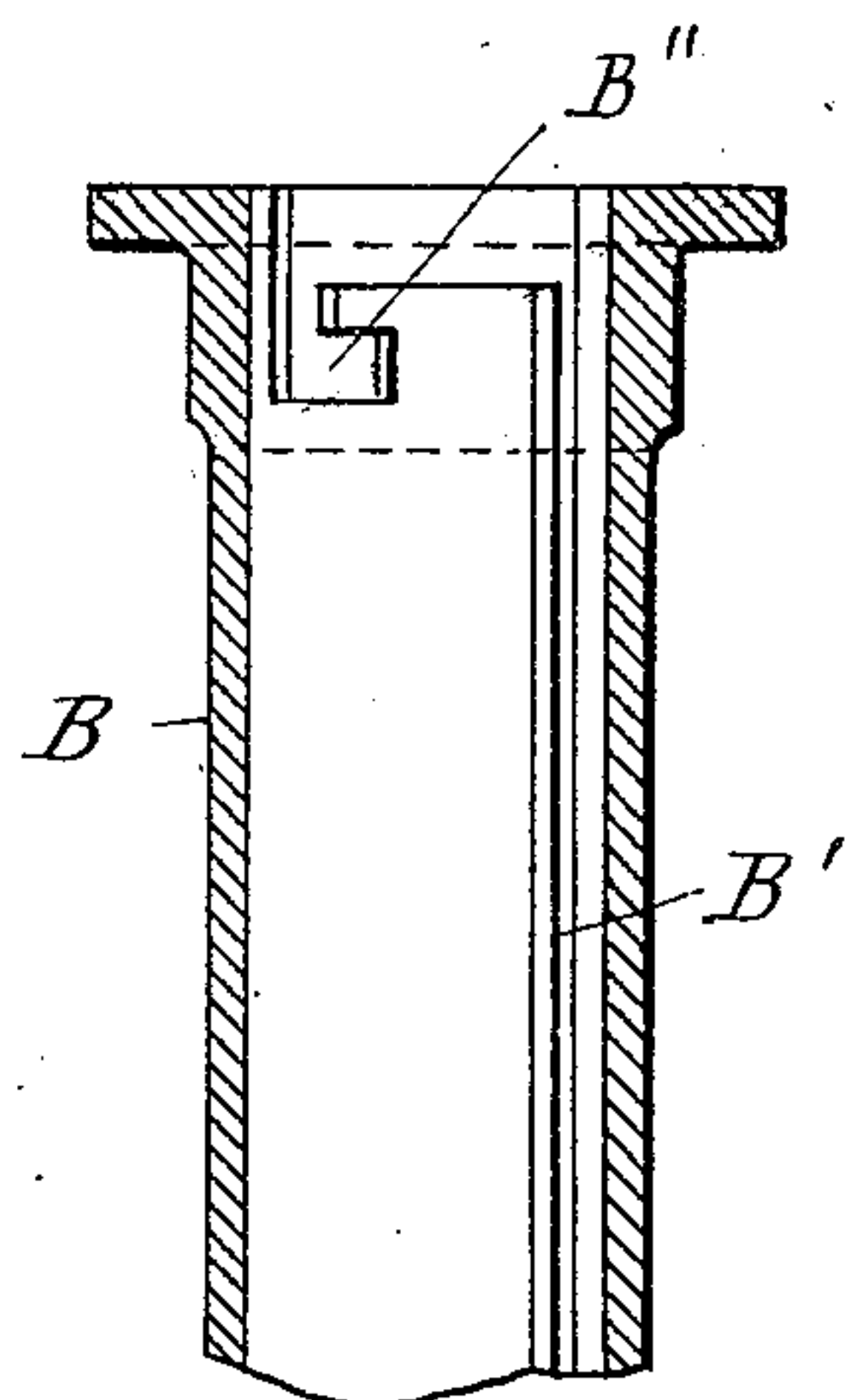


Fig. 7.

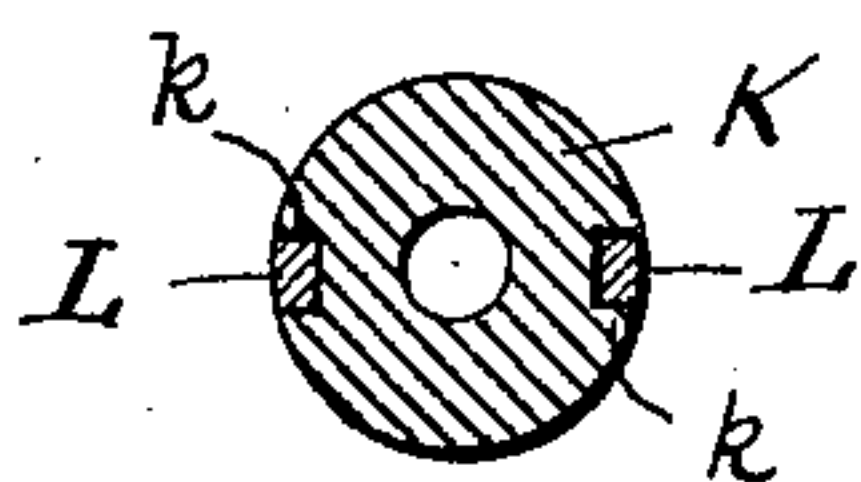


Fig. 9.

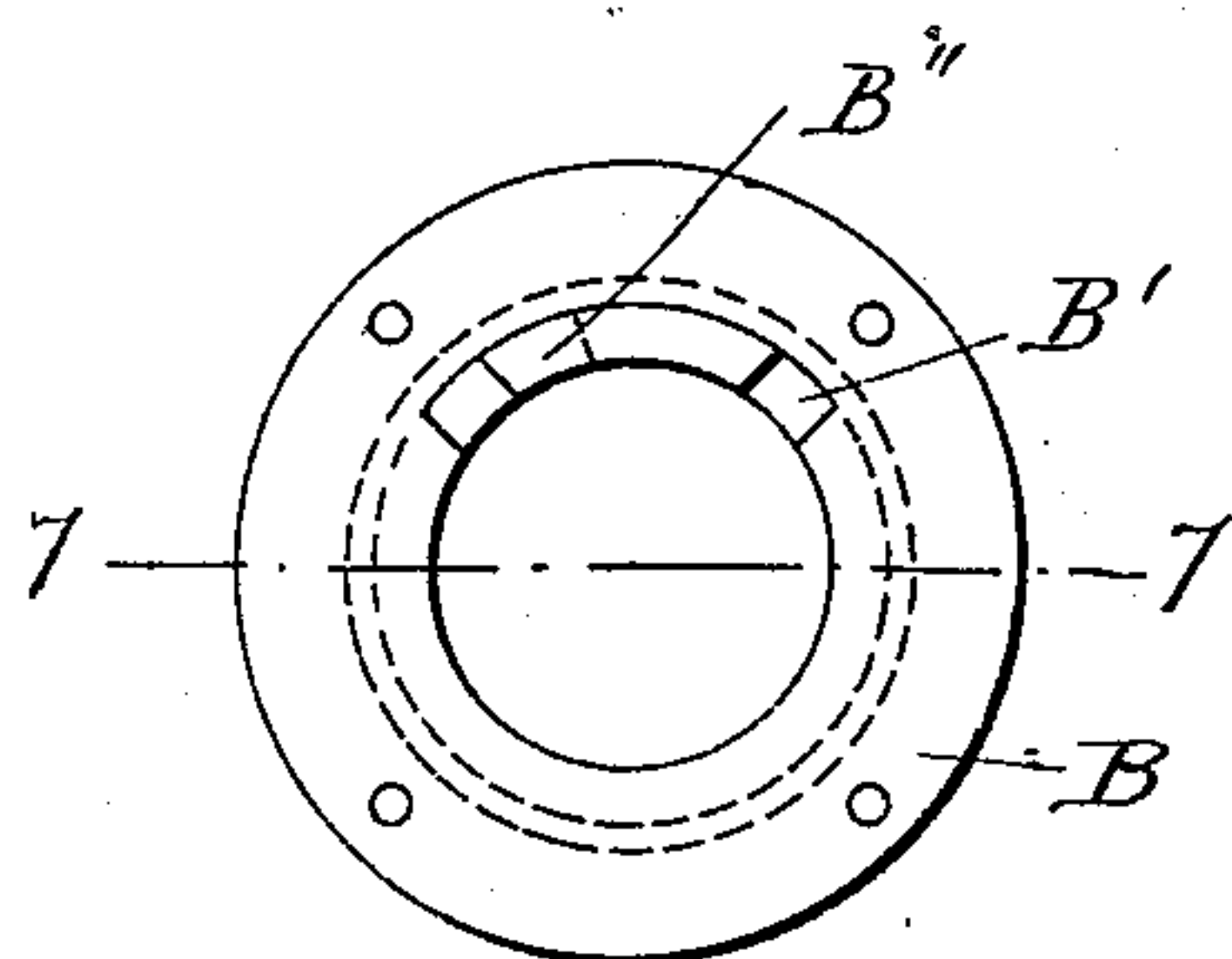


Fig. 6.

Witnesses:
Charles A. Harris.
Samuel J. Craddock.

Inventor:
Charles Butcher.
By Alvin Andrien his atty.

No. 680,638.

Patented Aug. 13, 1901.

C. BUTCHER.

DISAPPEARING AND SAFETY HITING POST.

(Application filed Mar. 22, 1901.)

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2 Sheets—Sheet 2.

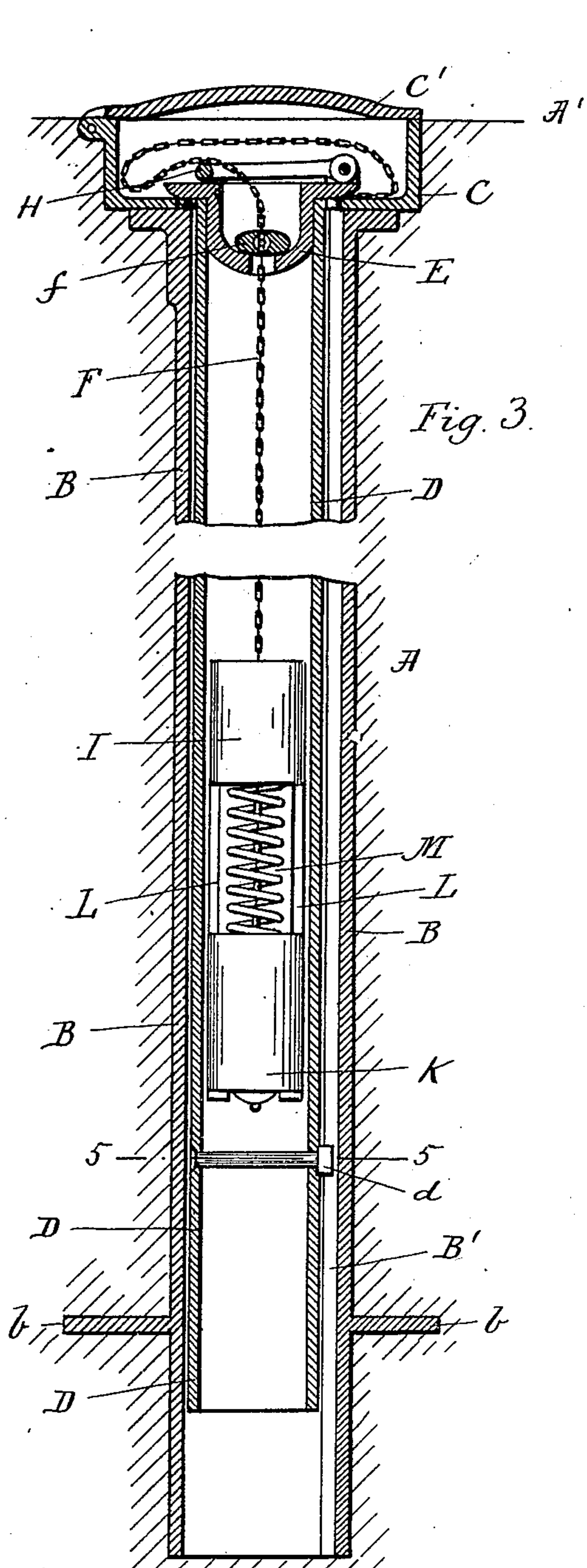


Fig. 3.

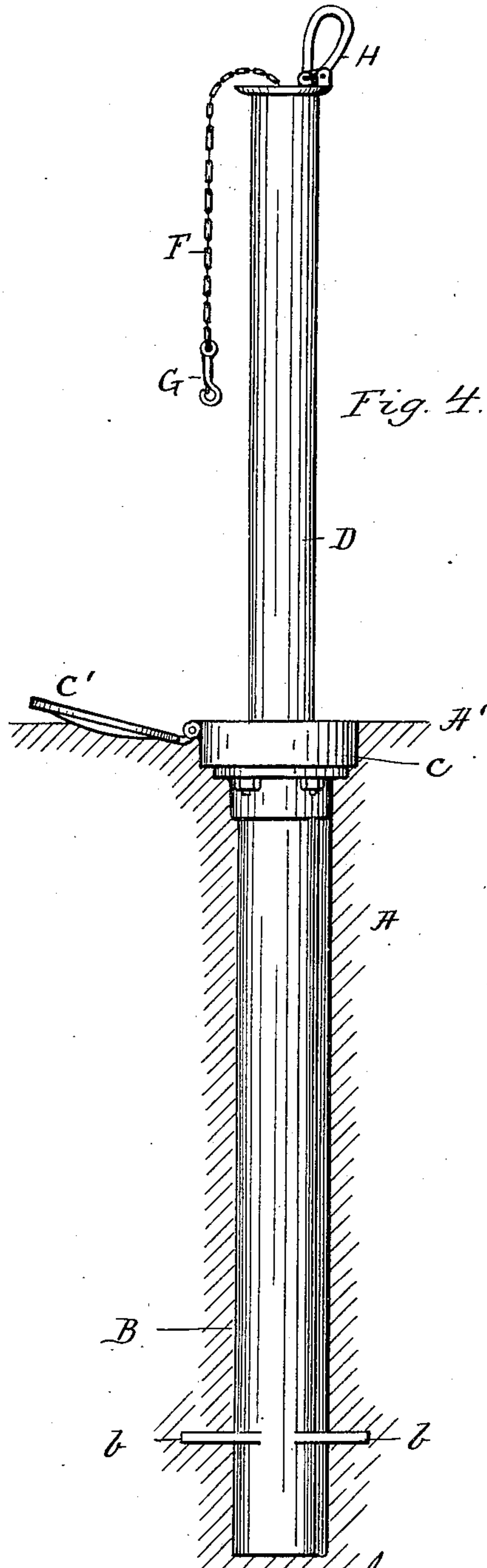


Fig. 4.

Witnesses:

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Samuel J. Craddock.

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UNITED STATES PATENT OFFICE.

CHARLES BUTCHER, OF CAMBRIDGE, MASSACHUSETTS.

DISAPPEARING AND SAFETY HITCHING-POST.

SPECIFICATION forming part of Letters Patent No. 680,638, dated August 13, 1901.

Application filed March 22, 1901. Serial No. 52,412. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BUTCHER, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Disappearing and Safety Hitching-Posts, of which the following is a specification.

This invention relates to an improved disappearing and safety hitching-post for animals; and it is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a top plan view of the device in its normal position with the cover closed. Fig. 2 represents a similar view showing the cover open preparatory to raising the movable portion of the hitching device. Fig. 3 represents a longitudinal section on the line 3 3 in Fig. 1, showing the counterweight within the movable tube in elevation. Fig. 4 represents a side elevation of the device, showing the inner adjustable tubular hitching-post raised and locked in position for use. Fig. 5 represents a cross-section on the line 5 5, shown in Fig. 3. Fig. 6 represents a detail top plan view of the stationary ground or guide pipe. Fig. 7 represents a longitudinal section on the line 7 7, shown in Fig. 6. Fig. 8 represents a detail longitudinal section of the counterweight, to which the lower end of the hitching-chain is attached; and Fig. 9 represents a cross-section on the line 9 9, shown in Fig. 8.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A in Figs. 3 and 4 represents the ground, in which is set the stationary guide-pipe B, preferably provided with ears or flanges *b b*, embedded in the earth for the purpose of retaining said pipe firmly in position. A' in Figs. 3 and 4 represents the street or sidewalk level. To the top of the said pipe B is secured in a suitable manner the metal box C, provided with a hinged cover C', as shown in Figs. 1, 2, 3, and 4.

In practice I prefer to set the pipe B in the ground so as to keep the cover C' when closed about level with the street-level A' when the device is not in use, as shown in Fig. 3.

Within the stationary guide-pipe B is lo-

cated the vertically-adjustable tubular hitching-post D. (Shown in Figs. 3 and 4.) The said hollow post D is provided near its lower end with a radial projection *d*, which is guided in a vertical groove B' on the interior of the stationary pipe B, as shown in Figs. 3, 5, 6, and 7. The upper end of said groove B' terminates in the form of a bayonet-shaped locking-groove B'', (shown in Figs. 6 and 7,) in which the projection *d* is locked after the tubular hitching-post has been raised to its limit and turned a partial revolution within the stationary guide-pipe B. To the upper end of the inner pipe D is secured in a suitable manner a centrally-perforated cup E, through which passes loosely the hitching-chain F, as shown in Fig. 3. To the upper end of the said chain F is secured a suitable snap-hook G or equivalent hitching device. (Shown in Fig. 4.)

f is a collar or button secured to the chain F and adapted to normally rest in the cup E, so as to prevent the said chain from dropping entirely into the hollow tube D, as shown in Fig. 3.

H is a bail, hook, or handle pivotally connected to the cup E or upper end of the pipe D, and it serves as a means for raising, turning, and lowering the latter within and relative to the stationary pipe B, as shown in Figs. 3 and 4.

Within the hollow hitching-post D is arranged a yielding counterweight attached to the lower end of the chain F, and it is constructed as follows: It consists of two centrally-perforated weights I and K. (Shown in detail in Figs. 8 and 9.) The chain F passes loosely through the upper weight I and is attached in a suitable manner to the lower weight K. To the sides of the upper weight I are attached a pair of guide-rods L L, which are guided in grooves *k k* in the sides of the lower weight K, as shown in Figs. 8 and 9. Between the weights I and K is arranged a coiled compressible spring M. (Shown in Figs. 3 and 8.)

The object of suspending the upper spring-pressed weight I upon the yielding spring M, that is supported on the lower weight K, is to ease the strain on the hitching-chain and cushion the blow of the weight against the under side of the cup E in case the animal

while hitched should make a sudden pull or jerk on the hitching-chain, thus preventing the snapping of the latter or breaking of the harness to which the animal is hitched.

5 Normally when not in use the inner tube D is lowered within the stationary guide-tube B and the cover C' closed, as shown in Fig. 3.

If it is desired to use the hitching device, all that is necessary to do is to swing the cover
 10 C' to the open position, (shown in Figs. 2 and 4,) after which the operator takes hold of the bail H and raises the pipe D to its limit and turns the latter sufficiently to cause the projection *d* to be interlocked in the bayonet-
 15 groove B'' in the upper end of the stationary pipe B, after which the device is ready for hitching the animal to the hook, &c., G, attached to the end of the chain F. If the animal should pull on the chain F, it will raise
 20 the counterweight within the inner tube D without causing the chain to be snapped or the harness to be broken, as hereinabove set forth.

To return the parts to their normal position after unhitching the animal, it is only
 25 needed to unlock the tube D from the bayo-

net-groove B'', after which said tube is lowered, the upper portion of the chain placed in the box C, and the cover C' closed, as represented in Figs. 1 and 3.

What I wish to secure by Letters Patent and claim is—

In a hitching-post, the combination with a tube constructed to be embedded vertically in the ground, of a tubular post vertically
 35 movable in the tube, two weights arranged one above the other in the tubular post, guide-rods fixed to one of said weights and slidably connected with the other weight, a spring dis-
 40 posed between said weights, a centrally-perforated cup fixed in the upper end of the tubular post, and a hitching-chain loosely passing through the cup and upper weight and attached to the lower weight, substantially as
 45 described.

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

CHARLES BUTCHER.

Witnesses:

ALBAN ANDRÉN,
 CHARLES S. BARKER.