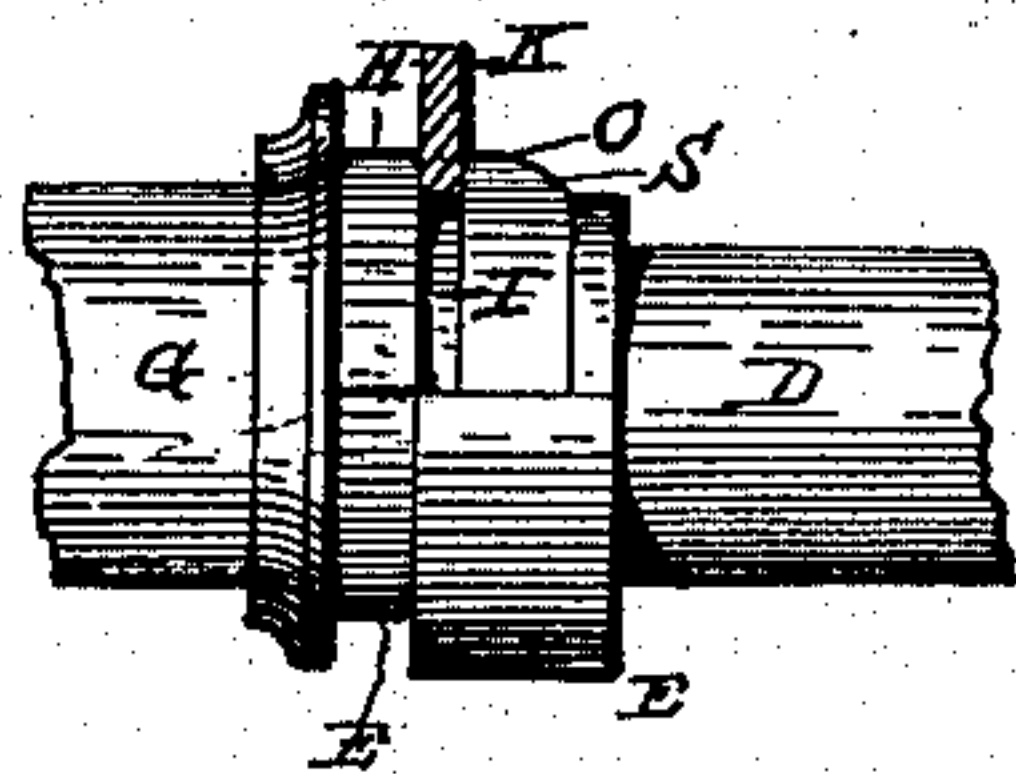
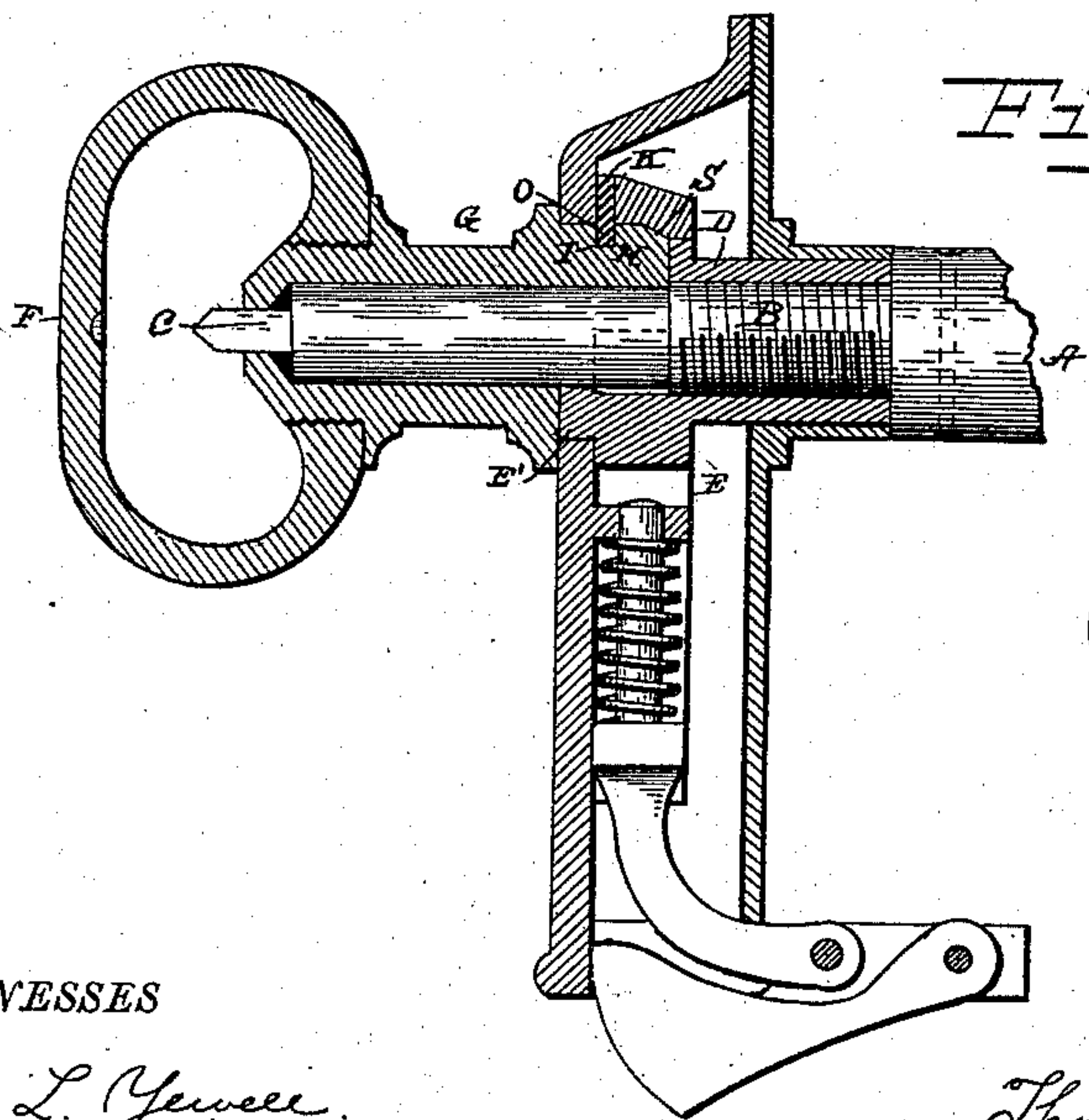
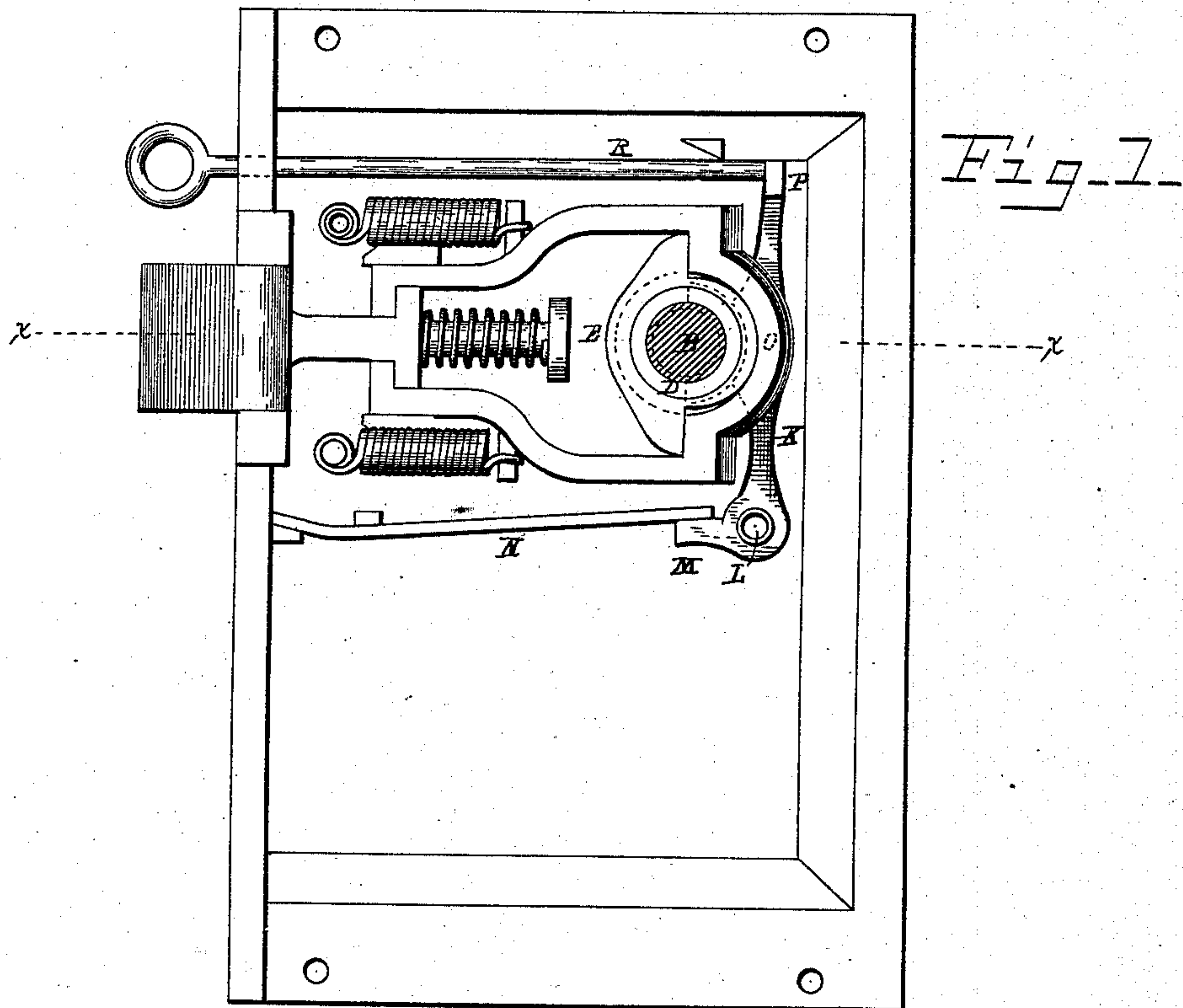


(No Model.)

T. J. MORGAN.
KNOB ATTACHMENT.

No. 326,048.

Patented Sept. 8, 1885.



WITNESSES

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THOMAS J. MORGAN, OF WOODLAWN PARK, ILLINOIS, ASSIGNOR OF ONE-HALF TO WILLIAM McCOMBIE, OF CHICAGO, ILLINOIS.

KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 326,048, dated September 8, 1885.

Application filed April 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. MORGAN, a citizen of the United States, residing at Woodlawn Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Knob Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in means for attaching door-knobs to their spindles, and is designed to produce an easily-attached knob that requires no bearings upon the door, no set-screws nor pins to hold the knobs in position, has no lost motion, requires no washers or other adjustments, and when put together is practically as solid as though made of one piece.

The improvement consists, essentially, in the construction and combinations of parts, as claimed.

In the following description reference is had to the annexed drawings, showing in Figure 1, a plan view of a latch with the knob-attachment; Fig. 2, a section through the same, showing a portion of the knob or handle; and Fig. 3 a detail view of cam and sleeve adjacent thereto.

The knob is formed with a spindle, A, having an extension, B, screw-threaded for a portion of its length and flattened at the end C. An internally screw-threaded sleeve, D, fits on the threaded portion of B, and has at one end a cam, E, which operates the yoke of the latch.

The cam has a projection, E', which rests in the opening in the casing through which one of the knobs F projects, the other knob being formed on or attached to the spindle A. The said knob has a sleeve, G, formed on it, and has in it a recess or hole of the shape of the end C of the spindle. About one-half of the sleeve G is continued, as shown at H, which is provided with a slot, I, adjacent to the said sleeve. The parts forming the spindle and cam are passed through the yoke from one side of the casing, the cam being first placed and the spindle then screwed into it, and the knob F slipped over the projecting end from

the other side of the casing, as shown in Fig. 2.

A lever, K, has a pivotal point, L, formed in the casing, and is provided with a short arm, M, at an angle to the longer arm, the said shorter arm engaging with a spring, N. The lever has an enlargement, O, which normally rests in the slot I, and thus retains the knob F on the spindle B. The free end of the lever has a head, P, against which engages a rod or pin, R, passing through a hole in the casing. This rod or pin is removed, and the door may be closed, and then the knob cannot be detached. The pressing inward of the pin when inserted through a hole in the casing will remove the lever from the knob, and it may then be taken from the casing.

The continuation H is beveled at S, so as to force the lever out of the way when the knob F and sleeve G are placed in position.

The right to vary the construction consistent with the spirit of the invention is reserved.

I claim—

1. A latch having a knob formed of two pieces, the spindle of one knob passing partly into the other knob, combined with a latch or snap contained within the casing and normally retaining the said parts in conjunction, and a rod or pin extending to the exterior of said casing and operating the snap, substantially as and for the purpose specified.

2. The combination of a knob-spindle having a partly screw-threaded and a partly plain continuation with a flattened or similarly formed end, with a knob having a sleeve, which latter is recessed to receive the spindle, the said sleeve having a slotted continuation, and a snap or catch engaging in said slot, substantially as and for the purpose specified.

3. The combination, with a knob-spindle having a continuation partly screw-threaded and with a flat or similarly-shaped end, of a knob having a sleeve, which latter is recessed to receive the spindle, said sleeve having a slotted and beveled continuation, a cam provided with an internally screw-threaded

sleeve, and a catch formed of a spring-retained lever with an enlargement fitting in the slot, and a rod or pin engaging with the said lever, the whole operating substantially as
5 and for the purpose specified.

4. The combination, with an internally screw-threaded sleeve, having a cam at one end, of a knob having a sleeve with a continuation resting against the cam, and a knob
10 with a partially screw-threaded spindle and a

snap or catch engaging with the continuation of the sleeve, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS J. MORGAN.

Witnesses:

FRANK K. BIGGS,
WILLIAM McCOMBIE.