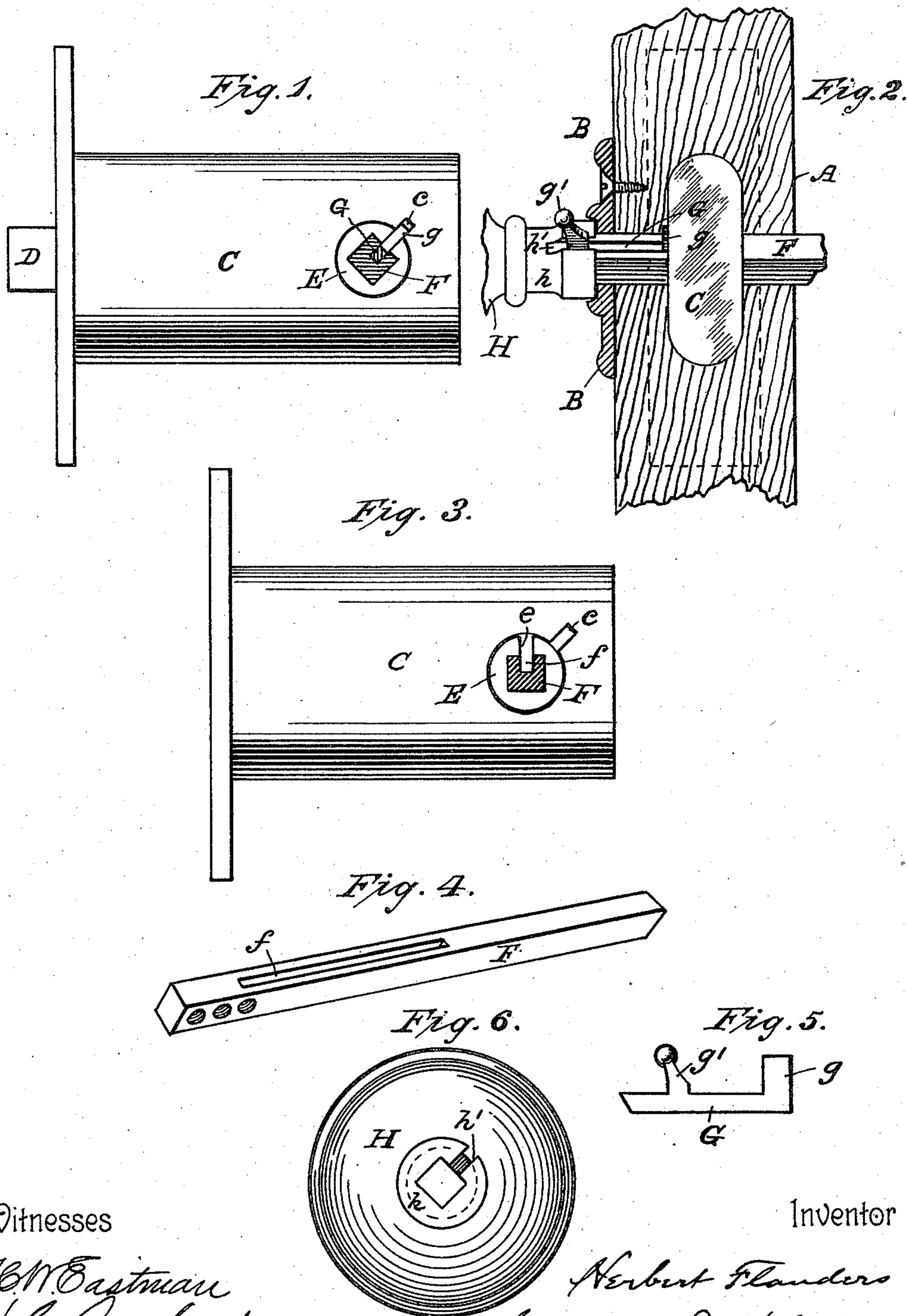


(No Model.)

H. FLANDERS.  
DOOR KNOB FASTENER.

No. 575,471.

Patented Jan. 19, 1897.



Witnesses

*J. W. Eastman*  
*H. Flanders*

Inventor

*Herbert Flanders*

By his Attorney *J. B. Thurston*



# UNITED STATES PATENT OFFICE.

HERBERT FLANDERS, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR OF  
ONE-HALF TO CHARLES E. STEARNS, OF SAME PLACE.

## DOOR-KNOB FASTENER.

SPECIFICATION forming part of Letters Patent No. 575,471, dated January 19, 1897.

Application filed April 24, 1896. Serial No. 588,835. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT FLANDERS, a citizen of the United States, residing at Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Door-Knob Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to devices for securing the knob-spindle of an ordinary mortise snap-lock in its normal position, thus making such a latch or lock serve the purpose of a separate lock operated by a key, the object being to provide an inexpensive and ready means for fastening doors without the aid of key-locks or bolts.

The invention consists in the novel attachment to an ordinary mortise snap-lock and its knob-spindle, as fully set forth in the following specification and claim and clearly illustrated in the accompanying drawings, forming a part of the same, in which—

Figure 1 is a detached elevation of an ordinary snap-lock, showing its knob-spindle in section with the spindle and snap latch or bolt in normal position and having my improved attachment applied as when securing the latch. Fig. 2 shows a cross-section of a door and one of the escutcheons with an ordinary snap-lock knob-spindle to which my improvements are applied, and a portion of the door-knob in elevation. Fig. 3 is an elevation similar to Fig. 1, showing the knob-spindle turned so as to draw in the snap-latch. Fig. 4 is a perspective view of my improved knob-spindle. Fig. 5 is an elevation of my improved slide, designed to rest in a groove in the knob-spindle and to engage a groove or slot formed in the snap-lock and its cam to prevent the door-knob from being turned when a door is closed. Fig. 6 represents my improved door-knob in elevation.

Similar reference-letters designate corresponding parts in all the views.

A is a section of a door, and B is one of the escutcheons through which the knob-spindle passes.

C represents an ordinary snap-lock of the

class which are mortised into a door. D is its snap-latch, E its operating-cam, and F the knob-spindle, which passes through the cam for turning the same.

In the knob-spindle I form a longitudinal groove *f*, to which is fitted the sliding spline or key *g*, having at one end a lateral projection *g*, and at a point near the opposite end is formed a suitable projection *g'*, which normally passes upward through a slot *h'*, formed for its reception in the shank *h* of the door-knob H, and when the spline or key G is in its normal position the lateral arm or projection *g* is adjacent to the case C and cam E, but not in contact therewith, so that the knob-spindle F may be revolved by the knob H to the position at which said spindle is seen in Fig. 3, which draws in the snap-latch D, but when said spindle is in the position seen in Figs. 1 and 2 the spline or key G may be pushed inward by its arm *g'*, so that its arm *g* may enter the slots *c e*, respectively, of the case C and cam E, and thus prevent the rotation of said spindle F, which effectively locks a door. This projecting arm *g'* may be moved forward and backward, as desired, between the escutcheon B and the inner end of said slot *h'* in the shank of the door-knob.

The projecting end of the sliding key G is of proper length to reach beyond the inner end of the slot in the hub or shank of the knob, and thus prevents the key G from being displaced or removed from the groove *f* of the knob-spindle, and when said key is pushed inward against the escutcheon, with its arm or projection *g* engaging the slot *e* of the cam E, the snap-latch D is secured in its normal position, and thus serves to effectively lock a door.

In order to turn the knob for the purpose of opening a door, the key G may be drawn outward by placing one's finger on the arm *g'* and pulling it outward within the slot *h'* of the knob H. This construction involves but slight additional expense over the ordinary snap-lock, as the key G can be readily drop-forged or struck up, requiring no finish, and the groove *f* can be cast in the knob-spindle F, and so also can the slot *h'* be cast in the hub or shank *h* of the knob H.



I am aware that a sliding bolt has been combined with a knob-spindle prior to my improvement. Said bolt was seated in a groove formed in the exterior of the knob-shank, and it passed through a slot specially  
5 formed for it in the escutcheon and into a casing-slot and into a slot formed in the exterior of the cam, all these parts being entirely outside of and separated from the spindle, and such a lock is not of my invention.  
10

Such prior construction not only made a specially notched or slotted escutcheon necessary, but it also required the use of a tool to form the slot in the knob-shank, said slot being of dovetail form in cross-section and closed  
15 at the bottom. It also necessitated a larger opening through the door to provide space for the catch-bolt, said bolt being situated some distance above and not in the spindle,  
20 as by my improvement.

Having described my improvements, what I claim is—

In a snap-lock, a knob having a slot in its shank extending transversely through and communicating directly with the shank spindle-opening, a spindle provided with a recess  
25 registering with the said shank-slot, a cam and casing each having a slot registering with the spindle-recess and a key sliding in the recess and adapted to pass through the opening of an escutcheon of usual form and to  
30 lock the spindle to the casing, substantially as described.

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

HERBERT FLANDERS.

Witnesses:

J. B. THURSTON,

JOHN H. ANDREWS.