

(No Model.)

R. H. KUHRTS.  
LATCH.

No. 439,016.

Patented Oct. 21, 1890.

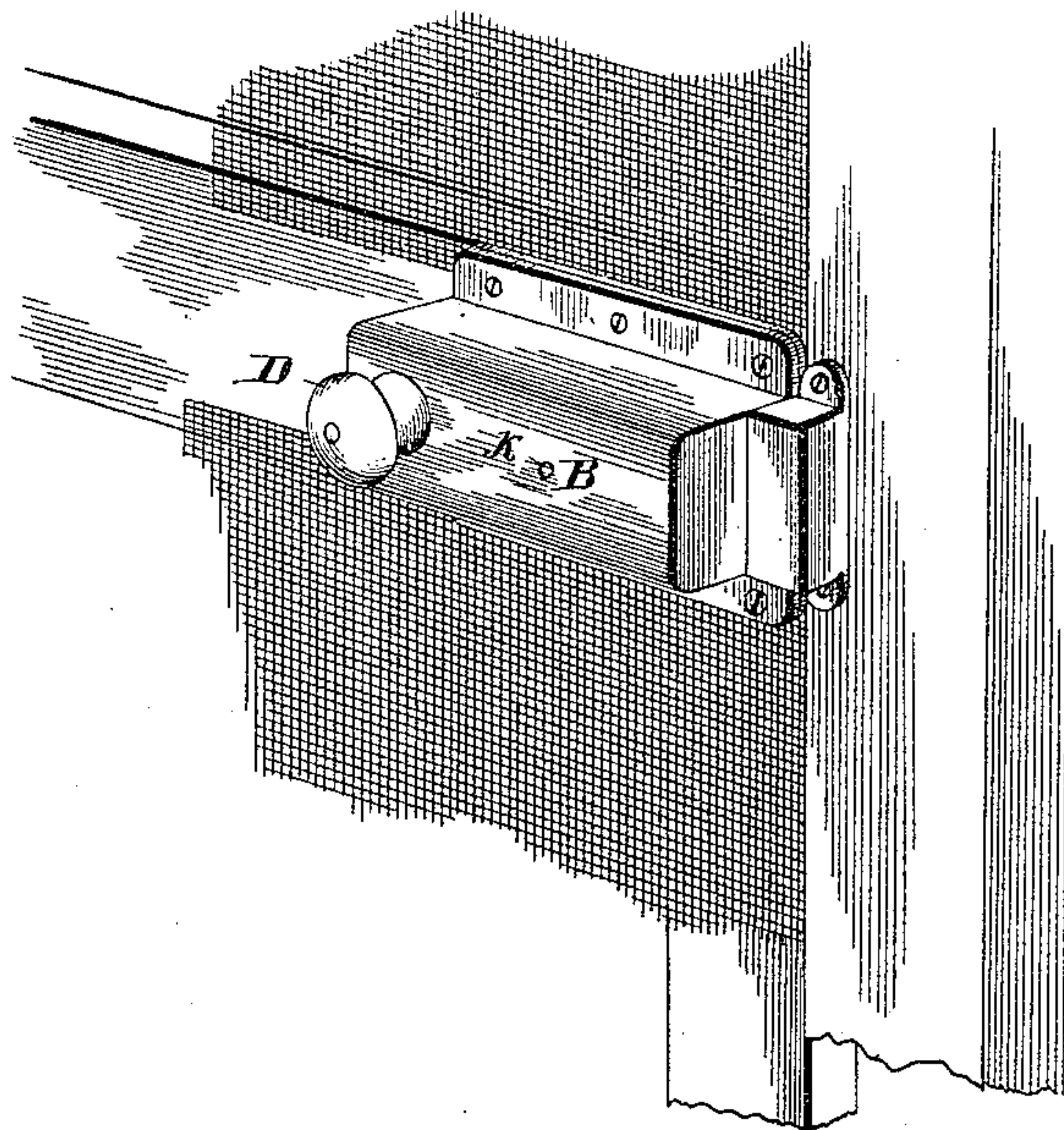


Fig. 1.

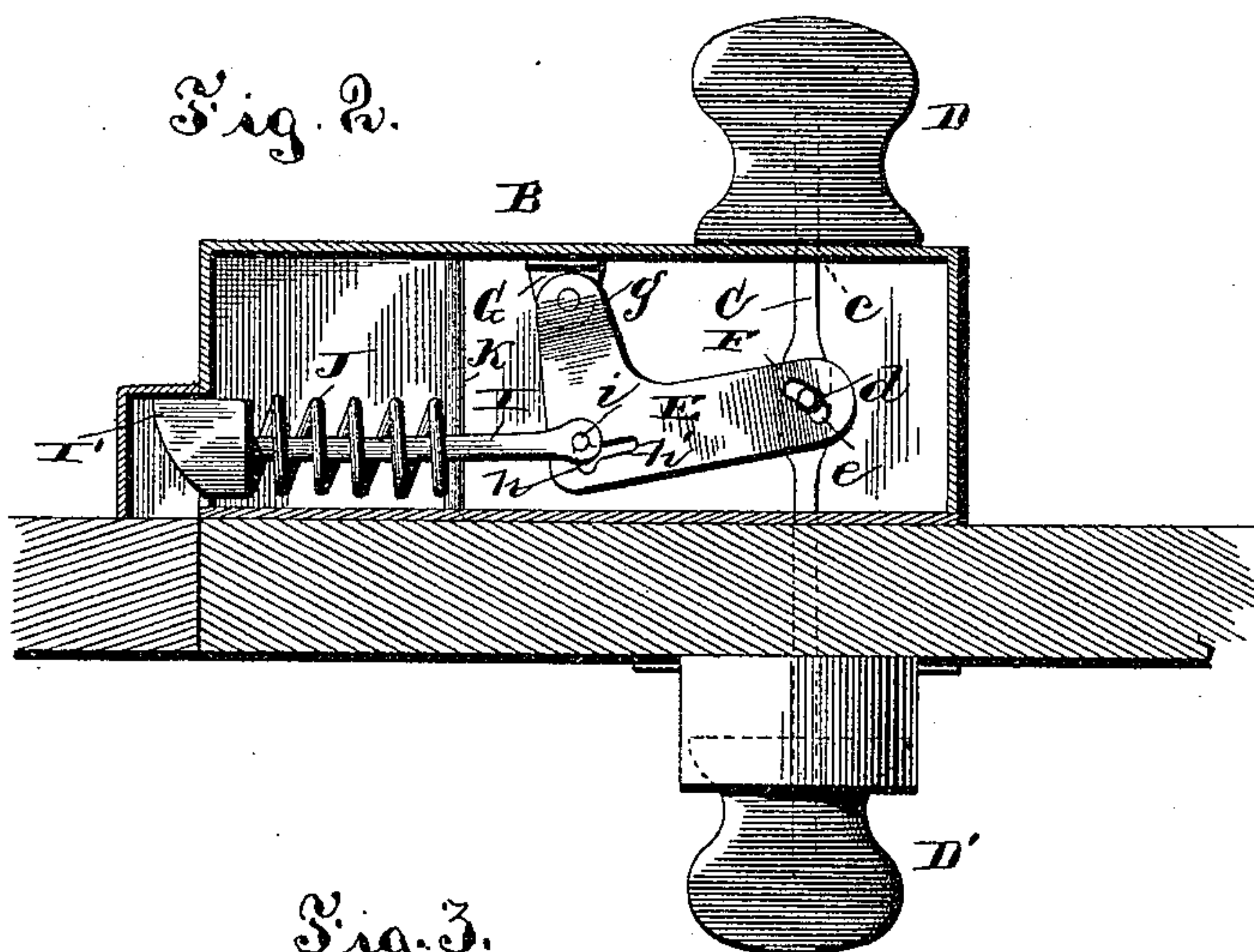
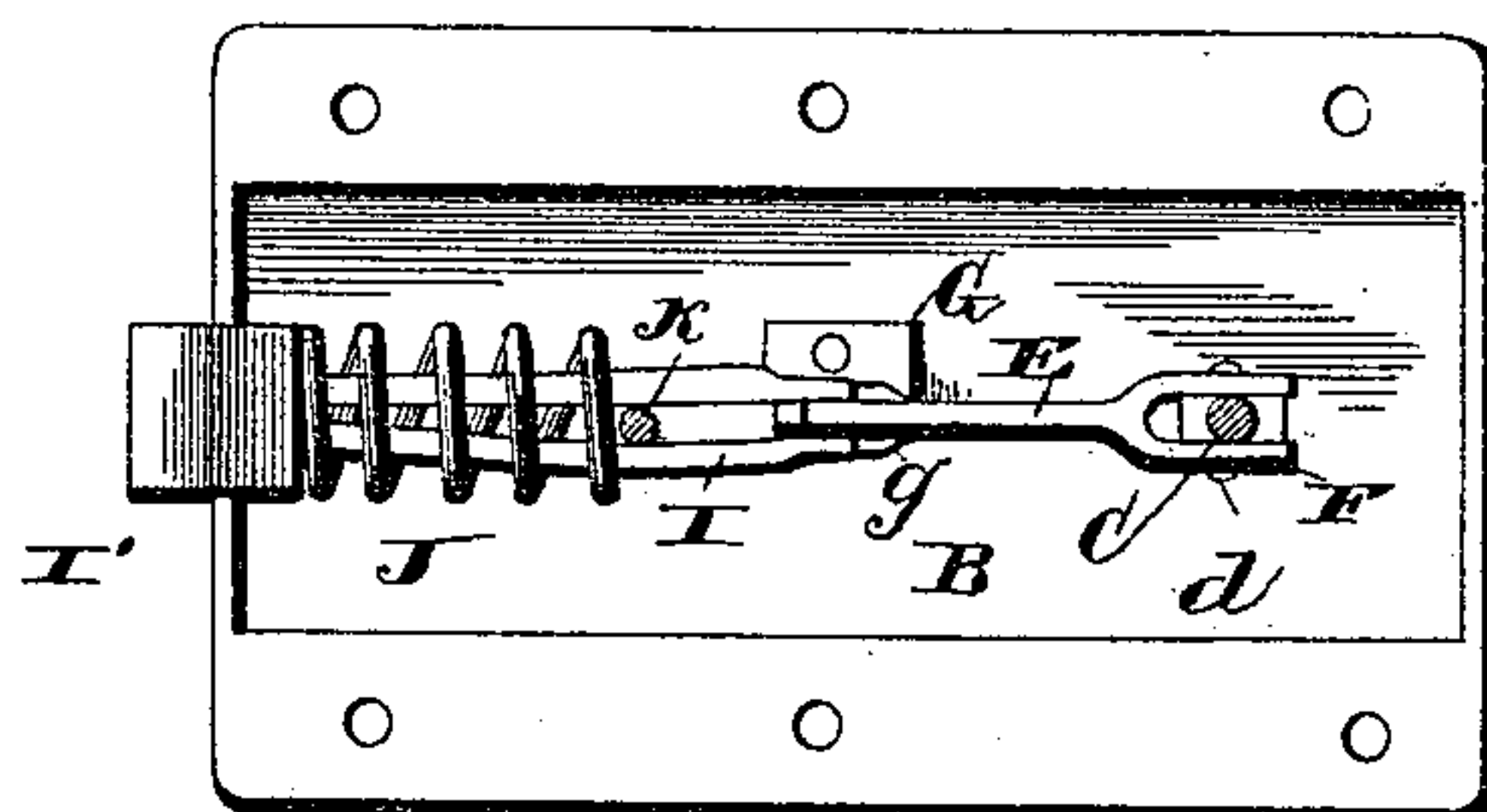


Fig. 2.

Fig. 3.



Rudolf H. Kuhrts.

Inventor

Witnesses

John Amie  
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by

*[Signature]*

Attorney



# UNITED STATES PATENT OFFICE.

RUDOLF H. KUHRTS, OF GERMANTOWN, NEBRASKA.

## LATCH.

SPECIFICATION forming part of Letters Patent No. 439,016, dated October 21, 1890.

Application filed June 26, 1890. Serial No. 356,795. (No model.)

*To all whom it may concern:*

Be it known that I, RUDOLF H. KUHRTS, a citizen of the United States of America, residing at Germantown, in the county of Seward and State of Nebraska, have invented certain new and useful Improvements in Door-Latches; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in door-latches.

The object of the invention is to provide a spring-latch which will be actuated or retracted by drawing upon the knob thereof, but only one movement being necessary to open the door; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view showing my improved latch applied to a screen-door. Fig. 2 is a transverse sectional view. Fig. 3 is a sectional view taken through the line *xx* of Fig. 2.

The door-frame adjacent to which the latch is attached is provided with an ordinary keeper, and the mechanism constituting the latch is covered by the casing B, through which the spindle C passes, the ends of said spindle being screw-threaded or provided with equivalent means for attaching thereto knobs D and D'. The spindle passes through perforations *c c* in the casing B, and is enlarged at a suitable point within said casing for the reception of a transverse pin *d*, which passes through and plays in a curved slot *e*, formed in the bifurcated end F of the dog or bell-crank lever E, the end *g* of said bell-crank lever being bifurcated and pivotally secured over an angle-plate G, attached to the casing B. The bell-crank lever is also provided at its angle with intersecting slots *h* and *h'*, through which passes a pin *i*, which connects the ends of the latch-bar I, said latch-bar being made up of two members, or is bifurcated, as may be found most desirable in practice.

The latch I' is securely attached to the latch-bar I, which is partially encircled by a spiral spring J, which bears upon the inner end of the latch-head I' and upon a rivet or bolt *k*, which secures the rear plate of the casing to the main casing. This rivet or bolt *k* passes through the bifurcated portion of the latch-bar or between the members thereof and the spring bearing against the same, and the latch-head normally projects the same beyond the casing.

The main portion of the latch-casing has the edges flanged or bent at right angles and provided with perforations through which pass screws for securing the casing to the door. On the opposite side of the door from which the latch-casing is secured I attach a collar in which one of the knobs can move, the object thereof being to cover the normally-exposed end of the spindle C.

When it is desired to open the door, it is only necessary to grasp the knob and draw the same toward you, when the door can be opened, and in closing the door by drawing upon the opposite knob the door will be moved and the latch-head retracted.

I am aware that prior to my invention it has been proposed to provide spring-actuated latches which are operated by drawing upon the knobs, and I do not therefore claim such, broadly, as my invention; but

What I do claim as new, and desire to protect by Letters Patent, is—

A spring-latch comprising a suitable casing, a latch-head extending through said casing and connected to a bifurcated stem, a spring for throwing said latch-head outwardly, a crank-lever pivoted to the casing and provided with a slot through which a pin attached to the bifurcated latch-stem passes, curved slots *e*, and pin *d*, carried by the knob-spindle for retracting the latch-head, substantially as shown, and for the purpose set forth.

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

RUDOLF H. KUHRTS.

Witnesses:

R. W. SUMANN,  
R. F. SUMANN.