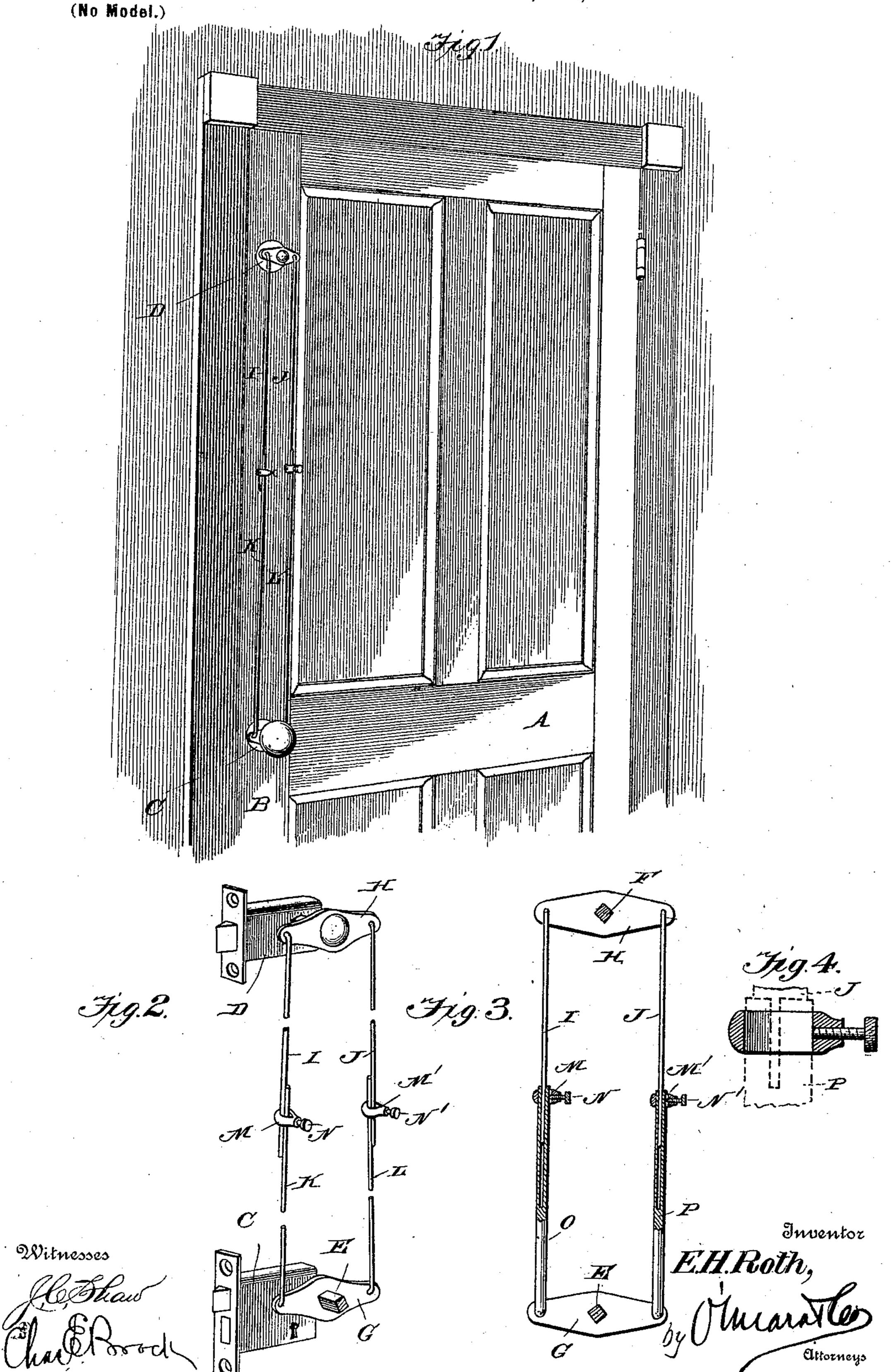
No. 616,144.

Patented Dec. 20, 1898.

E. H. ROTH. DOOR SECURER.

(Application filed Feb. 23, 1898.)



United States Patent Office.

EBER H. ROTH, OF NESCOPECK, PENNSYLVANIA.

DOOR-SECURER.

SPECIFICATION forming part of Letters Patent No. 616,144, dated December 20, 1898.

Application filed February 23, 1898. Serial No. 671,404. (No model.)

To all whom it may concern:

Be it known that I, EBER H. ROTH, a citizen of the United States, residing at Nescopeck, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Door-Securer, of which the following is a specification.

My invention is in the nature of a device for securing a door at any specified point or points along its outer edge above or below or both above and below the ordinary lock.

The object of my invention is to provide improved means for effectually securing the door along the whole of its edge when it has been warped or bent out of line by heat, dampness, or other causes.

My invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically pointed out in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the upper 30 portion of a door having mounted thereon the ordinary lock and a supplementary lock or bolt above it, the two locks being provided with the double-ended levers and connecting means constructed in accordance with my in-35 vention. Fig. 2 is a detail perspective view of the two locks and their connecting means detached from the door, the connecting-rods being broken away to shorten the view. Fig. 3 is a similar view illustrating a modified 40 means of securing the connecting-rods together. Fig. 4 is a detail view, in vertical section, of the band and screw for securing the rods in their adjusted positions, a rod and connected pipe being shown in dotted lines.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by letters, A indicates the lock-rail, and B the lock-stile, of a door of ordinary construction. C indicates the ordinary lock with which doors are usually provided, and D a supplementary lock

or spring-bolt attached to the door, in this instance above the ordinary lock; but it is obvious that it may be attached to the door 55 below the ordinary lock or both above and below it.

E indicates the knob-spindle of the ordinary lock, and F the knob-spindle of the supplementary lock.

G indicates a cross-bar or double-ended lever secured upon the knob-spindle E of the ordinary lock, and H a similar double-ended

lever secured upon the spindle F of the supplementary lock.

I and J indicate rods secured to opposite ends of the double-ended lever H and depending downward. K and L indicate similar rods secured to the double-ended lever G and projected upward in line with the rods I and 70 J and of a sufficient length to overlap them.

Mand M' indicate clamp-rings, through one side of which are threaded screws N and N'. The free ends of the rods I and K are passed through the ring M and are clamped and secretely held by the set-screw N at any adjustment desired. The rods J and L are passed through the ring M' and held in any desired position by the set-screw N'.

In Fig. 3 I have shown tubes O and P in-80 stead of the lower rods K and L, said tubes having their upper ends split. In this construction the rings M and M' are made to fit the tubes O and P in their normal open position, and the lower ends of the rods I and J 85 are passed into the split ends of the tubes O and P, in which they may be adjusted upwardly or downwardly at will and may be securely held in position by threading up the screws N and N' against the outer surfaces 90 of the split ends of the tubes, thereby clamping the ends of the tubes tightly against the inclosed ends of the rods I and J.

The construction of my invention will be readily understood from the foregoing de- 95 scription, and its operation will be obvious.

As is well known, ordinary doors, more especially when they have not been properly seasoned, will warp out of line after being hung, the tendency being for the upper and lower ends to draw toward the warm air inside of the room, the outside of the door being exposed to all kinds of weather, which assists in causing this inward warping. The

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door thus bent out of form cannot be properly closed and held with a single lock, as the lock C, situated as ordinarily on a level with the lock-rail of the door. When such a door is closed, the central portion will be held closely in the frame by means of the ordinary lock, but above and below there will be openings between the frame and the door. To overcome this objection is the object of my invention, and I accomplish it by the construction hereinbefore described.

With my invention applied to a door the door will be held closed in the ordinary manner by the ordinary lock, and the upper and 15 lower ends will be held closed by means of the upper and lower supplementary locks. To operate these locks simultaneously with the main lock, it is only necessary with my invention to turn the knob of the main lock 20 in the usual manner, which will oscillate the double-ended lever G, causing one end to move downward and the other end upward. By means of the connecting-rods the doubleended lever H is caused to operate simulta-25 neously therewith and in the same direction, thereby turning the spindle of the supplementary lock and withdrawing its bolt simultaneously with the withdrawal of the bolt of the ordinary lock.

While I have illustrated and described the best means now known to me for carrying out my invention, I do not wish to be understood as restricting myself to the exact details of construction shown, but hold that any slight changes or variations such as

might suggest themselves to the ordinary mechanic would properly fall within the limit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by 40 Letters Patent of the United States, is—

1. The combination with a door, of the ordinary lock and a supplementary lock, a double-ended lever secured upon the knob-spindle of the ordinary lock, a similar double-45 ended lever secured upon the spindle of the supplementary lock, and adjustable means for connecting the outer ends of these double-ended levers together, substantially as described.

2. The combination with a door, of the ordinary lock and a supplementary lock, a double-ended lever secured upon the knob-spindle of the ordinary lock, a similar double-ended lever secured upon the spindle of the 55 supplementary lock, a rod connected to each end of the double-ended lever of the supplementary lock and extending toward the main lock, a rod connected to each end of the double-ended lever of the main lock and over-foo lapping the rods of the supplementary lock, clamp-rings encircling the overlapping ends of the two sets of rods, and a set-screw in each clamp-ring for securing the rods at any desired adjustment, substantially as described.

EBER II. ROTH.

Witnesses:

J. W. KIRKMANN, W. L. WILLIAMS.