No. 721,334. PATENTED FEB. 24, 1903.

J. C. SKIDMORE & A. TYER.

DOOR CHECK.

APPLICATION FILED DEC. 17, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

FIG. 1.

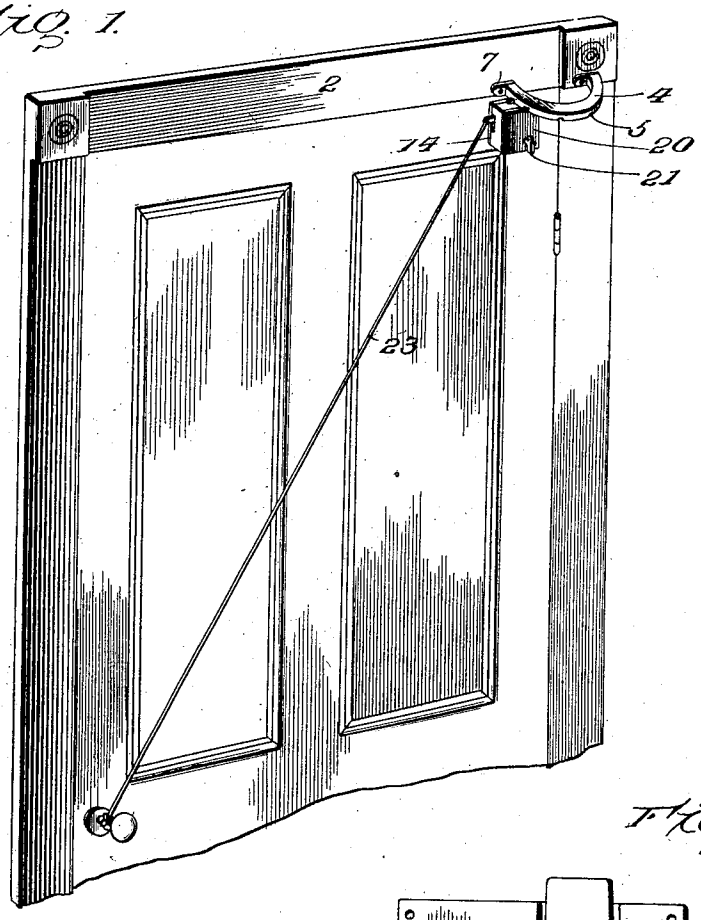


FIG. 4.

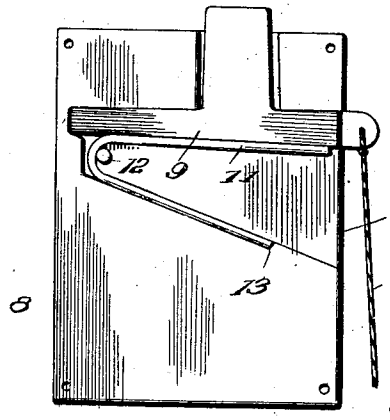
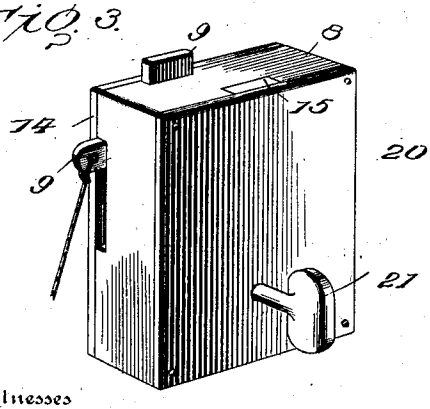


FIG. 3.



Witnesses

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NO MODEL. 2 SHEETS—SHEET 2.

FIG. 2.

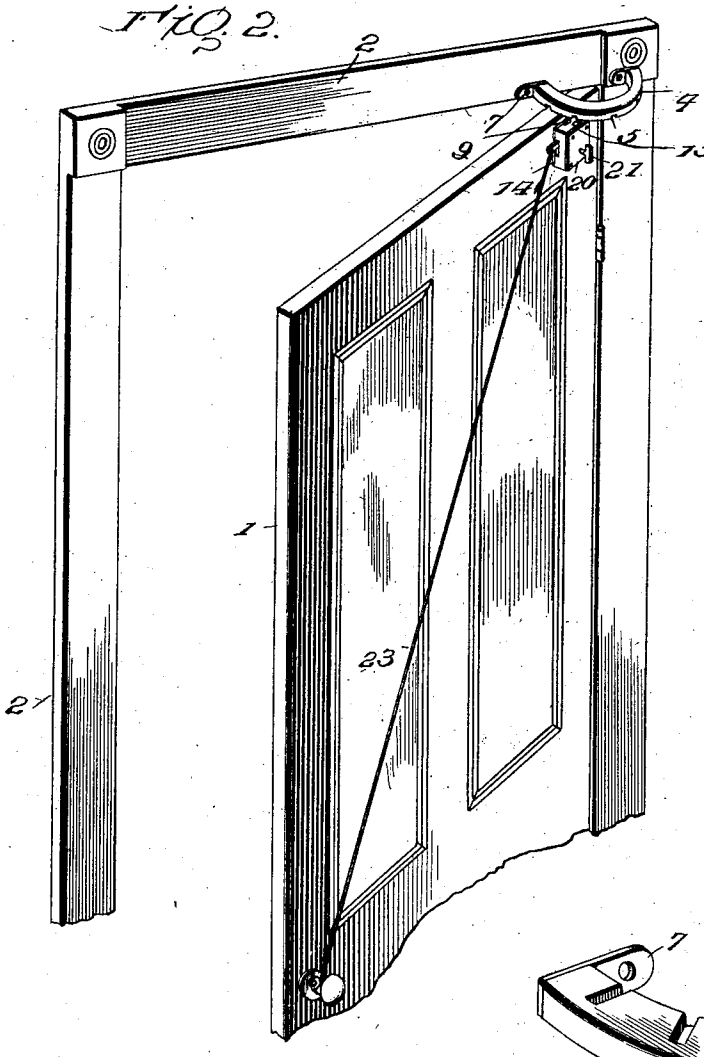


FIG. 5.

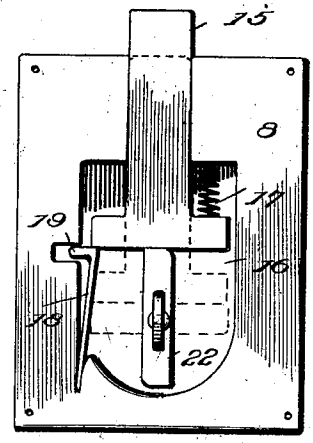
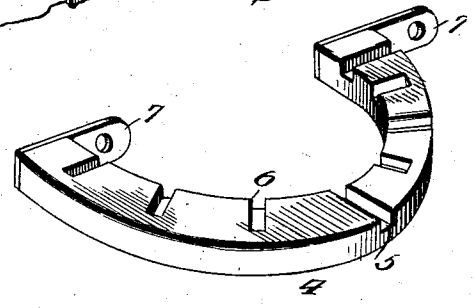


FIG. 6.



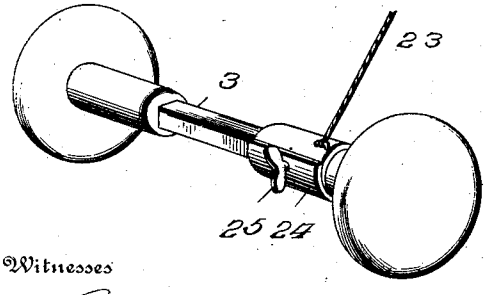


FIG. 7.

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UNITED STATES PATENT OFFICE.

JOHN C. SKIDMORE AND AUTHOR TYER, OF GRAPELAND, TEXAS.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 721,334, dated February 24, 1903.

Application filed December 17, 1902. Serial No. 135,587. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. SKIDMORE and AUTHOR TYER, citizens of the United States, residing at Grapeland, in the county of Houston and State of Texas, have invented certain new and useful Improvements in Door-Securers, of which the following is a specification.

This invention aims to improve the class of devices commonly employed for holding a door open at any angular position, the same being controlled by the knob-spindle or like means governing the door-fastening.

This invention provides a latch for manual operation independent of the latch operated by means of the knob-spindle for securing the door when opened to a position intermediate the points determined by the knob-operated latch.

A further purpose of the invention is the provision of a curved bar adapted to be secured wholly to the door trimming or facing, said bar having two sets of notches, the notches of one set being peculiarly adapted for use with the knob-operated latch and the notches of both sets being adapted for coöperation with both latches.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the invention applied, the door being closed. Fig. 2 is a similar view showing the door partly open. Fig. 3 is a perspective view of the fastener. Fig. 4 is a view of one side of the fastener with the cap-plate removed, showing the knob-operated latch. Fig. 5 is a view of the opposite side of the fastener, the cap-plate being removed, showing the hand or key operated latch. Fig. 6 is a perspective view of the curved bar having two sets of notches for coöperation with the two latches of the fastener. Fig. 7 is a detail perspective view of the knob-spindle and band for attaching the operating cord or chain thereto.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The door 1 may be hinged in any accustomed way, so as to swing either to the right or to the left. The door-opening is finished by the trimming or facing 2. The door when closed is adapted to be secured by a fastening of any well-known type the latch of which is knob-operated, the knob-spindle being indicated at 3. The form of the parts may be of any construction and arrangement and are illustrated to demonstrate the workings of the invention.

The curved bar 4 is screwed to the facing or trimming 2 adjacent to the hinged edge of the door and is provided upon its under side with two sets of notches 5 and 6, the notches 5 being longer than the notches 6 for reception of the knob-operated latch solely. The bar 4 is approximately of semicircular form and is arranged concentric with the axis of the door. In order to facilitate attachment of the bar 4 to the trimming or facing 2, its ends are provided with offsets or flanges 7, which project in the same direction to admit of the bar being fastened solely to the door-trimming. The parts 7 project either to the right or to the left, according as the door is hung to swing to the right or to the left.

The fastener comprises a block or body 8, having opposite sides recessed to receive the latches, the sides of the recess being closed by cap-plates, which also serve to hold the latch and adjunctive parts in place. The knob-operated latch 9 is approximately of T form and is mounted in the recess 10, so as to receive a pivotal movement, the vertical portion being adapted to enter the notches 5 of the bar 4, but prevented from entering the notches 6 by riding upon the under side of the bar. The spring 11 is approximately of U form and is held in place by a pin 12 and shoulder 13, the latter being formed by cutting away the lower edge of the recess 10, as shown most clearly in Fig. 4. The spring 11 holds the latch 9 normally projected and against the upper edge or wall of the recess 10. The cap-plate 14, closing the open side

of the recess 10 and holding the latch 9 and spring 11 in place, is secured to the block or body 8 in any determinate way to admit of its removal at any time for repairing the fastener or gaining access thereto for any purpose. The latch 15 is arranged to operate in the recess 16, formed in the opposite face or side of the block 8, and is provided at its inner end with a cross-head, one arm of which receives the down pressure of the coil-spring 17, interposed between it and the upper edge or wall of the said recess 16. The other arm coöperates with a spring 18, which constitutes a stop to limit the downward movement of the latch, the lower end of the spring being secured to the part 8 and its upper end being bent laterally, as shown at 19, and adapted to enter a notch formed in the vertical edge or wall of the recess 16. The spring 18 holds the latch 15 projected against the tension of the spring 17, and when repressed so as to clear the latch the spring 17 regaining itself moves the latch inward out of engagement with the bar 4, whereby the door may be opened or closed. The open side of the recess 16 is closed by a cap-plate 20, attached to the block 8 in any convenient and substantial way.

A key 21 is provided for operating the latch 15, and wards 22 project in opposite directions from the stem, the ends of the wards being square, so as to engage with either the latch 15 or spring 18 to hold the key in a given position. The wards 22 are of such relative length as to project the inner end of the latch 15 beyond the bent end 19 of the spring 18 and to move the spring 18 so as to clear the latch 15 and admit of its moving inward under the action of the spring 17. This operation is plain from the full and dotted lines of Fig. 5, in which the extreme positions of the latch are shown.

The latch 9 is connected to the knob-spindle 3 or analogous part by means of a cord, chain, or like connection 23. Any means may be employed for attaching the connection 23 to the knob-spindle 3, and, as shown, a band 24 is fitted to the knob-spindle and secured thereon by a clamp-screw 25. A movement of the knob-spindle in either direction serves to move the latch 9 so as to withdraw its vertical portion from engagement with the notches of the bar 4, when the door may be opened or closed. If it be required to hold the door open for a short distance or at any interval intermediate of the notches 5, the latch 15 is projected by means of the key 21 into engagement with the selected notch 6; but for holding the door at determinate points—such as half-way, three-quarters, or all the way—the latch 9 is permitted to engage with the proper notch 5 of the bar 4. The latches 9 and 15 are set out of alinement, so as to permit the latch 9 to ride upon the under side of the bar 4 and clear the notches 6.

Having thus described the invention, what is claimed as new is—

1. In door-securing means of the character described, a bar provided with two sets of notches, and a fastener comprising two latches arranged out of line, one latch adapted to engage with a notch of one series and the other latch adapted to engage with any notch of the two series, and independent operating means for the said latches, substantially as set forth.

2. In a door-fastener of the character described, a block having a recess in a side, a latch mounted for reciprocal movement in said recess, a spring for moving the latch inward, another spring for holding the latch projected against the tension of the returning-spring, and a key for projecting the latch and repressing its supporting-spring, substantially as set forth.

3. In a door-fastener, a block having a recess in a side, a T-shaped latch mounted in said recess for pivotal movement, a spring of approximately U form for holding the latch in place and adapted to have one member in engagement with a stop at the inner edge or side of the recess, and a pin engaging with the spring at its folded end, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN C. SKIDMORE. [L. S.]
AUTHOR TYER. [L. S.]

Witnesses:
JAMES OWENS,
JAMES M. JOHNSTON.