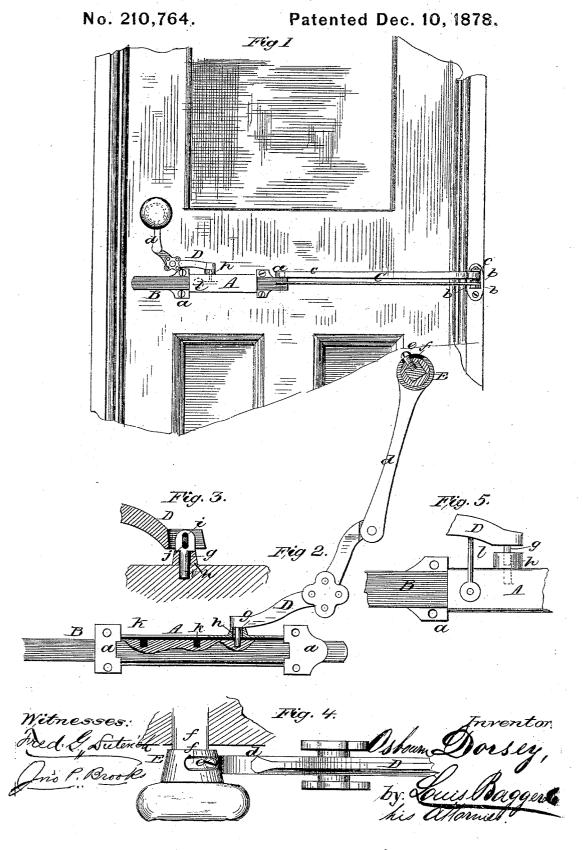
O. DORSEY.
Door-Holding Device.



UNITED STATES PATENT OFFICE.

OSBOURN DORSEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN DOOR-HOLDING DEVICES.

Specification forming part of Letters Patent No. 210,764, dated December 10, 1878; application filed June 8, 1878.

To all whom it may concern:

Be it known that I, OSBOURN DORSEY, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Door-Holding Devices; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a view showing my improved door-holding device as applied for use. Fig. 2 is a plan view, partly in section, of my improvement; and Figs. 3, 4, and 5 are detail

views thereof.

Corresponding parts in the several figures

are denoted by like letters.

This invention relates to certain improvements in door-holding devices for securing it (the door) open at any desired angle, and by which there is no possible chance of its being forced to by the draft or other cause, to prevent its accidental slapping and risking the breaking of the glass therein, with which it is very common to provide doors, as instanced in inner hallway-doors and store and office doors.

To these ends it consists, first, in the employment, in connection with a rod or bar pivoted or hinged to the door-casing or other desired point, and a slide, of a toothed lever connecting with the knob-spindle; secondly, in providing the slide-holding pin with an elongated slot, which permits the pin to fall by gravity into the coincident notch in the slide inclosed in a case having a tubular shoulder, the said slot receiving a transverse pin from the operating-lever; thirdly, in providing the knob-spindle of the door with a slotted collar or sleeve, which receives a projection from the said spindle, and is connected with an arm pivoted to a lever carrying the retaining-pin of the notched slide of the holding device; fourthly, in the employment, in connection with the operating lever having the slideholding pin, of a propping-lever, substantially as hereinafter more fully set forth.

In the drawing, A refers to a case or cap, open at both ends, and secured to the door by screws or otherwise, which screws pass through

apertured feet or plates a a, cast with or attached to said case. B is a bar sliding through, and confined to the door by, the case A. To the rear end of this bar is connected or pinned a rod, C, in turn pinned or hinged to the doorframe, or rather having its pin, which assumes the shape of an axis, bearing in perforated parallel studs or plates b b, fastened or cast upon a base-plate, b', screwed or otherwise secured to said frame. Around the projecting portions of the axis of the rod C is coiled a spring or springs, e, as seen in Fig. 1, by which, when the bar B is free to slide, upon opening the door, the latter will be automatically closed

D is a bell-crank lever, pivoted at about midway its length to the door. One end of this crank-lever D is pivoted to an arm, d, of a sleeve or collar, E, upon the knob-spindle, which is provided with a projection, e, preferably in the form of a headed screw-bolt, entering a slot, f, in the knob-spindle collar E. This slot permits of the turning of the knob and its spindle sufficiently to withdraw the latch-bolt in opening the door without interfering with the holding device when it may may not be desired to use it, in which instance the crank or holding device operating lever D is locked in position. The other end of the lever D is provided with a vertical pin, g, and when the said pin is depressed rests upon a tubular stud or projection, h, of the case A. This end of the lever D is recessed, as seen in Fig. 3, and passing through said recess, and secured in said end of lever, is a pin, i, same figure, upon which the holding device pin g is hung, and susceptible of a limited vertical movement thereon by means of a slot, j, the object of which is to permit of the pin g falling by gravity into its notch in the bar or slide B when that end of the lever D is depressed, and thus lock said slide in a fixed position to hold the door open at the desired point or angle in creating a draft through the room or The slide or bar B is provided with a series of notches, designated by the letters kk, to receive the pin g as the door is set nearer to or farther from the jamb, or as the opening between the latter and the door is varied, the slide B receiving its movement from the rod C.

It will be observed that, upon turning the

knob to open the door, it will elevate and disengage the pin g of the crank-lever D from its notch in the slide or bar B, and as the door continues opening the said bar will be slid forward; and after the opening of the door to the desired point, if it is desired to hold or secure it, the releasing of the knob will allow the outer end of the lever D to be depressed and its pin g to fall into the coincident notch k in the slide B, and thus obtain the desired result, the securing of the door, to prevent its being blown to and slammed by the draft, which slamming risks, and not unfrequently results in, the smashing or breaking of the glass in the door, with which it is common to provide inner halldoors and store and office doors.

A reverse movement of the knob by the hand is the only means by which the retaining or holding pin g can be retracted or disengaged from the holding-bar B, thus preventing any possibility of the accidental slamming or closing of the door.

By providing the collar E or latch-knob with a securing device the pin g will serve as a lock to prevent the opening of the door.

A lever or prop, l, pivoted to the case A, serves to prop the outer end of the lever D and its pin g in an elevated position, as shown in Fig. 5, when the holding device is not needed or the weather may be too cool for the holding of the door open.

Having thus fully described my invention,

I claim and desire to secure by Letters Patent of the United States—

1. In a door-holding device, the combination, with a rod, C, hinged or pivoted to the door-casing or structure, of a slide, B, and lever D, having a pin, g, engaging said slide, and provided with a pivoted arm, d, connecting with the knob-spindle of the door by a sleeve or collar, E, substantially as and for the purpose set forth.

2. In a door-holding device, its lever D, provided with a transverse pin, i, and the pin g, having a slot, j, in combination with the notched slide B and case A, having the tubular shoulder h, substantially as and for the purpose specified.

3. The knob-spindle collar E, having the slot f, in combination with the said spindle having a projection, e, and arm d, connected to the lever D of the door-holding device, substantially as and for the purpose set forth.

4. The combination, with the lever D, having the pin g, of the propping-lever l, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

OSBOURN DORSEY.

Witnesses:
JNO. W. MADIGAN,
AUGUST PETERSOHN.