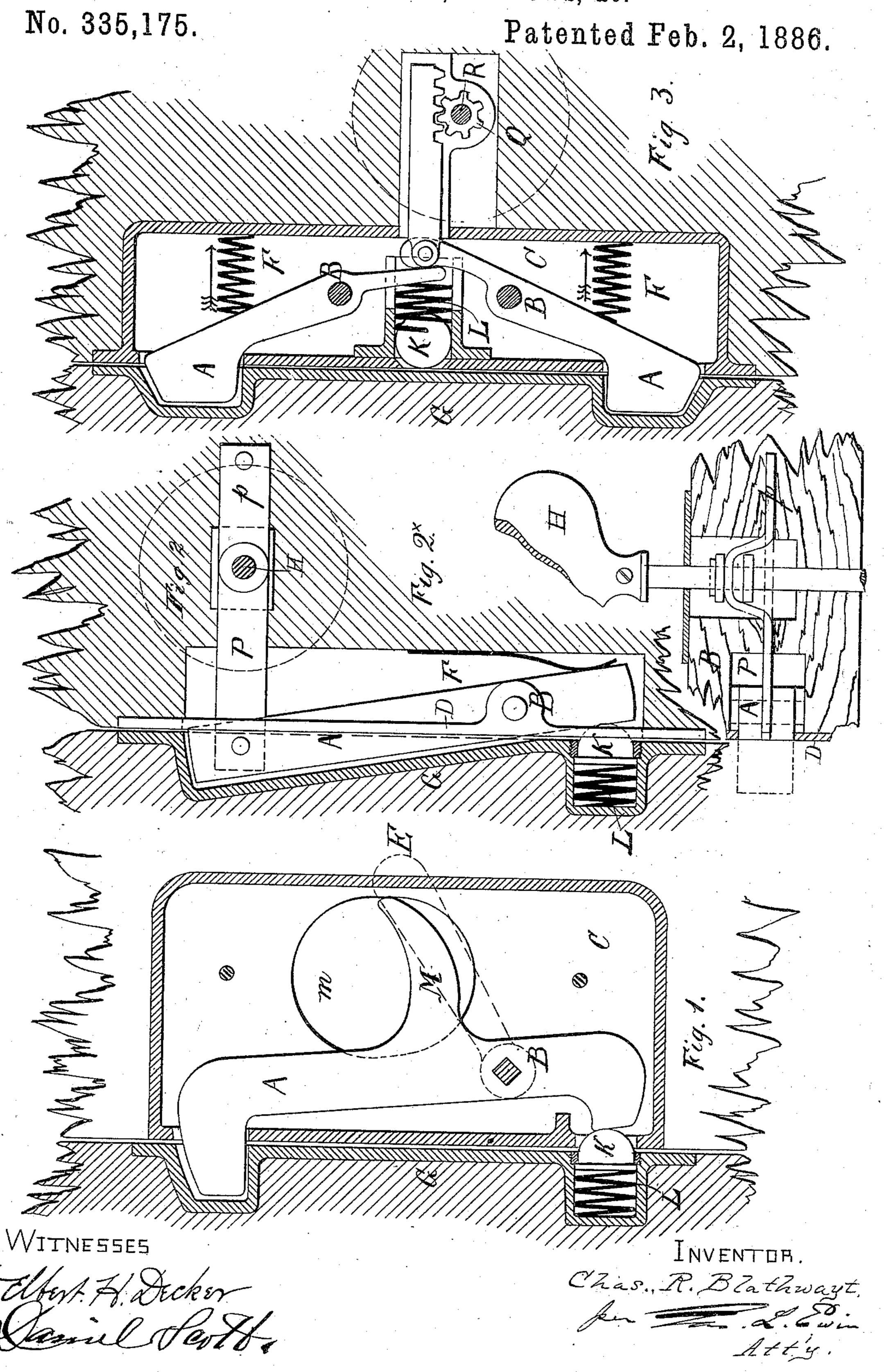
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LATCH FOR DOORS, WINDOWS, &c.



UNITED STATES PATENT OFFICE.

CHARLES REGINALD BLATHWAYT, OF CHELMARSH, BRIDGENORTH, COUNTY OF SALOP, ENGLAND.

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SPECIFICATION forming part of Letters Patent No. 335,175, dated February 2, 1886.

Application filed November 9, 1885. Serial No. 182,284. (No model.)

To all whom it may concern:

Be it known that I, Charles Reginald Blathwayt, a subject of the Queen of England, residing at Chelmarsh Vicarage, Bridgeorth, in the county of Salop, England, have invented an Improved Latch, of which the

following is a specification.

My invention relates to an improved form of latch applicable to doors, windows, drawers, 10 or other objects. It may be in the form of a mortise, "outside," or face-plate latch, and is so constructed that when the door, window, or drawer with which it may be fitted stands unclosed the latch remains flush with the edge 15 of the said door or object, and at the same time the latch is self-closing by the reaction of a spring knob or surface situated either on the latch or on the jamb of the door when the door or other object is shut, and, again, where 20 the door or other object, being hung on suitable hinges, is free to swing through the aperture, the latch will, with the same facility, close from either side.

My latch is constructed as follows, and I annex a sheet of drawings of same, in which—

Figure 1 is a sectional elevation of my latch as an outside latch. Figs. 2, 2* are a sectional elevation and plan of my face-plate latch. Fig. 3 is a sectional elevation of a duplicate mortise-latch.

Like letters refer to similar parts in all the

different figures.

My latch consists of a latch lever or levers, AA, each pivoted at B at a point near to one 35 end of the lever and mounted in a mortise or outside frame, C, as in Figs. 1 and 3, or in a face-plate, D, as in Figs. 2,2×. The said levers A A are maintained normally flush with the edge of the door or other object when it stands 40 open by counterpoise-weights on the levers, which may conveniently be handles ME, Fig. 1, (shown in that figure as alternatives to one another,) or by the reaction of a spring or springs behind them, F F, Figs. 2 and 3. The 45 longer ends of the lever or levers A A are caused to engage in the catch-plate G G G, when the door or other object is closed, by the pressure of a projecting knob, KKK, fitted either into the short ends of the latch-levers 50 themselves, as in Fig. 3, or into the jamb of the

door or edge of the aperture, as in Figs. 1 and 2, so that it is opposite to the short ends of the latch lever or levers. Unless the said latch lever or levers are themselves made from spring-steel, the said knob is provided 55. with a spring, L, which may be either a spiral or a flat spring, so as to enable the knob to yield to the passing of the latch until the latter is exactly opposite to the catch-plate, when the lever is thus able to yield to the pressure 60 of the knob and shoot forward into the catchplate. The said latch lever or levers may be withdrawn from the opposite catch-plate after the door or other object has been closed, so as to open the same in a variety of equiva- 65 lent methods, of which I specify and illustrate the following:

In Fig. 1 the latch-lever A A is provided with a thumb-piece, M, to which access can be obtained through an aperture, m, in the side 70 of the latch-case; or, alternatively, the handle E may be fitted to the spindle B, with which the latch-lever may be caused to move.

In Figs. 2, 2× I have shown a leather strap, chain, or steel band, P, one end of which is 75 attached to the longer end of the latch-lever A. The other end, p, may be fastened in the door, and a handle, H, to pull or push perpendicularly to this strap, may be attached at any point between the two extremities of the 80 strap. It is obvious that the pull or push of such a handle will draw backward the end of the strap attached to the latch-lever, and thus disengage it from the catch-plate; or the end p of this strap or band may be attached to a 85 drum upon the spindle of an ordinary doorhandle fitted to turn in the usual way. The turning of the said handle will effect the same object of withdrawing the projecting end of the latch-lever.

Similarly to the spindle of the said handle last named, a handle and pinion-wheel, Q, as in Fig. 3, may be attached and caused to gear into a rack, R, attached to the shorter or longer end or ends of the said latch lever or levers A A. 95 The revolution of this handle and pinion Q in a certain direction will cause the longer projecting ends of the latch-levers to be withdrawn from the catch-plate.

It is obvious that a variety of similar ar- 100

rangements for the withdrawal of the projecting ends of the latch lever or levers from the catch-plate may be employed without departing from the principle of my invention.

Having now particularly described the nature of my invention and in what manner the same is to be operated, I declare that what I

claim is—

1. A self-fastening door-latch, comprising, in combination, a lever-latch which normally remains flush with the latch-plate, a spring-knob which projects said lever-latch in the act of closing the door, and a handle for retracting said lever-latch, substantially as herein specified.

2. In a latch, the combination of a face-plate, a lever latch or latches therein maintained normally flush by a spring or weight, a spring actuating-knob either on the latch or on the opposite jamb, and a handle-spindle fitted 20 with a pinion gearing into a rack, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

CHARLES REGINALD BLATHWAYT.

Witnesses:
S. P. WILDING,
RICHARD A. HOFFMANN.