E. J. STEELE.

CUPBOARD-LATCH.

No. 182,240. Patented Sept. 12, 1876.

Fig. 1.

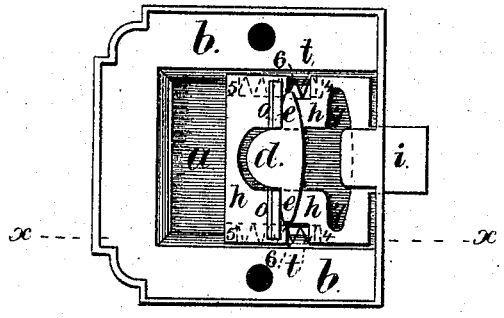


Fig. 4.

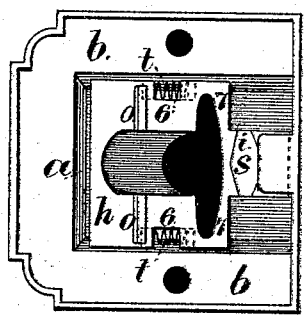


Fig. 3.

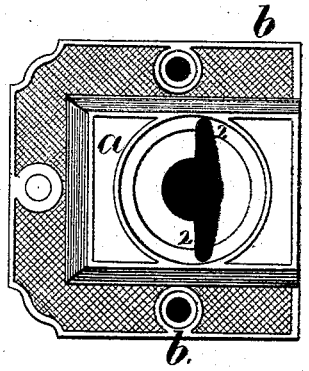
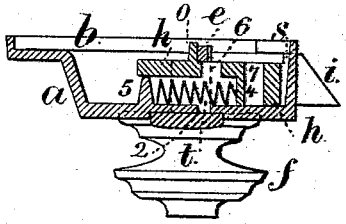


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ELBRIDGE J. STEELE, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO P. & F. CORBIN, OF SAME PLACE.

IMPROVEMENT IN CUPBOARD-LATCHES.

Specification forming part of Letters Patent No. **182,240**, dated September 12, 1876; application filed April 17, 1876.

To all whom it may concern:

Be it known that I, ELBRIDGE J. STEELE, of New Britain, in the county of Hartford and State of Connecticut, have invented an Improvement in Cupboard-Latches, of which the following is a specification:

This invention is made for simplifying the construction of the latch, lessening the amount of hand-labor and the cost of construction.

I make use of a box-shaped case, open at the back, into which the latch is inserted from the back, and then the cams and spindle are inserted from the front through openings in the case and in the latch-shank, the parts being constructed so that they remain together while in use; but the spindle and cams can be inserted or withdrawn when the latch is pressed entirely into the case by the hand applied at the end of such latch.

In the drawing, Figure 1 is a rear view of the latch. Fig. 2 is a horizontal section at the line *x x*. Fig. 3 is a front view of the case, and Fig. 4 is a rear elevation, with the parts in position for the spindle and cams to be inserted. The case is made of the box portion *a*, open at the back, and with the attaching-flange *b*. In the front of the case is a circular opening of a size to receive the spindle *d*, and with lateral slots 2 2 extending from said opening, and of a shape to pass the cams *e e* of the spindle *d*. The base of the knob *f*, at the outer end of the spindle *d*, is of a size to cover the openings in the case *a*, and the distance between the back surface of the base of the knob and the cams *e* is rather more than the thickness of the case *a* and the shank *h* of the latch *i*, so that the said shank will be kept in its position within the case *a* by the cams *e* projecting over it. The latch end *i* is inclined, as usual, and it slides through the mortise in the front plate of the case *a*, and the latch-shank is slotted longitudinally for the spindle *d*, and there are flanges *o* upon the latch-shank *h* for the ends of the cams *e* to act against in pressing the latch back, and the projection *s* at the base of the latch prevents the spindle from being turned too far, said projection forming a stop for the back of the cam that is not in action against the flange *o*. There are springs *t* acting between the flanges 4 on the latch-shank and the flanges 5 within the case to project the latch, and there should be notches 6 in the edges of the latch-shank to facilitate the insertion of the springs endwise into their places.

The spindle, knob, and cams, being cast in one piece for cheapness, could not be inserted into their place were it not for the lateral branches 7 of the longitudinal slot in the latch-shank. These slots 7 allow the spindle and cams to be inserted through the latch-shank when said slots 7 are in line with the slots 2 in the case *a*.

By this construction the entire latch is composed of three pieces, in addition to the spring or springs, and those pieces require but little hand-work upon them. Hence the latch is very cheap, and at the same time it is strong and efficient.

I am aware that locks have been made with openings in the case and in the plate connected with the latch. In this case the latch is secured in place by a separate cap-plate. In my latch the parts are simplified, so that the latch is held into the case by the cams of the spindle, and the springs are between the shank and case.

I claim as my invention—

The combination, in a cupboard-latch, of the box-shaped case *a*, slotted at 2, the latch *i*, slotted shank and flanges *o*, the springs *t*, flanges 4 and 5, the spindle *d*, cams *e*, and knob *f*, the three latter cast in one piece, substantially as and for the purposes set forth.

Signed by me this 7th day of April, 1876.

ELBRIDGE J. STEELE.

Witnesses:

CHARLES PECK,

E. L. PRIOR.