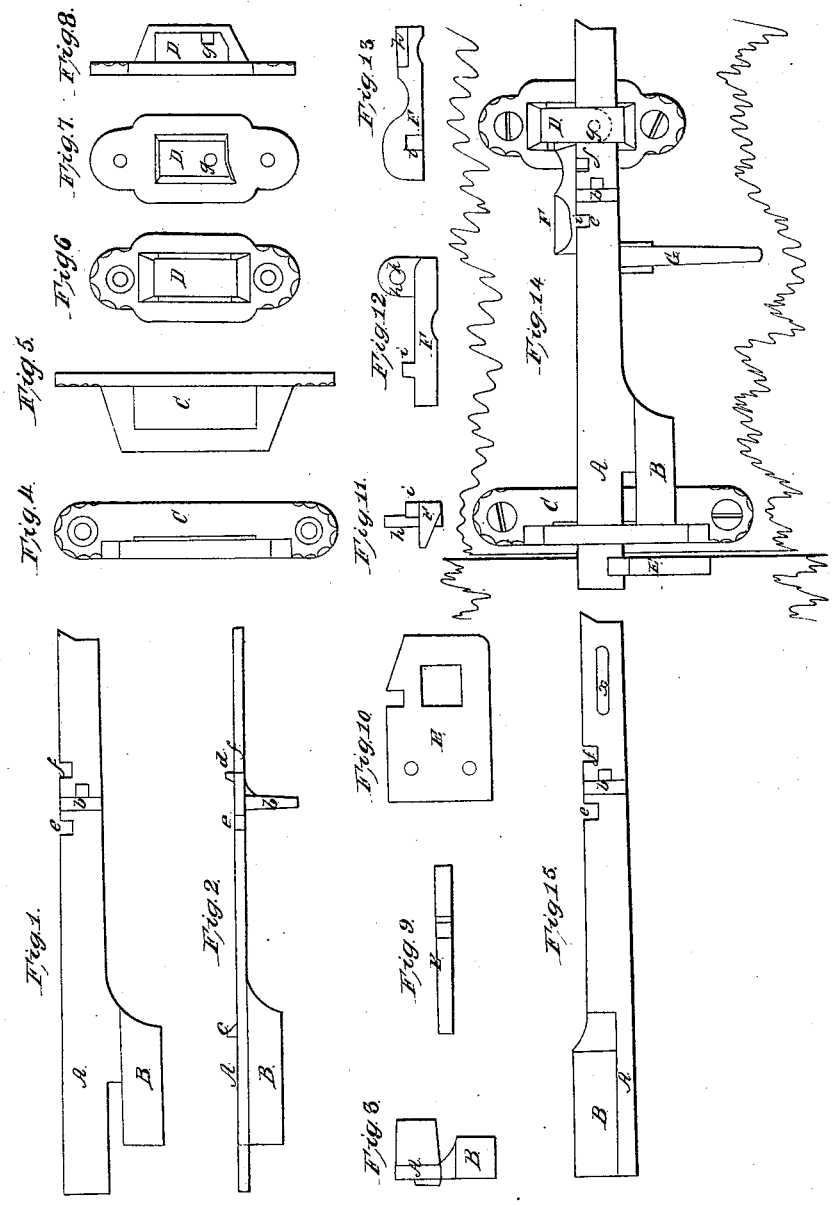
H. L. De Zeng,

Latch,

No. 53,585, Patented Apr. 3, 1866.



Witnesses:
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AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

HENRY L. DE ZENG, OF GENEVA, NEW YORK.

IMPROVEMENT IN DOOR-LATCHES.

Specification forming part of Letters Patent No. **53,585**, dated April ·', 1866.

To all whom it may concern:

Be it known that I, HENRY L. DE ZENG, of Geneva, in the county of Ontario and State of New York, have invented a new and useful Door-Latch; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

The nature of my said invention consists in a sliding latch formed with a bolt thereon, and sustained by cleats in such a manner that the latch will slide up the inclined catch, as usual, when the door is closed, and that the bolt and latch can be given an endwise motion for bolting the door, when required.

A and B, Figures 1, 2, and 3, represent the latch and bolt cast in one piece, with lugs *b c d* upon the sides of the latch, and two notches, *e f*, in its upper edge, for purposes hereinafter described.

C, Figs. 4 and 5, represents a cleat to be attached to the door, near its edge, to confine and guide the latch and bolt A B.

D, Figs. 6, 7, and 8, represents a second cleat to guide the narrow end of the latch A. Upon the under side of the upper plate of this cleat a pin or spur, *g*, is cast, for a purpose described hereinafter.

E, Figs. 9 and 10, represents a plate to be fastened to the door-post to receive the latch and bolt A B.

F, Figs. 11, 12, and 13, represents a check-latch with two lugs, *h i*, cast upon it. These lugs are upon the same side of the check-latch, but at opposite ends, *h* being flush with the side and drilled through at *k*, to receive the pin *g*, in the cleat D, and *i* fitted to the notches *e f* in the latch A, for purposes hereinafter described.

G, Fig. 14, represents the thumb-lever, extending through the door from the handle on the opposite side, and fitted in any usual manner.

Fig. 14 represents the several parts placed in their proper positions as follows: The check-latch F is first passed into the cleat D, and the lug *h* set over or attached to the pin *g*. The narrow end of the latch A is then placed between it and the two bars of the cleat D, the lug *i* fitting into the notches *e f* in the upper edge of the latch A.

By this simple arrangement the parts will be free to operate either as a latch or bolt, the check-latch F being easily raised by the thumb or forefinger, when the latch A is required to slide, by means of the lug *b*, until the lugs *c* or *d* strikes the cleat C or D. When used as a bolt, the latch A cannot be raised nor the thumb-lever G withdrawn from the door.

If preferred, the latch A may be constructed with the bolt B upon its upper edge, the cleat or plate to receive it being placed upon the face of the door-post instead of the edge, as represented. The narrow end of the latch A may be made to slide upon the pin *g*, if desired, by casting a slot, *x*, through it, as represented in Fig. 15.

What I claim, and desire to secure by Letters Patent, is—

1. The sliding latch A, and bolt B, constructed substantially as specified.

2. The check-latch F, in combination with the cleat D, and latch A, and bolt B, all being constructed and arranged substantially as set forth.

HENRY L. DE ZENG.

Witnesses:

S. H. SILL,

WM. GARDNER.