

B. W. FOSTER.
Latch.

No. 209,034.

Patented Oct. 15, 1878.

Fig. 1.

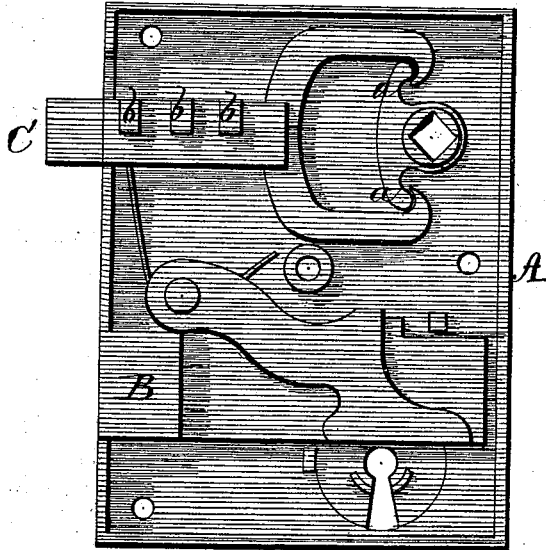


Fig. 2.

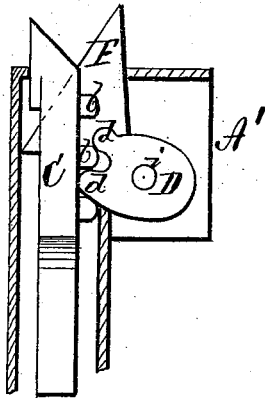
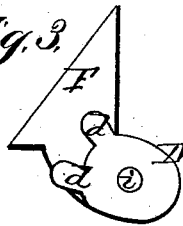


Fig. 3.



Witnesses:
M. P. ...
John C. Rogers

Inventor:
B. W. Foster
per
M. H. Alexander & Ellis
Attorneys.

UNITED STATES PATENT OFFICE.

BRADLEY W. FOSTER, OF HUNTINGTON, WEST VIRGINIA.

IMPROVEMENT IN LATCHES.

Specification forming part of Letters Patent No. 209,034, dated October 15, 1878; application filed September 21, 1878.

To all whom it may concern:

Be it known that I, BRADLEY W. FOSTER, of Huntington, in the county of Cabell and State of West Virginia, have invented certain new and useful Improvements in Door-Latches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to door-locks; and it consists in an attachment for operating the latch and in the construction and combination of parts, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is an interior view of a door-lock embodying my invention. Figs. 2 and 3 are detailed views of parts thereof.

A represents the lock-case, with bolt B and latch C. The latch is operated by the usual arms *a a* on the spindle by turning the door-knob in either direction.

The latch C is formed with cogs *b b* on the side, and is operated in its backward motion into the lock or latch case by cogs *d* on a section or segment, D, of a cog-wheel, which is

pivoted in an extension, A', of the lock or latch case. This cogged section or segment is provided with a cam, F, which projects from the front edge of the lock or latch case and comes in contact with the catch or striking-plate in the closing movement of the door or gate, and thereby gives a direct motion to the latch in the line of its receding motion into the lock or latch case. By this means the latch is freed from friction, and has only the force of the spring to overcome.

The cogged section D is held in place over or against the latch by its pivot or axle *i*, which is supported in the extension A' of the case, or by brackets cast on and in connection with the face-plate or cover side of the lock or latch.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The latch C, provided with cogs *b*, and the pivoted segment D, provided with cogs *d* and having the projecting cam F, and arranged in a case, A, substantially as and for the purposes herein set forth.

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

BRADLEY W. FOSTER.

Witnesses:

G. L. NYE,
H. W. BLOSS.