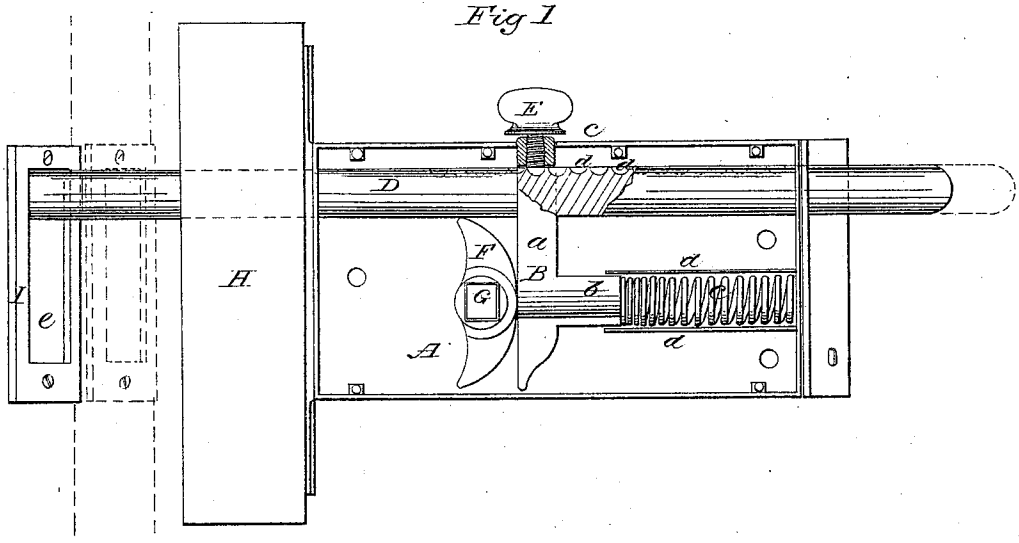
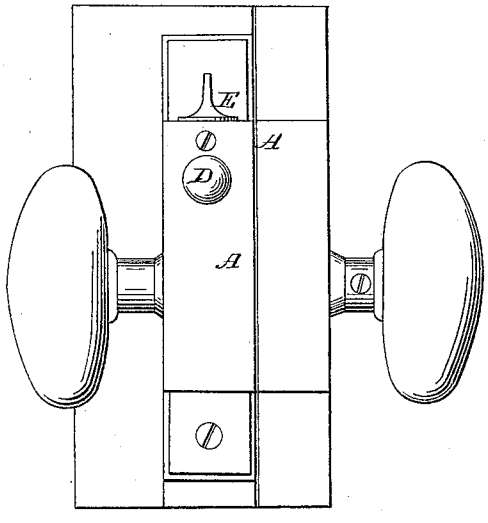
S. B. Williams,

Gate Latch.

No. 40,875. Patented Dec. 8, 1863.

Fig 1





Witnesses:
J. W. Coombs
Geo. W. Reed

Inventor:
S. B. Williams
per Munn & Co.
attorneys

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

UNITED STATES PATENT OFFICE

S. B. WILLIAMS, OF LEAVENWORTH, KANSAS.

IMPROVEMENT IN LATCHES FOR GATES.

Specification forming part of Letters Patent No. **40,875**, dated December 8, 1863.

To all whom it may concern:

Be it known that I, S. B. WILLIAMS, of Leavenworth, in the county of Leavenworth and State of Kansas, have invented a new and useful Improvement in Latches for Gates, Doors, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention, one side of the case being removed in order to expose the interior; Fig. 2, an end view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to obtain a latch with a bolt so arranged that it may be adjusted longitudinally farther forward or backward in the latch-case, so as to compensate for any shrinking or swelling of the gate or fence and admit of the bolt always being put in a proper relative position with the strike or nosing, so that it may operate well at all times, however much the space between the gate and the fence may vary in consequence of shrinking and swelling.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the case of the latch, which may be of rectangular or other form, and B is a slide, formed of vertical and horizontal bars *a b*, as shown clearly in Fig. 1. These two bars *a b* may be formed out of or cast in one piece, and the upper end of the vertical bar *a* passes through a slot, *c*, in the upper part of the case A, said slot being of such a length as to admit of a requisite length of movement of the slide within the case. The horizontal bar *b* of the slide is fitted or works between two horizontal guide-plates, *d d*, in the case A, said plates having a spiral spring, C, placed between them, which bears against the end of *b*, and has a tendency to keep the slide B shoved forward, so that the upper end of the bar *a* will bear against the front end of the slot *c*.

D represents a bolt, which is fitted horizontally in the upper part of the case A, and passes through the upper end of the vertical bar *a* of the slide B. This bolt D is allowed to slide longitudinally in the case A and bar *a* of the slide B, and it is secured in the bar *a* at any desired point by means of a set-screw, E, which passes vertically into the upper end of *a*, and has its lower end fitted in any one of a series of notches, *d*, in the bolt, as shown in Fig. 1.

F is a cam, which is fitted in the case A and has the knob arbor G passing through it. This cam bears against the slide B, and by turning the former in either direction the slide, and consequently the bolt D, may be shoved back. The case A is secured to a gate so that its outer end may abut against its stile H, the bolt D passing through said stile, and also through the back end of the case, as shown in Fig. 1. When the gate is hung, a sufficient space is allowed between the stile H and the fence-post adjoining it to prevent the stile H binding against the fence-post, however much the gate and fence-post may swell, and the bolt D is adjusted longitudinally so as to catch into or engage with the strike or nosing I when the gate is closed, said strike or nosing being attached to the fence-post. In the event of the shrinking of the gate or fence-post, or shrinking of both, so as to increase the space between the stile H and fence-post to which the nosing is attached, and prevent the bolt D from engaging with the strike or nosing I, the bolt D is simply adjusted a little forward by unscrewing the set-screw E, so as to liberate the bolt from the slide B, the bolt, when properly adjusted, being secured by screwing down the screw E. Thus by this simple arrangement the bolt D may be adjusted so as to compensate for the shrinking or swelling of the gate or fence or fence-post, and a proper relative position of the bolt D and strike or nosing I always obtained, so that the former may catch into and engage with the latter.

I would remark that the slot *e* in the strike or nosing I, which slot receives the end of the bolt D, is made sufficiently long to compensate for the sagging of the gate.

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

The securing of the bolt D of the latch within the case A and to the slide B by means of the set screws E, substantially as shown, to admit of the longitudinal adjustment of said bolt, for the purpose herein set forth.

S. B. WILLIAMS.

Witnesses:

G. H. RUSHMORE,

LYMAN SCOTT, Jr.