S. CHERRY.

GATE-LATCH.

No. 169,418.

Patented Nov. 2, 1875.

FIG. I

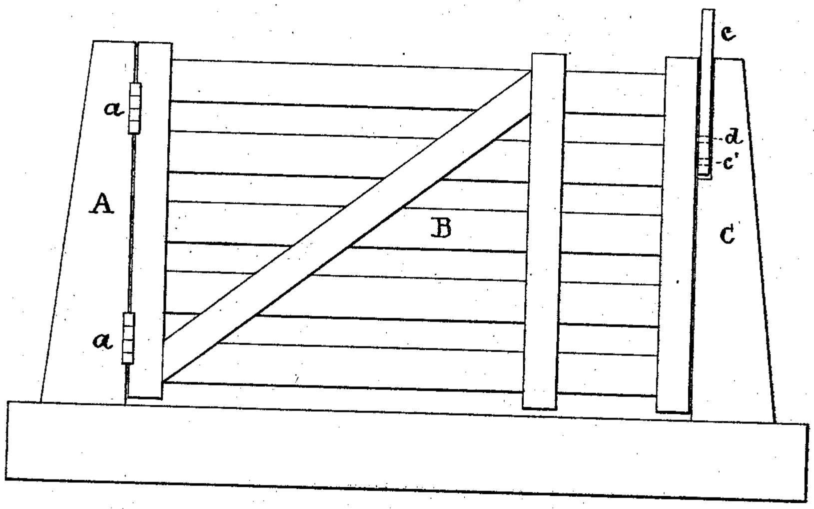


FIG. III

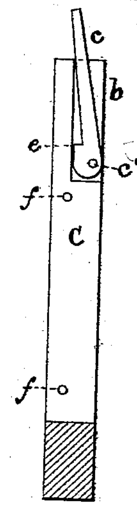
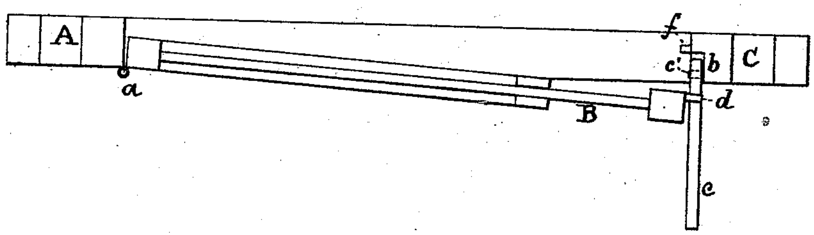


FIG. II



WITNESSES.

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UNITED STATES PATENT OFFICE.

SAMUEL CHERRY, OF NEW PLYMOUTH, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO MOSES M. CHERRY, OF SAME PLACE.

IMPROVEMENT IN GATE-LATCHES.

Specification forming part of Letters Patent No. **169,418**, dated November 2, 1875; application filed July 12, 1875.

To all whom it may concern:

Be it known that I, SAMUEL CHERRY, of New Plymouth, in the county of Vinton and State of Ohio, have invented certain Improvements in Gates, of which the following is a specification, reference being had to the accompanying drawing forming a part hereof.

This invention relates to a combination of devices which relieves the gate-hinges of part of the strain upon them, acts as a substitute for a latch, and also affords a means whereby the gate is conveniently opened.

In the accompanying drawing forming a part of this specification, Figure 1 is a front view of a closed gate and its posts having my invention thereon. Fig. 2 is a top view of the same, partly open. Fig. 3 is an inner-edge view of the latch or jamb post and its connected parts.

Similar letters of reference indicate similar parts in all the views.

A is the hinge-post of the gate. B is the gate, suspended upon the hinges *a*. C is the latch or jamb post. The upper part of the latch-post C is rabbeted, as shown at *b*, in which rabbet is pivoted the lever-latch *c*. The lower end of the lever-latch, through which passes the pin *c'* into the latch-post, acts, when partly revolved, as an eccentric or cam, for a purpose better understood from the following: Supposing the gate to have been opened, and then closed to the extent shown in Fig. 2, the pin *d*, projecting from the front end of the gate, strikes against the shoulder *e* of the lever-latch, which stands or is held at the time about horizontally, the momentum of the closing gate throwing the lever-latch over beyond the perpendicular, as shown in Fig. 3. The gate is thus locked between the lever-latch and the pins *f*, projecting from the inside of the latch-post. The eccentric course taken by the shoulder *e*, which carries the pin *d* of the gate, tends to slightly lift the gate, and relieve the hinges of about half the weight of the gate.

When it is desired to open the gate the lever-latch is simply pulled forward and allowed to fall, when the same eccentric course taken by the shoulder *e* slightly raises the latch end of the gate, which opens by reason of the slight droop given it by the additional strain placed upon the hinges; or the gate is pulled open, if any power is required.

It is thus seen that the appliances herein described act in a threefold capacity—viz., to open the gate; to relieve the hinges from about half the weight of the gate, and thus admit of making the posts lighter, and prevent loosening at the hinges; and also to lock the gate when closed.

The contrivance is simple and reliable, and can be cheaply constructed by means of the tools in ordinary use on a farm or in a country shop.

I claim as my invention, and wish to secure by Letters Patent of the United States—

The hinged gate B, pin *d*, rabbeted latch-post C, stops *f*, and latch-lever *c*, provided with the eccentric or cam end and shoulder *e*, all combined and operating substantially as and for the purposes herein specified.

In testimony whereof I have hereto subscribed my name this 17th day of May, in the year of our Lord 1875.

SAMUEL CHERRY.

Witnesses:

VOLNEY BRIGGS,

M. M. CHERRY.