

HENRY D. ALDERFER.

Improvement in Latches for Gates.

No. 119,491.

Patented Oct. 3, 1871.

Fig. 1.

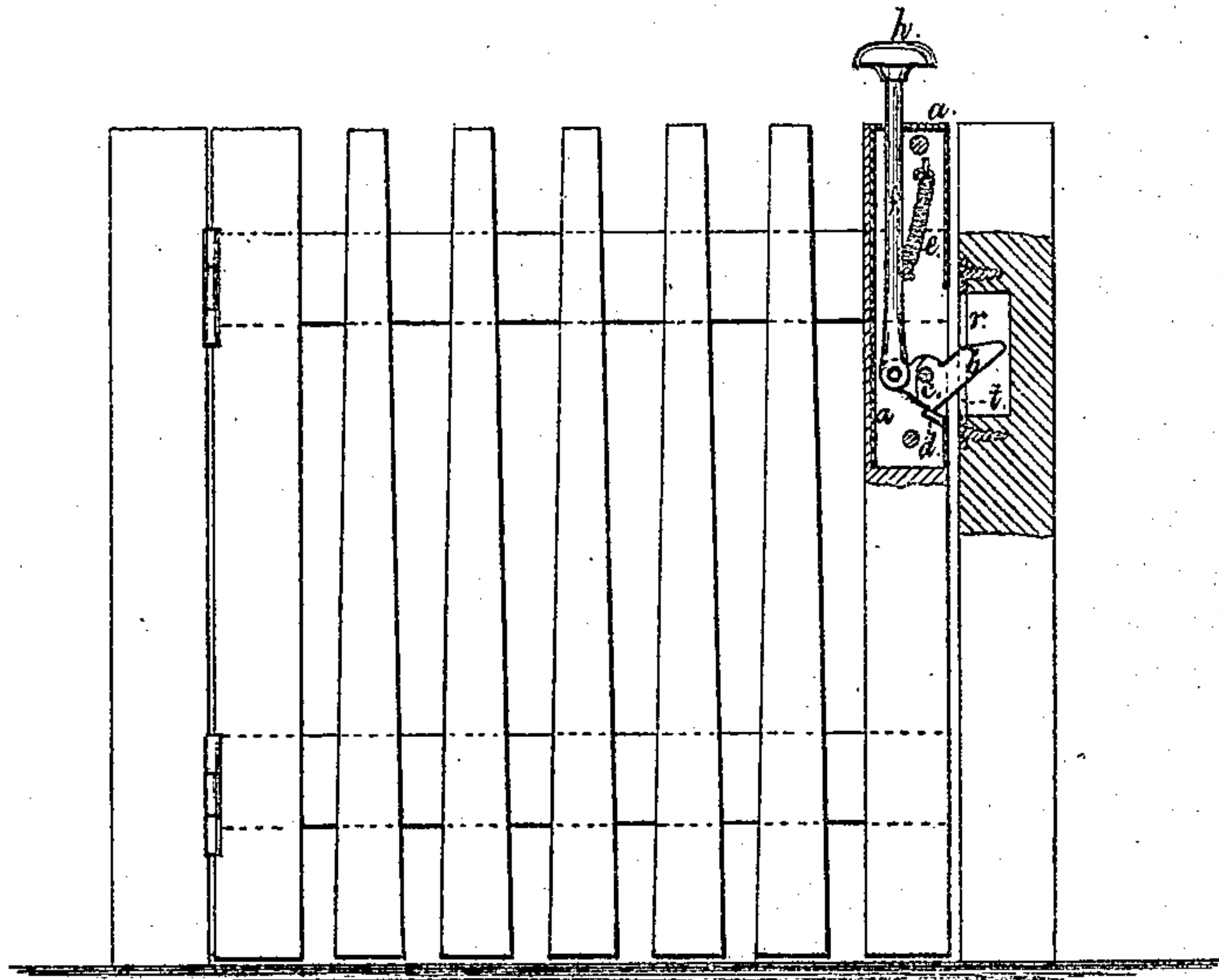


Fig. 3.

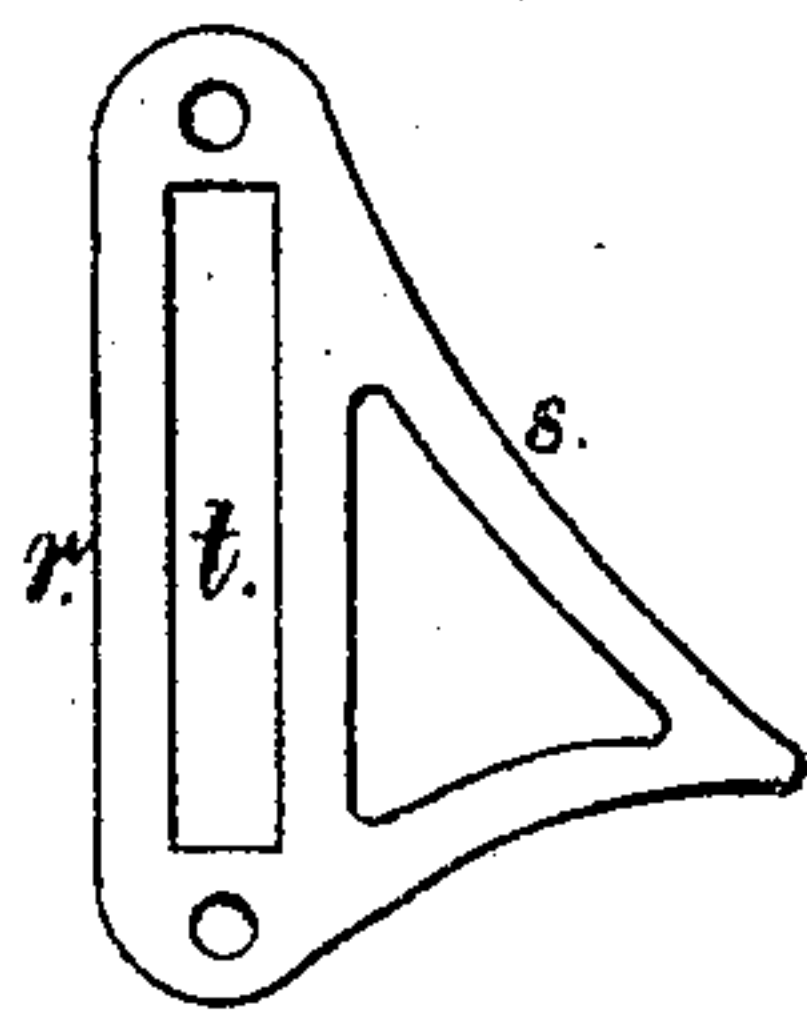
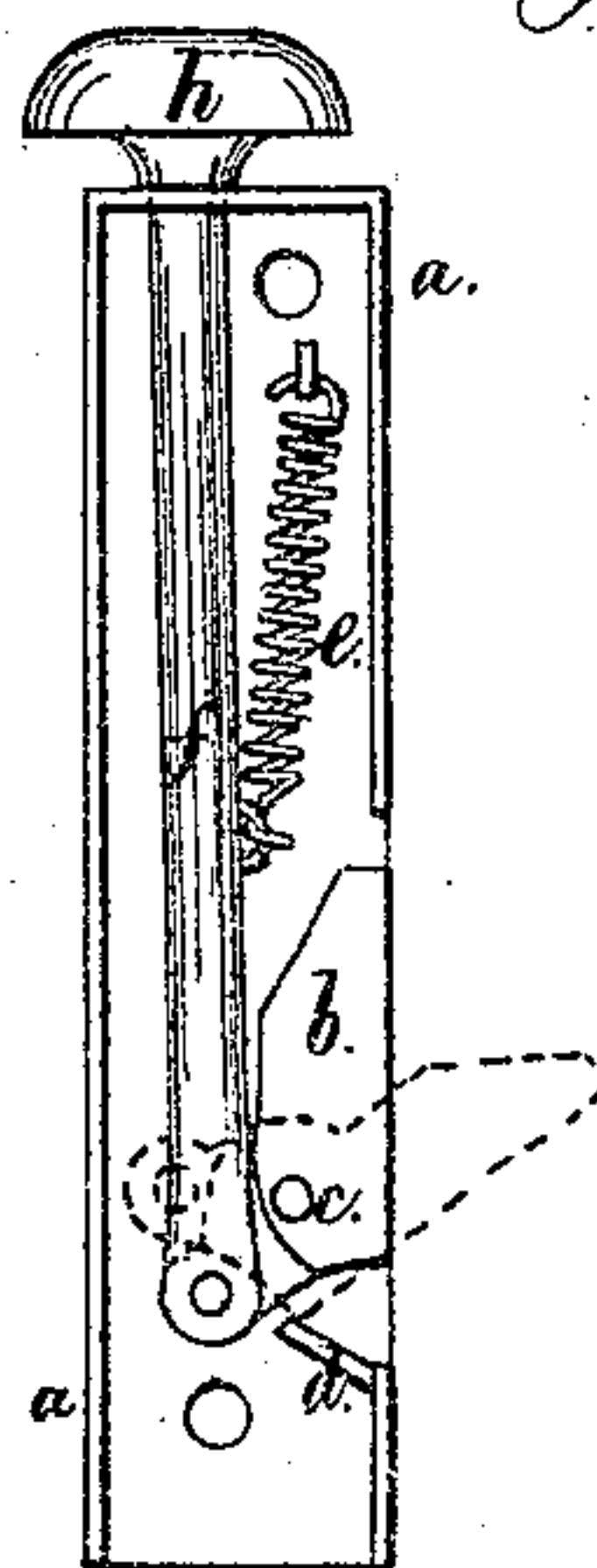


Fig. 2.



Witnesses,

Chas. H. Smith  
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Lemuel W. Serrell atty

# UNITED STATES PATENT OFFICE.

HENRY D. ALDERFER, OF GRATER'S FORD, PENNSYLVANIA.

## IMPROVEMENT IN LATCHES FOR GATES.

Specification forming part of Letters Patent No. 119,491, dated October 3, 1871.

*To all whom it may concern:*

Be it known that I, HENRY D. ALDERFER, of Grater's Ford, in the county of Montgomery and State of Pennsylvania, have invented and made a new and useful Improvement in Gate-Latches; and the following is declared to be a correct description of the same.

This latch is made so as to lessen the concussion upon the swinging catch, and to prevent the latch becoming inoperative in consequence of the gate-posts being partially displaced by frost or otherwise.

The latch or catch swings within a metal case. Its lower edge stands at an inclination while in a normal position; hence it slides with great ease up the incline of the nosing upon the gate-post. The latch is operated by a sliding bar with a knob at the upper end, and to this the spring is attached that throws the latch. This latch is placed upon the gate so that the knob can be easily depressed to throw up the latch and disconnect the same; and as the gate closes there is but little concussion on the latch, because of the inclined position of the swinging latch.

In the drawing, Figure 1 represents the latch sectionally as applied to a gate. Fig. 2 is a corresponding view of the latch separately, but in larger size; and Fig. 3 is a side view of the nosing.

The box *a* is made of a size and shape adapted

to being screwed upon the gate. It contains the latch *b* that swings upon the fulcrum *c*, and in a normal position stands at an inclination, as seen in Fig. 1, and by dotted lines in Fig. 2, the end of the latch resting against the stop *d*, so that the spring *e*, acting upon the rod *f*, cannot turn this latch beyond the said inclined position. The knob *h* is upon the upper end of the rod *f*, where the same projects above the box *a*. As this knob *h* is depressed, the latch *b* is swung up within the case *a* so as to unlatch the gate. The nosing *r* is made with an inclined face, *s*, so that the inclined under side of the latch shall run up the same with ease and close the latch into its case as the gate is shut, and when the latch comes opposite the mortise *t* in the nosing said latch is thrown in by the spring *e* so as to retain the gate.

I claim as my invention—

The inclined latch *b*, passing entirely within the casing, combined with the rod *f* and spring *e* for operating the same, said rod and latch moving in the vertical plane of the gate, as set forth.

Signed by me this 26th day of June, A. D. 1871.

H. D. ALDERFER.

Witnesses:

JOSEPH BALL,  
F. A. OSBOURN.

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