J. ELLIS.

Gate Latch.

No. 37,028. Patented Nov. 25, 1862.

Fig: 3.

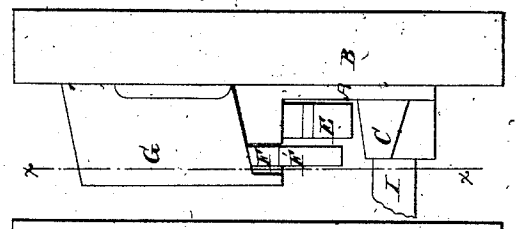


Fig: 2.

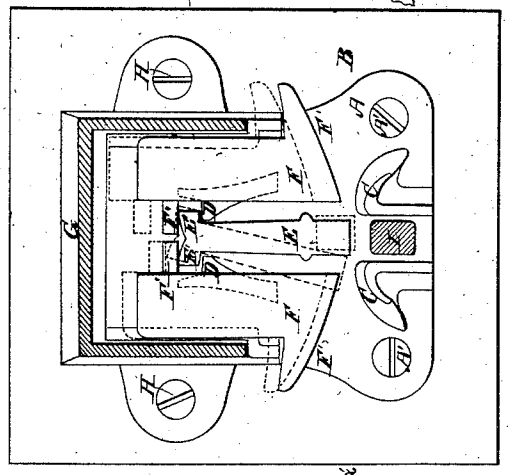


Fig: 1.

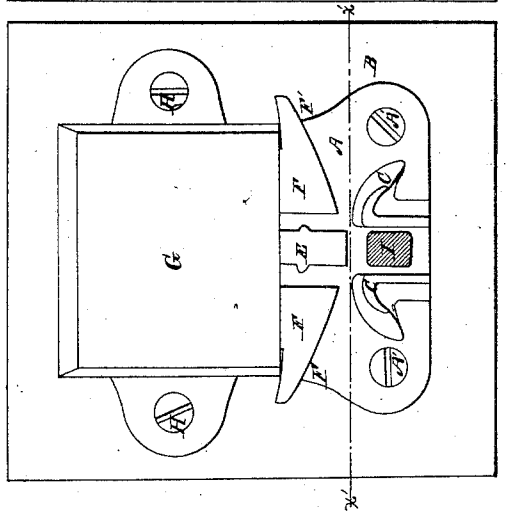


Fig: 5.

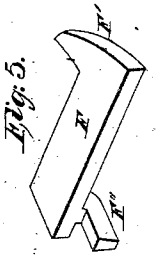
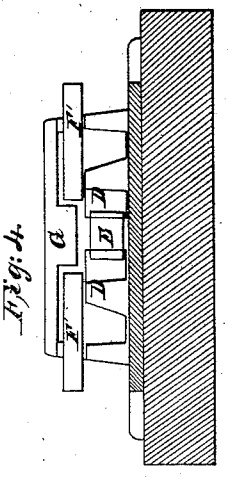


Fig: 4.



Witnesses:

Inventor:
John Ellis

UNITED STATES PATENT OFFICE.

JOHN ELLIS, OF DETROIT, MICHIGAN.

IMPROVEMENT IN GATE-LATCHES.

Specification forming part of Letters Patent No. **37,028**, dated November 25, 1862.

To all whom it may concern:

Be it known that I, JOHN ELLIS, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Gate-Latches; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view. Fig. 2 is a vertical section in the direction of the line *x x* in Fig. 3. Fig. 3 is a side view. Fig. 4 is a section in the direction of the line *x' x'* in Fig. 1, and Fig. 5 is a detached part.

Like letters refer to like parts in the several views.

The nature of my invention relates to such a construction of a gate latch that when applied to self-acting gates or others it can by no possible means, dependent upon its legitimate action, become deranged, and thus allow the gate to pass through beyond the post; and at the same time the structure is such that the gate can swing in either direction in opening or shutting.

A represents a plate that is attached to the inner face of the gate-post B by means of two screws, A', and C C on the lower end of the plate showing the catch between which the latch is held when the gate shuts. These are attached to or cast with the plate A, all the parts being made of cast-iron.

D D are brackets, also cast upon the plate A, which serve to support the pendulated stop E, which, by means of the projections E' E', rests upon them, as seen in Fig. 2.

F F are pendulated catches which are suspended upon the head of the stop E, and are kept thus in place by their gravity. Either one can be raised by pressure against the inclined plane F', which is the case when acted upon by the latch in the act of shutting the gate.

G is a plate which covers over the parts shown in Fig. 2 and keeps them in place, and is secured to the post by screws, as shown at H H, Figs. 1 and 2.

In Fig. 5 one of the pendulated catches is shown detached. The spur F'', by which they are suspended, rests upon the head E' of the stop E.

In the several figures, I represents a transverse section of the gate-latch. When the gate shuts, the latch I strikes against the inclined planes C F', rising on the inclined plane C and lifting the pendulated catch F until the latch I comes in contact with the stop E, which is thrown forward until it strikes against the lower end of one of the brackets D D, thus arresting the further progress of the latch, which by its gravity falls into its position, (seen in Figs. 1, 2, and 3,) and this is the case from whichever way the gate swings, the two sides of the catch being duplicates of each other, the pendulated stop E performing the same office from whichever way the gate swings. Now, if the latch I is raised for the purpose of opening the gate, the latch lifts the pendulated stop E, and with it both the pendulated catches F, and the gate can be opened without obstruction.

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

The pendulated stop E and pendulated catches F, when arranged and operated as and for the purpose specified.

JOHN ELLIS.

Witnesses:

W. H. BURRIDGE,

HENRY VOTH.