

United States Patent Office.

ALFRED K. DAVIS, OF CAREY, OHIO.

Letters Patent No. 70,537, dated November 5, 1867.

IMPROVED GATE-LATCH.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ALFRED K. DAVIS, of Carey, in the county of Wyandott, and State of Ohio, have invented a new and improved Gate-Latch; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an improved gate-latch, and consists of two bars pivoted on an upright secured to the gate-post, or upon the gate-post itself, the bars being attached at one end to another upright or connecting-bar, operated by a lever similarly pivoted and attached, or where the latch-bars are pivoted to the gate-post, then pivoted upon an upright or ear attached at the top of the gate-post. The free ends of the latch-bars hold the gate by extending over the front vertical bar thereof. To open the gate the movable upright is operated by lowering the free end of the lever, thereby depressing the free ends of the latch-bars and releasing them from the gate. The weight of the movable upright suffices to close the latch-bars, and when it is desired to prevent this the lever is held in a catch at the top of the gate-post. The movable upright may be replaced by a cord, in which case the centres of gravity of the latch-bars and their free ends must be on opposite sides of their pivots. In the accompanying drawings—

Figure 1 is a front, and

Figure 2 a top view of gate having my improved latch annexed.

Similar letters of reference indicate like parts.

A is the front vertical bar of gate; B the front gate-post, to which the upright C is bolted, at *b* and *b'*, by bolts passing through the latch-bars D D', to which they serve as pivots; or the latch-bars may be pivoted upon upright C, and the latter only secured to the front gate-post B; or the upright may be dispensed with, the latch-bars being pivoted to the front gate-post, and a short upright or ear attached to the top of the gate-post to serve as a fulcrum to lever F. A movable upright, E, is bolted to the ends of the bars D D', and to the end of the lever F, pivoted on upright C, or its equivalent, at *f*. The movable upright E may be replaced by a cord connecting the latch-bars D and D' and the end of lever F, but in that case the latch-bars D D' must be pivoted between their centres of gravity and their free ends, while the centre of gravity of lever F and its free ends should be on the same side of the fulcrum or pivot *f*. A pin or catch upon the front gate-post A, just above the horizontal position of latch-bars D D', will prevent the weight of said latch-bars from carrying them too far over, while the weight of lever *f*, acting in the opposite direction, will hold taut the connecting-cord substituted for the upright E. The ends of the latch-bars lock the gate by extending over its front vertical bar A.

To open the gate, depress the free end of lever F, thereby raising upright E, and with it the bolted or tied ends of latch-bars D D', depressing the free ends of said bars, thereby releasing them from the front vertical bar A of gate. To hold the latch open, the end of lever E is to be secured in catch *g*, on top of front gate-post B. A slight blow or jar releases the lever from the catch *g*, when the weight of the upright E or of the latch-bars restores the latch-bars D D' to their horizontal position, holding the gate closed. A guide-block may be placed on the ground-rail G to guide the upright E to place, and when the ground-rail is dispensed with, a ground-block placed under the foot of E prevents it from sinking into the ground.

The gate by the use of my improved latch is not liable to be injured by hogs and other small animals twisting it open below and squeezing through, nor by horses, cows, and other large cattle racking it above by pushing with their breasts against the top, as frequently happens to gates latched in the centre. Furthermore, when the latch is set upon the gate, as is now the ordinary practice, the gate is apt to sag down, so that to latch it the whole gate has to be lifted—a defect from which a gate provided with my improved latch is entirely free. My improved latch is also more readily operated than any other latch, especially by horsemen.

I claim as new, and desire to secure by Letters Patent—

The pivoted latch-bars D D' and connecting-bar E, and their respective equivalents, all as set forth, in combination with the lever F, operating and arranged in manner substantially as and for the purposes herein shown and described.

ALFRED K. DAVIS.

Witnesses:

PETER SIMONIS,

ROSWELL PERRY.