



# UNITED STATES PATENT OFFICE.

HENRY H. HOOVER, OF MACY, INDIANA.

## FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 346,558, dated August 3, 1886.

Application filed October 30, 1885. Serial No. 181,390. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY H. HOOVER, carpenter, a citizen of the United States, residing at Macy, in the county of Miami and State of Indiana, have invented certain new and useful Improvements in Farm-Gates, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to farm-gates, and has for its object the provision of a gate of the class named having means whereby it may be moved both rearwardly and upwardly to a predetermined distance upon a suitable supporting-track, and thereafter to be swung open in the horizontal plane.

The invention further contemplates the provision of means whereby the gate is held against accidental displacement when balanced upon its supporting-track, and, further, means whereby it is released from said balanced position upon said track.

In the accomplishment of the above the invention consists in the construction, arrangement, and combination of parts, substantially as hereinafter described, and more particularly pointed out in the claims.

In the drawings, Figure 1 represents, in side elevation, a gate embodying my invention balanced upon its supporting-track in position to be swung open. Fig. 2 is a similar elevation showing the gate closed. Fig. 3 is a top plan view of the gate in closed position. Figs. 4 and 5 are detached detail views of parts of the gate, showing modified forms of the locking mechanism.

Referring to the drawings, in which similar letters of reference denote similar parts, A designates a gate consisting of a series of longitudinal rails, *a*, secured to the vertical bars *a'* in the usual well-known manner. One of the longitudinal rails *a* projects beyond the vertical forward bars, *a'*, to form a latch, *a''*, whereby to hold the gate in closed position, said latch engaging with a suitable recess formed in the post B.

Upon one face of the gate A is secured a diagonal rail, C, the lower edge of which rests and travels upon a roller, *d*, mounted in a frame, D, projecting forwardly by and upwardly from a post, E, hinged at *e* to the rear post, F, of the gate.

G designates a second inclined rail secured at its lower end to the post E, and projecting thence rearwardly in a plane similar to that of the rail D. The upper edge of the rail G forms a track upon which a roller, H, pivoted to the rear end of the gate A, rests and travels when said gate is opened or closed.

*g* designates a recess formed in the upper edge of the rail G, near the outer end thereof, to receive the roller H when the gate is moved backward for the purpose of being opened. (See Fig. 1.) The upper end of the latch *g'* is eccentric with its pivot, said eccentric portion passing under the roller, to raise the same from engagement with the recess *g'*, when desired.

If desired, the pivoted latch *g'* may be dispensed with, and in lieu thereof a latch, I, may be pivoted upon the side of the diagonal rail C, at the forward end thereof, in such manner that its forward end shall be raised by the frame *d'* when the gate is moved backward, said latch thereafter dropping behind said frame, thus holding the gate in proper position upon its supporting-rails D G.

K designates stay-rods extending from the top of the hinged post E to the outer ends of the track-rails D G, respectively.

Figs. 4 and 5 represent modifications of the means employed to hold the gate properly balanced upon its supporting-rails D G, the former consisting in a pivoted latch, the latter in a sliding bar, L, having an inclined portion, adapted to pass under the roller H for raising the same.

The operation of my improvement will be apparent without further description.

I am aware of the patents issued to F. R. Sherman, dated January 7, 1868, No. 73,129, and to C. A. Mosher, November 6, 1877, No. 196,925, and I make no claim to the construction of devices therein shown and described.

What I claim is—

1. In a sliding and swinging gate, the combination of a hinged post having inclined rails projecting from opposite sides thereof, one of said rails provided with a recess to receive a track-roller, with a gate having a diagonal rail secured upon one of its faces, and a track-roller normally in engagement with one of the inclined rails of the hinged post, substantially as described.

2. In a sliding and swinging gate the combination of a hinged post having inclined rails projecting from opposite sides thereof, said inclined rails provided at their outer ends, respectively, with a fixed roller and a roller-receiving recess, with a gate having a diagonal rail secured upon one of its faces, said rail normally in engagement with the fixed roller upon the inclined projecting rail of the swinging post, and a roller pivoted to the gate and normally in engagement with the remaining projecting rail of said swinging post, substantially as described.

3. In a sliding and swinging gate, the combination of a hinged post having inclined rails D G projecting from opposite sides thereof, straining-rods K, and locking mechanism, substantially as described, with a gate having a diagonal rail, C, and a releasing-latch, as and for the purpose set forth.

4. In a sliding and swinging gate, the com-

bination of a post, F, a post, E, hinged thereto, provided with inclined rails connected to said post at a common point, and projecting thence outwardly in similar but opposite planes, straining-rods connecting said rails with the upper end of the hinged post, and a gate having a diagonal rail, a roller, and a locking-latch, substantially as set forth.

5. In a sliding and swinging gate, a gate provided with a diagonal rail, a roller, and a locking-latch, in combination with oppositely-inclined rails projecting from a hinged post at opposite sides thereof, and provided, respectively, with a fixed roller and a detaining-recess, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY H. HOOVER.

Witnesses:

E. H. SUTTON,  
A. L. NORRIS.