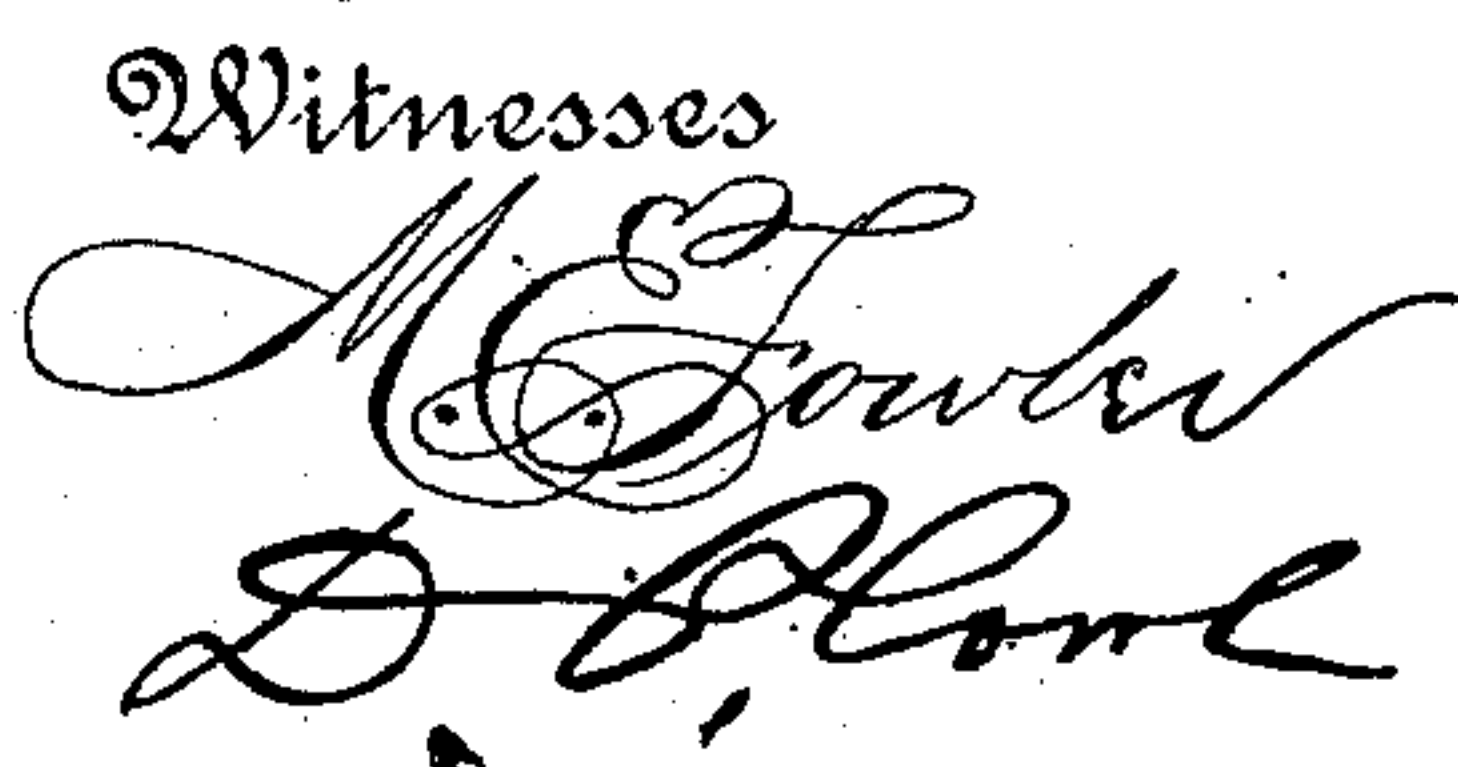


H. HUBLER.
SWINGING GATE.

Patented Feb. 22, 1887.



Inventor
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UNITED STATES PATENT OFFICE.

HARVEY HUBLER, OF WEST SALEM, OHIO, ASSIGNOR OF ONE-HALF TO
E. L. PETERS, OF SAME PLACE.

SWINGING GATE.

SPECIFICATION forming part of Letters Patent No. 358,396, dated February 22, 1887.

Application filed September 18, 1886. Serial No. 213,919. (No model.)

To all whom it may concern:

Be it known that I, HARVEY HUBLER, a citizen of the United States, residing at West Salem, in the county of Wayne and State of Ohio, have invented a new and useful Improvement in Swinging Gates, of which the following is a specification.

My invention relates to improvements in swinging gates; and it consists of the peculiar combination and novel construction and arrangement of the various parts for service, substantially as hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings, which illustrate a swinging gate embodying my present improvements, Figure 1 is a top plan view. Fig. 2 is a side elevation; and Fig. 3 is a detached view of the latch, showing the case therefor in section and the front stile of the gate.

The object of my invention is to provide an improved swinging gate of simple and durable construction, which can be easily and conveniently opened and closed by the occupant of a vehicle or a horseback-rider without his being compelled to dismount; and a further object is to provide an improved latch for preventing the gate from swinging, which will be automatically operated to engage its keeper without reference to the direction in which the gate is moving.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the gate-sill, and B the road-sills, which are arranged on opposite sides of and at right angles to the gate-sill, the inner ends of the road-sills being connected to the gate sill by tenon-and-mortise joints.

C designates the hinge-post; D, the latch-post, connected to the gate-sill at the end opposite to that at which the hinge-post is connected thereto; and E E', the road-posts, which are affixed to the extremities of the road-sills and are arranged in line with the hinge-post. The gate and road sills can, however, be dispensed with and the several posts planted directly in the ground; and I prefer to secure

the said posts in the last-mentioned manner, as it dispenses with and saves the cost of the sills.

F designates the horizontally-swinging gate, which is of any approved or preferred pattern. The rear stile of the gate is hinged to the hinge-post C, as at *f*, and the front stile thereof carries a latch, G, on its outer front side. This latch G is arranged in a vertical position on the front stile of the gate and reciprocates freely in a sheath or housing, *g*, that is affixed to the gate. The latch is provided with a longitudinal vertical slot, *h*, in which is housed a coiled spring, H, the lower end of which bears against one of the terminal ends of the longitudinal slot, while the other end bears against a fixed stop-pin, *h'*, that passes through the slot of the latch, and against which the upper terminal end of the slot bears to limit the downward movement of the latch. The lower end of the latch is provided with an enlarged foot, I, which has a central notch or recess, *i*, in its under side, into which fits a keeper, J, that is rigidly affixed to the latch-post and arranged in the path of the foot of the latch, and the said foot is provided with beveled portions *i'* on opposite sides of the central notch, which impinge or ride upon the keeper as the gate swings back and forth to elevate the latch against the tension of the spring H thereof, and thus automatically lock the gate without reference to the direction in which it is moving.

The latch is elevated out of the keeper thereof by a cord or wire, J', which is suitably connected to the upper end of the latch and passes over a vertical grooved guide-roller, L, which is arranged in a vertical slot, *l*, of the front stile of the gate, and journaled on a suitable pin or shaft fixed therein.

The hinge-post C of the gate has a horizontal bar, M, secured to its upper end, and to the extremities of this bar are affixed the brackets O P, which are provided with upper anti-friction rollers, *o p*, respectively, and lower anti-friction rollers, *o' p'*. These rollers have grooved peripheries, and are arranged to rotate in horizontal planes on suitable shafts

or pins, the upper and lower rollers of the brackets being arranged in line with each other, as shown.

Q designates a bracket, which is swiveled to the upper end of the road-post E and carries two grooved anti-friction rollers, $q q'$, and R is another bracket, which is swiveled to the upper end of the road-post E', and also carries two grooved anti-friction rollers, $r r'$, as shown.

The latch-cord J' of the gate has one end passed round the rollers $r p o$, and then through the slot l and over the roller L to the latch G, and then round the roller p over the roller o again, finally being passed through the roller q .

The gate-cords are passed over the rollers $q' r' o' p'$, and are connected to the upper end of the middle stile of the gate.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the drawings. One end of the latch-cord is first drawn to release the latch from its keeper, and the corresponding end of the gate-cord is then pulled upon to swing the gate open. The passer or team can now pass through, and the other end of the gate-cord is drawn upon to close the gate, the latch thereof acting automatically and engaging its keeper.

The free ends of the latch and gate cords or wires J' S depend from their respective rollers in the brackets Q R for a suitable distance, and have operating handles or pulls t affixed thereto.

I am aware that it is not new to provide a swinging gate with a latch comprising a fixed cylinder having removable heads and endwise-moving rod or bolt working in the cylinder, and provided with a right-angled foot, a catch over which the said foot takes, and a spring

housed within the cylinder and normally depressing the bolt or rod to automatically engage the catch when the gate is closed; but such is not my invention.

I am also aware that it is not broadly new to provide a horizontally-swinging gate with a hinge-post, a latch-post, a gate hinged to the hinge-post and closing against the latch-post, the road-posts, pulleys secured to the road and hinge posts, a latch on the gate, and gate and latch cords passing through the pulleys and connected to the gate and latch, as such devices are shown, for instance, in Patents Nos. 64,924, 130,938, and 201,703.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a swinging gate, the combination of the hinge-post, the latch-post having the keeper, the road-posts, a gate hinged to the hinge-post and carrying a sheath and a guide-roller above the sheath, a longitudinally-slotted latch housed in the sheath and having the notched and beveled foot I, a spring fitted in the slot of the latch, the brackets O P, affixed to the hinge-post and having the upper and lower grooved rollers in line with each other, the brackets Q R, swiveled to the road-posts and each carrying the guide-rollers, and the gate and latch cords or wires, substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HARVEY HUBLER.

Witnesses:

T. J. SALTSMAN,
A. F. MCKEE.