

UNITED STATES PATENT OFFICE.

NATHAN H. LONG, OF MUNCIE, ASSIGNOR TO HIMSELF AND JOHN C. LONG, OF EATON, INDIANA.

IMPROVEMENT IN AUTOMATIC GATES.

Specification forming part of Letters Patent No. **168,509**, dated October 5, 1875; application filed August 6, 1875.

To all whom it may concern:

Be it known that I, NATHAN H. LONG, of Muncie, in the county of Delaware and State of Indiana, have invented certain new and useful Improvements in Farm-Gates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention is intended particularly to be used in connection with the gate for which Letters Patent No. 124,600 were granted to John C. Long, March 12, 1872, but it may be used with any other gate, if desired; and it consists in the construction and arrangement of a device by which the gate may be opened and closed by a person in a vehicle or on horseback, as will be hereinafter more fully set forth.

In the annexed drawing, A, A¹, and A² represent the hinge and latching posts of the gate B. F F are the posts to which are bolted the operating-levers E E. At the top end of the hinge-post A¹ is bolted a frame, D, having a slot, *a*, set angular to the post, and with the swing of the gate. The gate is, at its inner end, provided with an upward-projecting pintle, C, passing through the slot *a*, and having its upper end bent to form a crank, which is, by rods *b b*, connected with the T-shaped levers E E, as shown. By means of the slotted frame D, arranged as described, when the gate is in a closed position, and the crank or pintle C is moved in the direction the gate is to swing open, it will cause the forward end of the gate to rise out of the latching-block.

The gate being closed, the rider, in approaching from either direction, pulls down on the lever E on that side, by which the angular pintle C will be rapidly thrown past its vertical pivoted center, whereby the then acquired force of momentum and gravity will carry the gate to an open position. The gate being fully opened, it is closed by similar action at either of the levers E.

The gate cannot be opened by stock, and the effect of the severest gale of wind is neutralized by a continuous pull on the levers.

At the inner end of the slot *a* in the frame D is a notch, *x*, in which the pintle C is rotated when the gate is opened by hand, and is to prevent the pintle from moving out of place when the gate is in a closed position, which it would do if it were not for the notch.

On the pintle C is a nib, *y*, for the purpose of throwing the pintle out of the notch *x* when the gate is closed, and to allow it to move along in the slot *a* in opening and closing by the levers.

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

The combination of the inclined frame D, having slot *a*, with notch *x*, and the pintle C, with nib *y*, substantially as and for the purposes herein set forth.

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

NATHAN H. LONG.

Witnesses:

JOHN C. LONG,
WILL H. M. COOPER.