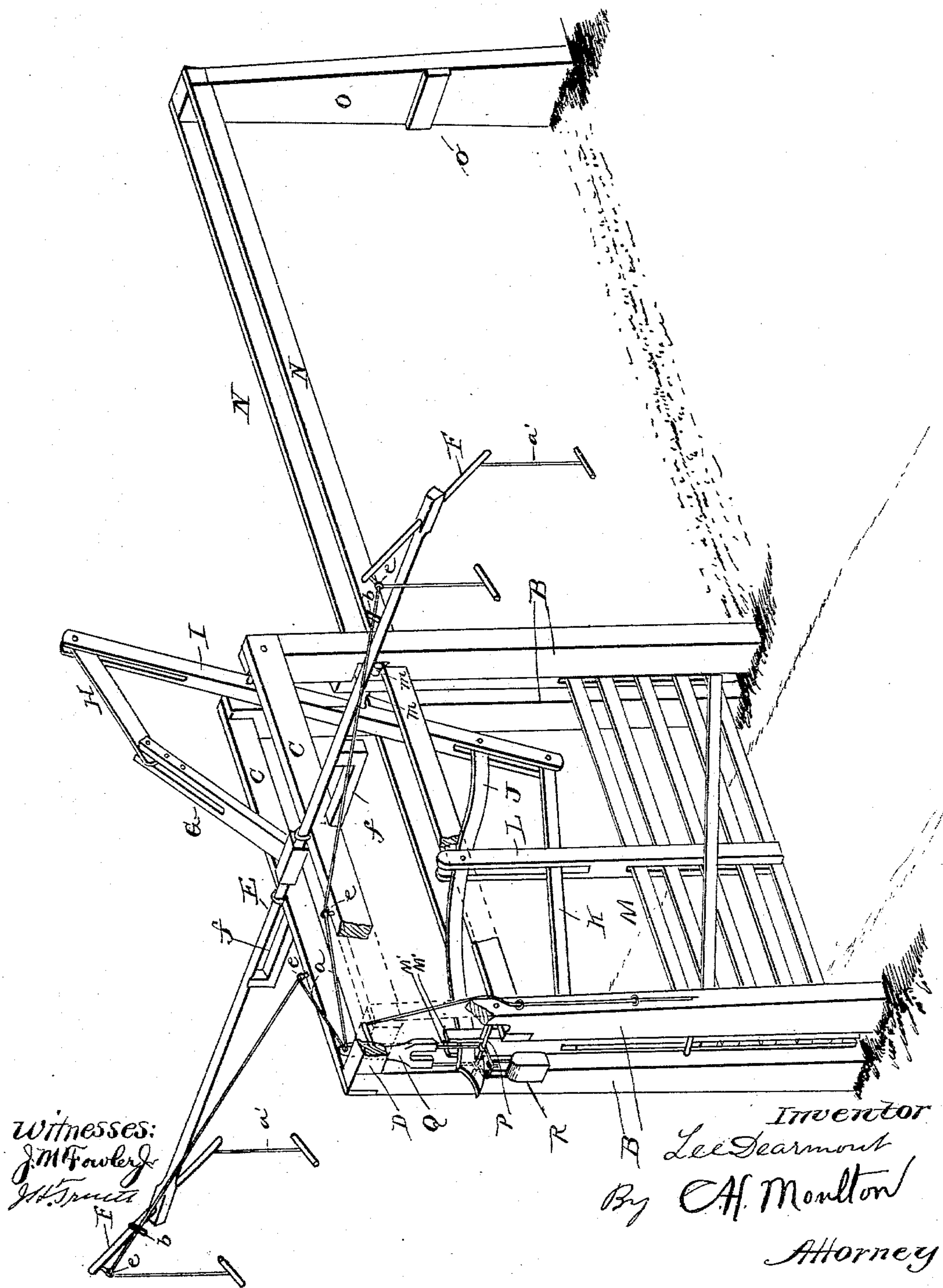


(No Model.)

L. DEARMONT.
SLIDING GATE.

No. 546,306.

Patented Sept. 17, 1895.



UNITED STATES PATENT OFFICE.

LEE DEARMONT, OF MOUND CITY, MISSOURI.

SLIDING GATE.

SPECIFICATION forming part of Letters Patent No. 546,306, dated September 17, 1895.

Application filed May 22, 1895. Serial No. 550,166. (No model.)

To all whom it may concern:

Be it known that I, LEE DEARMONT, a citizen of the United States, residing at Mound City, in the county of Holt and State of Missouri, have invented certain new and useful Improvements in Sliding Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to sliding gates; and it consists in certain details of construction, which will be fully hereinafter described, and specifically pointed out in the claims.

Referring to the drawing forming a part of the specification, the figure is a perspective view of the invention, showing the gate in a closed position.

Like letters of reference indicate corresponding parts in the drawing.

Four posts or standards B are inserted in the ground in any suitable manner. These posts are set some distance apart in pairs, although a single solid post may be used at the end, with an aperture through it at the proper place for the latch and latch-bar. The posts are connected at the top by side rails C C, and these side rails are connected at the outer end by an end rail D. A post O is mounted at the end of the base opposite the gate and at a distance from the gate about equal to the width thereof.

Two rails N N, about the length of the base, are mortised or otherwise secured to the inside edges of the post B, and these rails extend to and are secured to the post O, and they form ways on which the gate is supported and on which it is adapted to be moved as it is opened or closed. They may be beveled at the top to reduce friction.

The gate M may be of any suitable or desired pattern and may be constructed of any proper material. The end vertical rails M' M' of the gate are extended above the rails C C, and are provided with antifriction-rolls m m, which rest upon the rails, and the gate is thus supported and allowed to slide freely on the rails.

A vertical rail L is provided, which extends upwardly about the height of the rails. The rail L straddles the gate at the bottom and is slotted at the top to form a guide for the latch-

arm as well as for the pivoted lever K. It is manifest that this rail might consist of two pieces, one on each side of the gate, with a block between them at the proper place to form a stop for the lever K when it is lowered in the operation of closing the gate. Arranged transversely on top of the rails C and practically over the center of the gate is a long arm E, which is arranged to rotate in bearings on the rails. This arm E extends laterally a sufficient distance to be accessible to a person on horseback or in a vehicle. Arms F are arranged at the ends of the arms E and at right angles thereto for a purpose which will be presently explained. A bracket f extends from the outside of each of the rails C and supports the outwardly-projecting ends of the arm E.

A slotted arm G is secured centrally to the arm E, and in said slot is pivoted one end of a short lever H. The opposite end of the lever H is pivoted to a long vertical lever I. The lever I is slotted at both ends, and it is pivoted between the open ends of the rails C. To the lower end of the lever I are pivoted the latch J and the lever K. The latch J comprises a curved arm with a suitable engaging device at its free end. The lever K is pivoted at one end to the lower end of the lever I and at the other end to the outside vertical side rail of the gate. Both the latch J and lever K are movable in the slot in the upper end of rail L and are guided thereby.

Across the two outside posts B, put above the rails N N, is a latch-bar P, which engages the latch J when the gate is closed. On the latch-bar P is pivoted a yoke or arm Q. The yoke Q, in the present instance, has wire legs which are coiled around the latch-bar and extended outwardly, and to the outward extension a weight R is secured. This weight, on a spring which would be its full equivalent, holds the yoke in a vertical position, and thus forms a releasing device by which the latch may be positively released, as will be presently explained. The yoke Q has eyes or analogous devices for securing the operating cords or chains. A cord, rod, or chain is attached to the yoke and carried down through suitable eyes on the posts to be within reach of a person walking, so that a pull on the cord, rod, or chain will draw the yoke down and re-

lease the latch, when the gate can be pushed open by sliding it along on the rails N.

Eyes or guards *e* are provided on top of the rails C and also on the ends of the transverse arms F. A continuous cord or chain *a* is attached near the top of the yoke Q, extends through the eyes or guards on top of the rails C through the eyes on the arms F, and depends therefrom a sufficient distance to be reached by a person on horseback or in a vehicle. A suitable handle or pull is provided at the ends of the cords *a*. Stops *b* are also arranged on the cord *a*. Depending cords *a'* are secured to the opposite ends of the transverse arms F, and they are also furnished with handles or pulls.

The arm or lever G has a series of holes through its two members formed by the slot therein, so that the lever H may be adjusted up or down in the slot as desired.

The stops *b* on the cord *a* may also be adjusted to any point desired to regulate the drop of the yoke Q.

A buffer *o* is secured on the inside of the post O, which acts as a cushion for the gate when it is opened.

The posts are inserted in the ground, and the gate and its operating mechanism is supported a suitable distance above the ground.

The operation of the gate will be apparent. A pull on the cord *a* draws down the yoke or arm I and releases the latch, and as soon as the stops *b* come in contact with the eyes on the arms F the arm E is partially rotated, the toggle-levers are operated, and the gate is slid back against the buffer or cushion *o*. A pull on either of the cords *a'* reverses the operation and closes the gate. The gate can be opened or closed from either side, as will be plain without description.

Minor changes may be made in the details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is—

1. A sliding gate comprising vertical posts, horizontal rails forming ways upon which the gate slides, a supplemental post which supports the ends of the rails, a gate having anti-friction rolls at its top, a latch for the gate,

a releasing device for the latch a system of levers connected with the latch, a long rotary arm at right angles to the gate, transverse arms on the end of the cross arm, a cord or chain connected near its center to the releasing device, for the latch and extending to and, depending from the transverse arms, and supplemental depending cords on the cross arms for closing the gate, substantially as and for the purpose described.

2. A sliding gate comprising vertical posts, horizontal rails forming ways upon which the gate slides, a supplemental post which supports the ends of the rails, a gate having anti-friction rolls at its top, a latch for the gate, means for releasing the latch from its closed position, a system of levers connected therewith, a rotary arm at right angles to the gate and projecting beyond it at both sides, transverse arms on the rotary arm, a cord or chain provided with stops and connected near its center to the releasing device; for the latch and extending to and depending from the transverse arms, and supplemental depending cords on the cross arms for closing the gate, substantially as described.

3. A sliding gate comprising vertical posts, horizontal rails forming ways upon which the gate slides, a supplemental post which supports the ends of the rails, a gate having anti-friction rolls at its top, a latch for the gate, means for releasing the latch from its closed position, a system of levers for operating the latch, a rotary arm at right angles to the gate and projecting beyond it at both sides, transverse arms on the rotary arm, a cord or chain provided with stops and connected near its center to the releasing device for the latch and extending to and depending from the transverse arms, and supplemental depending cords on the cross arms for closing the gate, and an additional cord or rod for operating the latch from the ground, substantially as described.

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

LEE DEARMONT.

Witnesses:

D. W. PORTER,
WALDEN FRAME.