

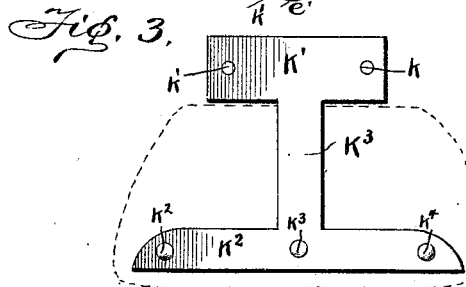
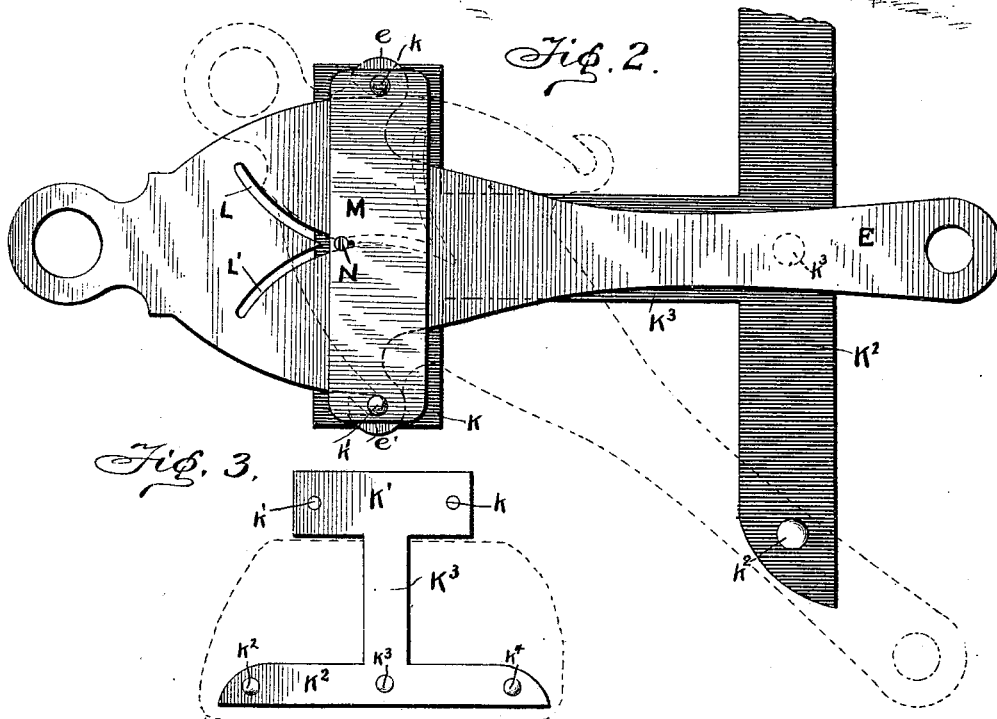
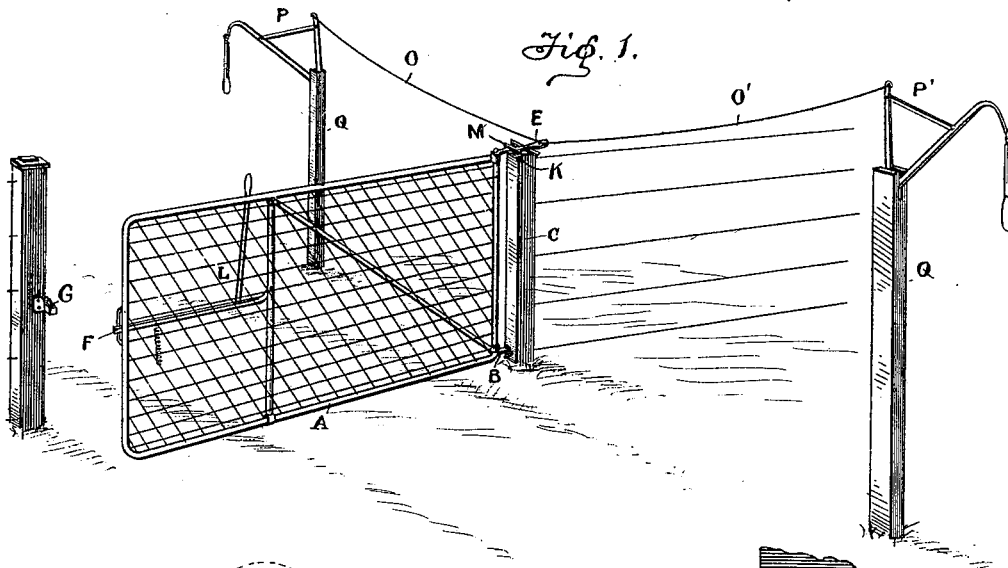
No. 646,167.

Patented Mar. 27, 1900.

J. E. GIBBS.
SWINGING GATE.

Application filed Sept. 20, 1899.

(No Model.)



WITNESSES

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SWINGING GATE.

SPECIFICATION forming part of Letters Patent No. 646,167, dated March 27, 1900.

Application filed September 20, 1899. Serial No. 731,118. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. GIBBS, a citizen of the United States, residing at Bridgewater, in the county of Rockingham and State of Virginia, have invented certain new and useful Improvements in Swinging Gates, of which the following is a specification.

My present invention relates to improvements in swinging gates of that class which are adapted to be opened in either direction by persons at a distance therefrom and without necessitating the party dismounting from horseback or carriage to actuate the gate-opening devices.

One of the objects of the invention is to provide an improved draft-transmitter or connecting-piece between the gate and the hand-actuated devices.

With this and other ends in view the invention consists in the peculiar construction and arrangement of parts hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of a gate constructed in accordance with my invention and presenting one embodiment thereof. Fig. 2 is a plan view, on an enlarged scale, of a portion of the gate-actuating devices, the position of such parts with relation to their supporting-post when the gate is closed being shown in full lines and the position of said parts when the gate is open being indicated by dotted lines. Fig. 3 is a detail view of the cap-plate of the post to which the gate is permanently connected.

Like letters of reference designate corresponding parts in each of the figures of the drawings, referring to which—

A designates a gate which may be of any suitable form, size, and style, it being hinged at its lower rear end, as at B, to a post C. The rear standard or upright of the gate is preferably extended or projected somewhat above the upper bar thereof, and this upwardly-extending portion D is engaged by a lever E, mounted upon the upper end of the post C in a manner to be hereinafter described. The gate is provided at its forward end with a latch-bar F, which when the gate is in its closed position engages with a plate G, secured to one face of a post H. The latch-bar F is provided with an upwardly-extending arm or rod I, by means of which the latch-

bar can be disconnected from the plate C by a party standing close to the gate.

The operating-lever E is preferably made in the form shown in Figs. 1 and 2, it having two laterally-projecting hook-shaped members *e e'*, each adapted to engage with or surround a fulcrum stud or pin *k k'*, extending upwardly from a cap-plate K, that is suitably secured to the upper end of the gate-post B. In the body of the lever E are formed two slots *L L'*, which are connected at one end and are respectively concentric with the fulcrum pins or studs *k k'*. The operating-lever E is held from vertical movement on the cap-plate K by means of a cover bar or plate M, which connects the studs *k k'*, and a guide-pin N, connecting said plate or bar M with the cap-plate K, extends through the above-described slots in the lever E. To the rear end of the operating-lever E are connected two cords or chains *O O'*, which are in the embodiment of the invention herein illustrated also connected to hand-levers *P P'*, mounted, respectively, upon posts *Q Q'* in line with but on opposite sides of the gate-supporting post B. By applying power to either of the hand-levers *P P'* one of the hook-like lateral projections *e e'* of the gate controlling or operating lever E will engage with its co-acting fulcrum-stud, and as said lever is rocked or turned about said stud as a pivot the upper end of the rear standard of the gate will be moved rearwardly and laterally, disengaging the latch from its plate G and drawing the gate open in the direction of the hand-actuated device or lever *P P'*, to which the power is applied. During this movement, as illustrated in dotted lines in Fig. 2, and assuming that the lateral hook extension *e'* is operative, it will be seen that the guide-pin N will be within the slot *L'*, and the hook extension *e* will be moved away from its co-acting fulcrum pin or stud *k*.

To close the gate, power is applied to the other hand-lever and the operation above described is reversed—that is, the operating-lever E is returned to its normal position, in which the guide-pin N lies in the slot connecting and common to both the curved slots *L L'* and the latch F is engaged with its plate G. To assist in holding the gate open, I pref-

erably make the cap-plate K in the form shown in Fig. 3, it having a forward member or section K', carrying the aforesaid fulcrum-studs k k' , and another parallel section K², connected with that at K' by a reduced portion K³. The portion K² of said cap-plate extends transversely of the gate, moving or operating lever E, near the rear end thereof, and on its upper surface said portion of the cap-plate is provided with three bosses or lugs k^2 k^3 k^4 . When the gate is in either its closed or open position, the under side or face of its operating-lever E contacts with and rests on one of these lugs or bosses, and the frictional engagement between the lugs or bosses and said lever is such as to hold the gate stationary. The first effect of the draft or pull applied either to the handle P or P' for the purpose of closing the gate is to lift the operating-lever E sufficiently to move it out of contact with the lug or boss on the cap-plate previously engaged thereby.

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

1. The combination with a gate-post, a gate, and a hinge connecting the lower rear end of the gate to the post, of two fulcrum studs or pins mounted on and extending upwardly from the post, an operating-lever arranged between and adapted to engage with either of said fulcrum-studs, said lever being connected at one end with the gate and at its other end to two hand-operated devices arranged on opposite sides of the gate-post, and a guide-pin secured to the gate-post between said fulcrum-pins and extending through a slot in the lever, said slot having two curved portions each extending concentric with one of the fulcrum studs or pins.

2. The combination with a gate-post, and a gate hinged thereto, of an operating-lever mounted on the upper end of the post and having two laterally-extending projections, a stationary fulcrum pin or stud arranged adjacent to each of said lateral lever extensions, said lever being connected with the gate above

the aforesaid hinge of the latter and having two slots formed therein and extending concentric with said fulcrum-pins, a guide-pin extending upwardly from the post and into one of the guide-slots in the lever, and two hand-actuated devices arranged on opposite sides of the gate-post and each connected with the first said lever.

3. The combination with a gate-post, and a gate hinged thereto, of a cap-plate mounted on the post and having two upwardly-extending studs or pins thereon, an operating-lever arranged between said studs and having two laterally-projecting hook-shaped members each adapted to engage one of said studs, said lever having formed therein two curved slots which are connected at one end and which extend concentric with said studs, a stationary guide-pin extending into said slots, connections between said lever and the gate, draft devices connected to said lever and extending beyond opposite sides of the gate, and means carried by the cap-plate for engaging with said lever when the gate is open and acting to hold it in that position.

4. The combination with a gate, of an operating-lever in the forward end of which the upper rear corner of the gate is pivoted; two fixed fulcrum-pins on either of which the lever may turn; and a guide-pin cooperating, as said lever swings, with one branch or the other of a double-curved guide-slot.

5. The combination with a gate, and a gate-post, of a cap-plate mounted on the post, an operating-lever above the cap-plate, and hand-operated means for moving the operating-lever, said operating-lever and cap-plate being provided with two separated fulcrum-pins, a guide-pin, and a double-curved slot cooperating with said guide-pin as said lever swings on one or the other of said fulcrum-pins.

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

JAMES E. GIBBS.

Witnesses:

SUSIE E. GIBBS,

C. E. PATTILLO.