C. E. GILLESPIE.

Automatic-Gate.

No. 162,283. Patented April 20, 1875.

Fig. 1.

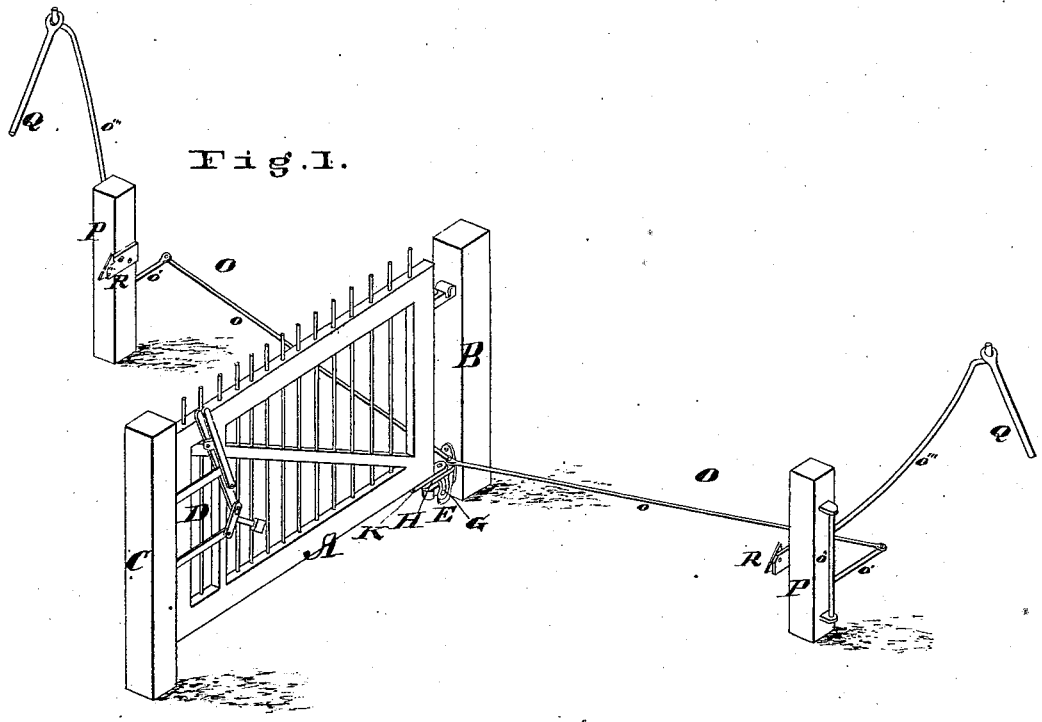


Fig. 2.

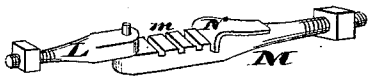


Fig. 3.

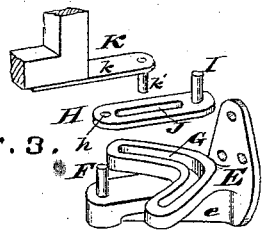


Fig. 4.

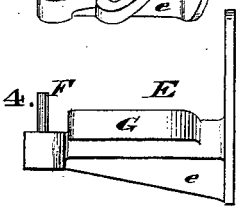
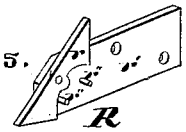


Fig. 5.



ATTEST.

Geo. W. Chambers

Fenil. S. Boyd

INVENTOR

Cyrus E. Gillespie,

By Chas. D. Moody.

atty.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

CYRUS E. GILLESPIE, OF EDWARDSVILLE, ILLINOIS.

IMPROVEMENT IN AUTOMATIC GATES.

Specification forming part of Letters Patent No. **162,283**, dated April 20, 1875; application filed March 18, 1875.

To all whom it may concern:

Be it known that I, CYRUS E. GILLESPIE, of Edwardsville, county of Madison, State of Illinois, have made new and useful Improvements in Gates, of which the following is a full, clear, and exact description, reference being hereby had to the drawing hereto annexed, making part of this specification, where—

Figure 1 is a view in perspective of the invention; Fig. 2, a view of the upper hinge; Fig. 3, a view of the parts composing the lower hinge; Fig. 4, a side elevation of the bracket or lower part of the lower hinge; and Fig. 5, a view of one of the catches employed in holding the gate open.

Like letters indicate like parts.

The present invention relates to improvements in that class of gates which are operated by affecting the position of the lower inner end of the gate. It consists in the means employed to elevate the forward end or toe of the gate, and to swing the gate. It further consists in the means used in moving the gate from a point beyond the reach of its swing. It further consists in the mode of locking the hook of the upper hinge in any desired position, and in the means used to hold the gate open.

In the accompanying drawing, A represents the gate, which may be of any preferable construction. B represents the hinge-post, and C the latch-post.

The form of latch D shown, and preferably used, is described more fully in Patent No. 139,712, granted me June 10, 1873.

E represents a bracket, secured to the hinge-post B, and forming the lower part of the lower hinge. At its outer end the bracket is provided with a spindle, F. It is also provided with a peculiarly-shaped groove, G, (shown more distinctly in Figs. 3 and 4,) and on the under side of the bracket is a rib, *e*. H represents a slotted lever, which, when in position, turns upon the spindle F, and for that purpose is provided with a suitable opening, *h*. At the opposite end the lever is provided with a pin, I. Between the opening *h* and pin I is a slot, J. K represents a hook, fastened to the heel of the gate, consisting of a strap, *k*, and, at the outer end thereof, a downwardly-projecting pin, *k'*, upon which are arranged friction-rollers. (Not shown in the drawing.)

These three pieces, E, H, and K, constitute the lower hinge, for, when in position, the pin *k'* engages in the slot J of the lever H.

In Fig. 2 is shown the construction of the upper hinge. Therein L represents an ordinary eye attached to the gate, and M represents the hook attached to the hinge-post. The hook, toward its outer end, is provided with a series of notches, *m*. N represents a key or wedge, whose outer end is turned down and fitted to engage in the notches *m*, and whose inner end passes into the hinge-post with the hook M.

Thus arranged, the hook can be set in or out, and secured in any position.

The gate is operated by moving the pin I of the lever H. For this purpose a system of levers, O O', is similarly arranged on either side of the gate, consisting of a rod, *o*, extending from the pin I, and whose other end is jointed to an arm, *o'*, that is attached to shaft *o''*, hung on a post, P. There is another arm, *o'''*, attached to the shaft *o''*, and extending upward and along the roadway. To the upper end of the arm *o'''* is loosely attached a lever, Q.

This lever can be turned around at will; but when at rest hangs toward the roadway.

In Fig. 5 is shown a fastening, R, which is attached to the post P, and is used to hold the gate open. It consists of a catch, *r*, hung or pivoted to a plate, *r'*, which is fastened to the post P. The catch is hung a little out of its center, so as to cause it to fall into the position shown, and so as to hold the gate, saving when the gate-latch D passes over it. It is kept from turning too far in either direction by pins *r''' r''*. By drawing upon the levers Q, the rod *o* acts upon the pin I, and thence through the lever H upon the pin *k'* of the hook K. This causes the pin *k'* to move in the groove G, and to lift the toe of the gate, as well as to incline its heel.

The gate-latch can thus be lifted out of either catch, and be readily swung in either direction, and held at any point.

Should the gate sag, it can be readily adjusted by means of the upper hinge.

The rib *e* of the bracket also affords opportunity for bracing the hinge-post, as a wedge can be inserted beneath it.

By means of the loose connection of the lever Q to the arm *o'''*, the former, although in a position to be used, does not present an obstacle to anything passing.

Having described my invention, what I claim as new therein is—

1. The lower hinge, consisting of the bracket E, lever H, and hook K′, combined and operating substantially as described.

2. The upper hinge, consisting of the eye L, hook M, provided with the notches *m*, and the key N, combined and operating substantially as described.

3. The bracket E, lever H, hook K, rod *o*, arm *o′*, shaft *o″*, post P, arm *o‴*, and lever Q, combined and operating substantially as set forth.

4. The gate A, post B, bracket E, lever H, hook K, leverage O, post P, and fastening R, combined and operating substantially as described.

CYRUS E. GILLESPIE.

Witnesses:

H. J. SPRINGER,

A. BAEHNING.