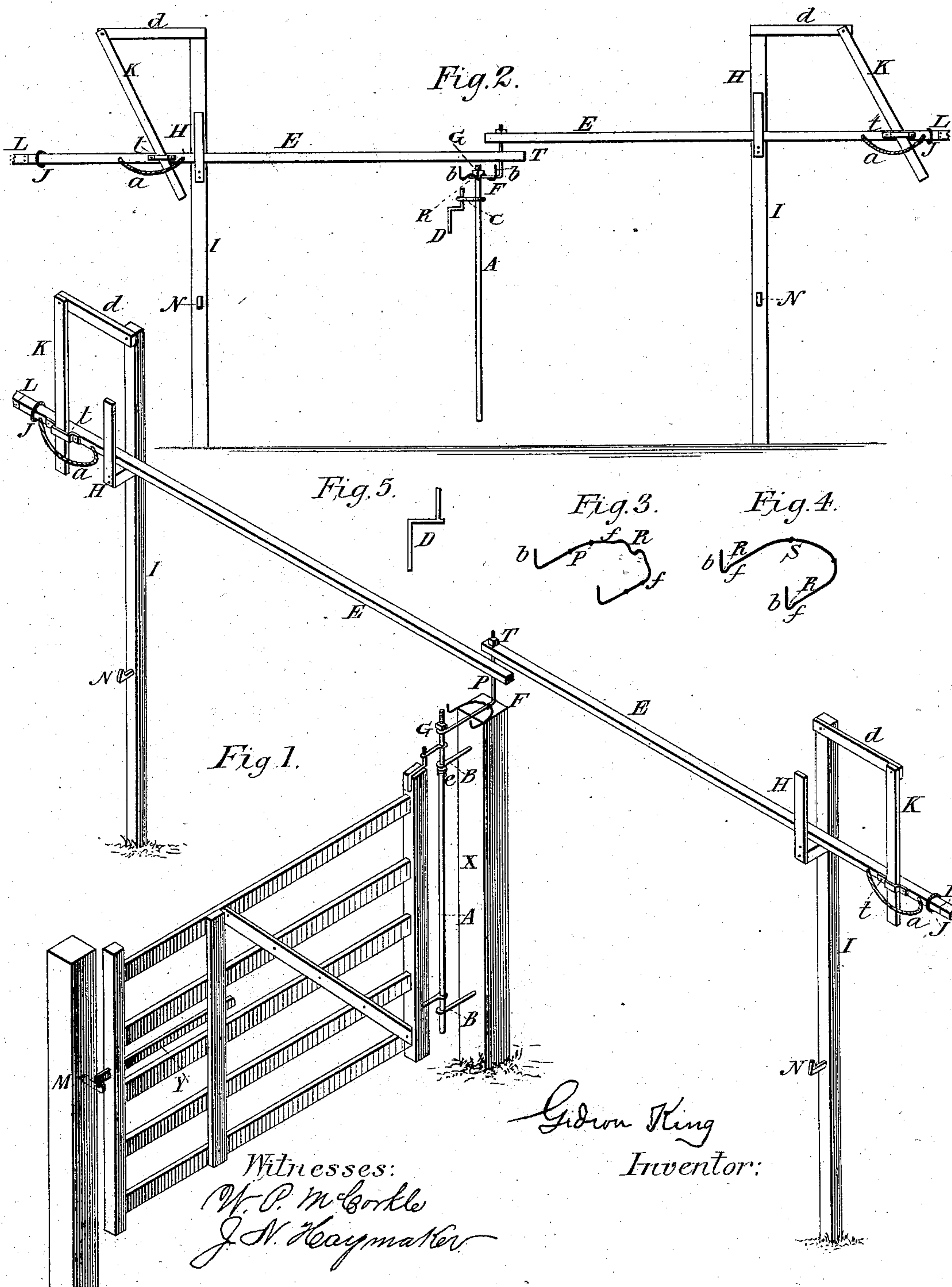


(No Model.)

G. KING.
SWINGING GATE.

No. 258,306.

Patented May 23, 1882.



UNITED STATES PATENT OFFICE.

GIDEON KING, OF EMINENCE, KENTUCKY.

SWINGING GATE.

SPECIFICATION forming part of Letters Patent No. 258,306, dated May 23, 1882.

Application filed January 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, GIDEON KING, a citizen of the United States, residing at Eminence, in the county of Henry and State of Kentucky, have invented new and useful Improvements in Road and Farm Gates, of which the following is a specification.

This invention relates to the improvement in hanging or swinging gates so constructed that persons in vehicles can open and close the same on either side of the gate; and it consists in the combination of the upper hinge with an arm attached to an iron rod connecting all the hinges of the gate in such manner as to cause it to swing open and close itself by its own weight when operated by crank with reciprocating levers attached thereto.

The invention consists in an arm and crank being attached to the upper end of the rod, which is placed through an ordinary hinge (with eye) at the top of the gate-post, extending down between the post and upright of the gate and through common hinges (with eyes only) at the lower part of the gate. The arm operates upon the upper hinge and extends over the upright of the gate, where it receives the hook of an angular hinge confined to and terminating on top of the upright of the gate. Said arm oscillates horizontally when the rod is driven by a crank, which is moved back and forward by reciprocating levers placed on the crank on both sides of the gate and in line with the road. Said arm carries the upper end of the upright with it, causing the front of the gate to elevate, unlatch itself, rotate, and follow in the direction of said arm, without sagging, to any point desired. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plain side view when the gate is closed with my improvements attached. Fig. 2 is a perspective view of the invention or improvements detached. Fig. 3 is an enlarged view of a curved iron rod with angles forming verticals at each end, with oval notch for a crank to drop and rest in on top of the gate-post when the gate is intended to open two ways. Fig. 4 is an enlarged view of a curved iron rod angled with verticals and oval notch at both ends, used when the gate is intended

to open only one way. Fig. 5 is an enlarged view of an angular hinge connecting the arm with the upright of the gate.

Similar letters refer to similar parts throughout the several views.

The invention consists in an iron rod, A, Fig. 1, passing through eyes of the upper and lower hinges, B B, with a permanent arm, C, welded to said rod, in which a new hinge, D, Fig. 5, operates. A crank, F, Fig. 2, is bolted on top of said rod at G, which is driven by reciprocating levers E E, one end being placed on the handle of said crank at T. The other ends of said levers are bolted or confined to levers K K, pivoted to brackets d d, supporting and swinging levers E E in slots H H on post I I, and are moved back or forward by hand-holds J J on levers E E. To pull either lever from the gate-post X, Fig. 1, will cause arm C to move from the operator at J or J, and at the same time raises the front of the gate, lifting the latch y out of catch M. The gate then follows arm C, rotates speedily to and latches in catch N or N opposite the operator at J or J. A contrary motion of the said levers has the same effect on the gate, causing it to unlatch at N or N, follow arm C, close, and latch at M. Thus the gate is rotated and the latch or front thrown from N to N at the pleasure of the operator at J or J. The gate always follows arm C, adjusts itself, and rests in line with it in the absence of power on or motion of said levers. I attach ropes a a (dotted lines) to levers E E, to enable persons in vehicles to operate them more easily. Rod A is held down to its place by key and washer at e, Fig. 1. I use a curved rod, P, Fig. 3, screwed or spiked on top of post X, under crank F, with angles forming verticals b b, Fig. 3, pointing upward to prevent crank F reaching the dead-point. Oval notch R in said rod P receives crank F (which is round) and holds it until moved by levers E E, causing the gate to remain closed. Curved rod P, Fig. 3, and rod S, Fig. 4, are raised or elevated gradually, like a gate catch, at f f, in order that crank F ascend and ride over said elevations, (rod A acting as a spring on crank F,) when it drops into notch R, (or R R, Fig. 4, when the gate opens one way only,) by which means the gate is held at points desired open or closed.

Thus constructed, the gate is under the absolute and perfect control of the operator while seated in a vehicle at either lever and at an indefinite distance from the gate, requiring but
5 little physical exertion to open or close it. By extending levers E E by splicing at L L several times a person can open the gate with a large lot of stock between him and the gate.

I am aware that prior to my invention posts
10 I I have been used with catches N N, (which catches are not broadly claimed;) but I use said posts as supports for levers E E indefinitely extended, consequently as applied are a part of my invention.

15 I am also aware that levers in various forms have been used; but I know of none that work

swinging, as set forth in the above specification.

What I claim as my invention, and desire to secure by Letters Patent, is—

20 Rod A, arm C, hinge D, crank F, key and washer e, swinging levers E E, levers K K, brackets d d, posts I I, slots H H, hand-holds J J, ropes a a, curved rod p, notch R, verticals b b, and elevations f f, combined, arranged,
25 constructed, and operated substantially as and for the purposes specified.

GIDEON KING.

Witnesses:

W. P. McCORKLE,
J. N. HAYMAKER.