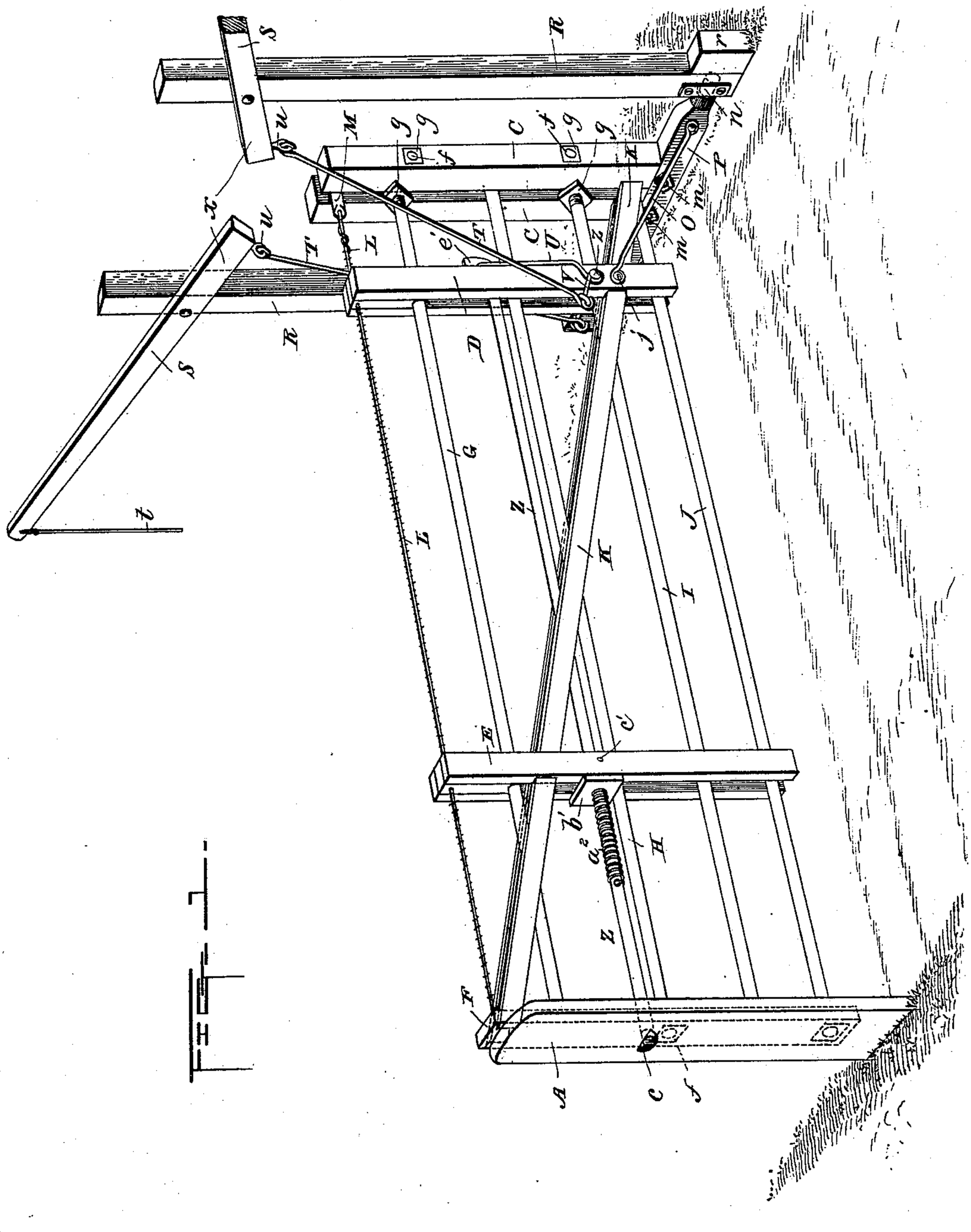
(No Model.) 2 Sheets—Sheet 1.

C. CHIDDISTER.

GATE.

No. 401,008. Patented Apr. 9, 1889.



Witnesses.
L. A. Connor Jr.
F. P. Davis.

Inventor.
Clark Chiddister
per D. G. Dewey Sons
his Attorney.

(No Model.) 2 Sheets—Sheet 2.

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FIG. 2.

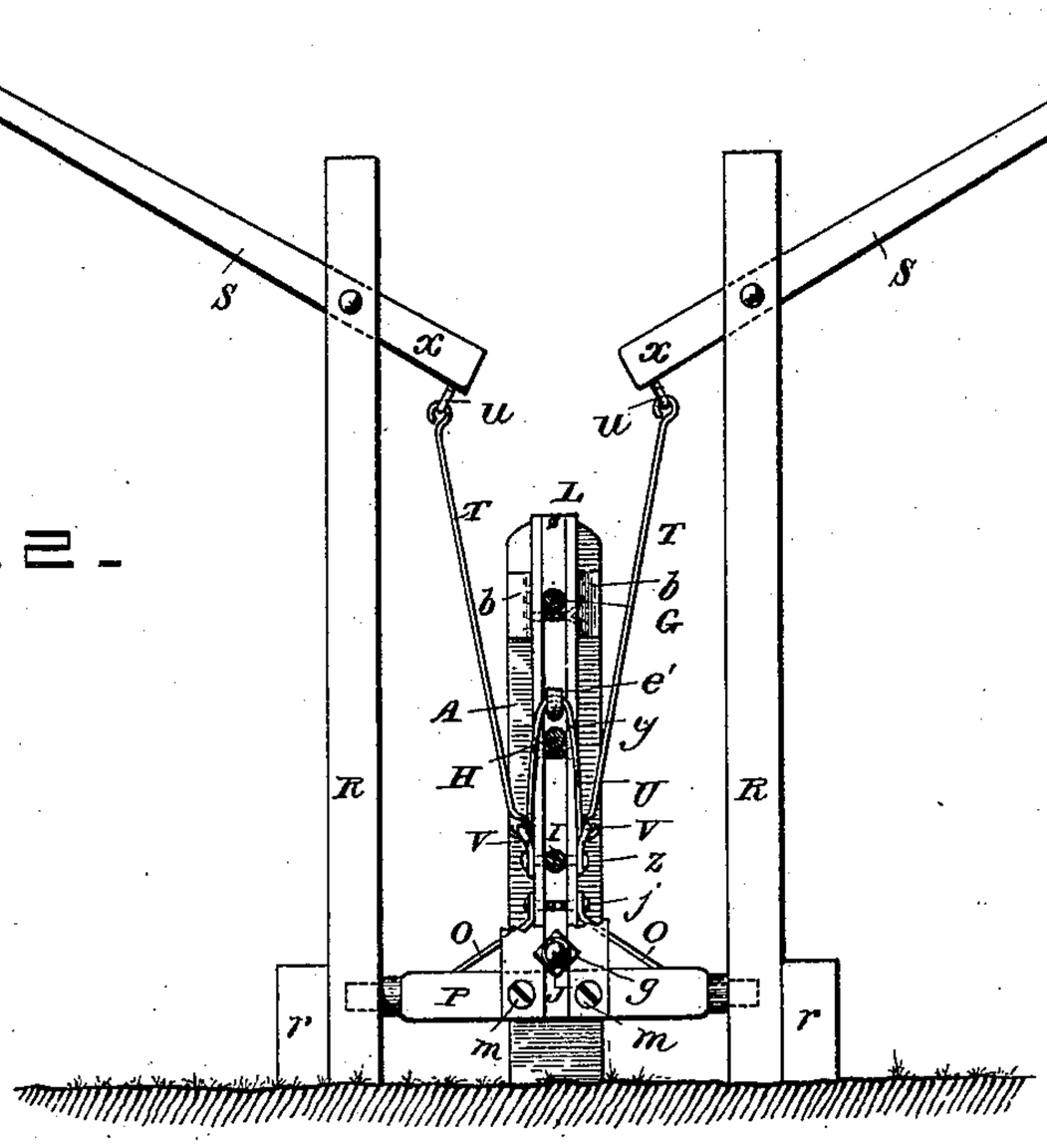
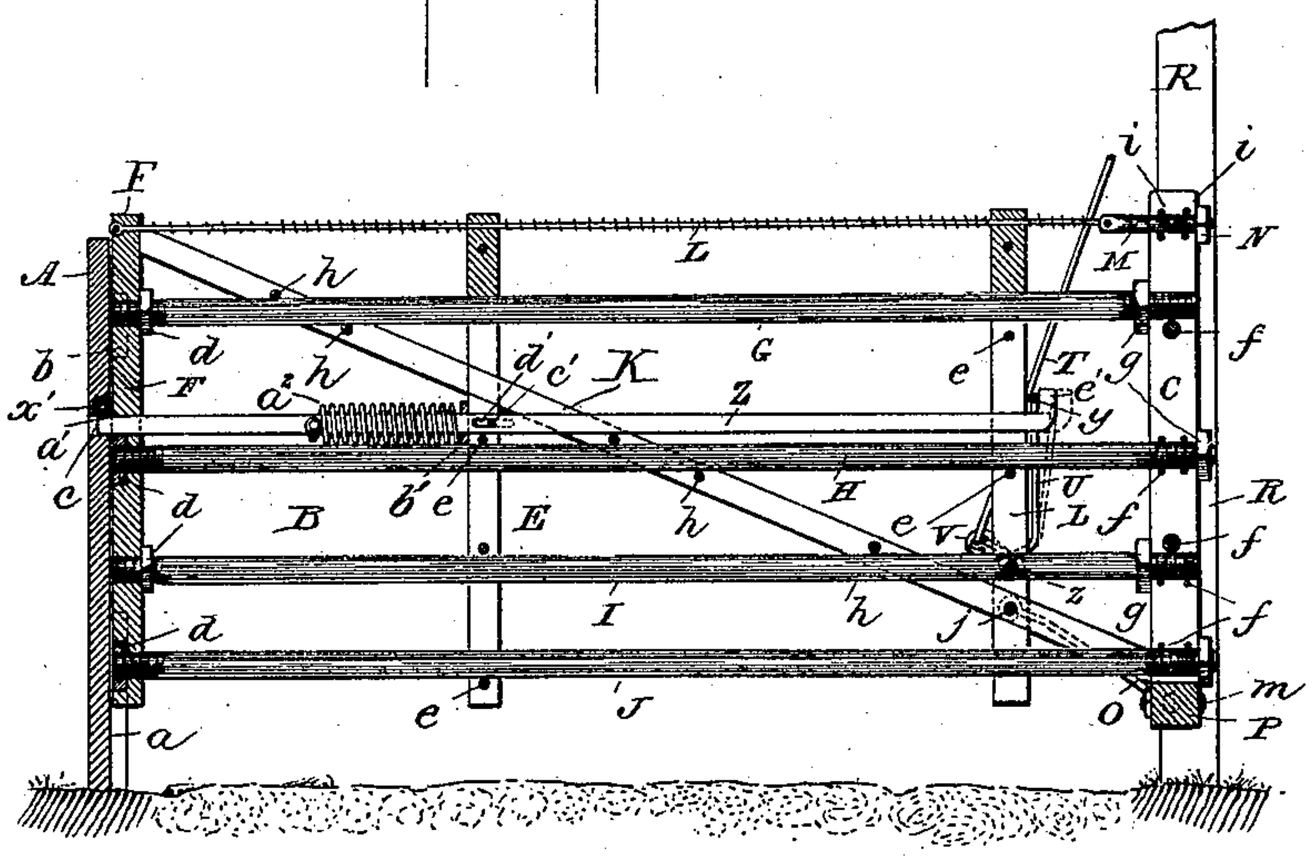


FIG. 3.



Witnesses,
T. A. Connor Jr
F. P. Davis.

Inventor,
Clark Chiddister
per R. H. Young Sons
his Attorney.

UNITED STATES PATENT OFFICE.

CLARK CHIDDISTER, OF DECATUR, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 401,008, dated April 9, 1889.

Application filed January 3, 1889. Serial No. 295,290. (No model.)

To all whom it may concern:

Be it known that I, CLARK CHIDDISTER, a citizen of the United States, residing at Decatur, in the county of Adams and State of Indiana, have invented certain new and useful Improvements in 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 gates, and more particularly to that class known as "tilting" gates.

The object I have in view is to construct a gate which will be adjustable and more simple, cheap, and durable, and also more effectively operated than those hitherto in use.

With these ends in view my invention consists in certain peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a perspective view of my complete device; Fig. 2, a rear view, a portion of the gate being broken away; and Fig. 3, a longitudinal section of the gate detached from the frame.

The reference-letter A indicates the latch-post, which is firmly set in the ground and provided near its lower extremity with a seat, *a*, which supports the front end of the gate when in closed position. It also has near its top a pair of guides, *b*, which prevent the gate from lateral play, and an aperture, *c*, which engages the bolt that locks the gate.

B is the gate, which is constructed with vertical bars C D E F and horizontal bars G, H, I, and J, which are made of iron and screw-threaded at both ends and their forward ends secured in the vertical bar F in any suitable manner, such as by the nuts *d*. The other vertical bars, C, D, and E, are each formed in two pieces, which are adapted to be placed on either side of the horizontal bars and firmly clamped together by means of the bolts or rivets *e*. The rear ends of the horizontal bars are supported and held in place between the two sections of the rear vertical bar, C, by means of bolts *f*, passed across between the two sections above and below the horizontal bars, which are provided with nuts *g* on their rear ends in the same manner as at their outer ends. The gate is also provided with a cross-brace, K, extending from the top of the forward vertical bar, F, to the bottom of the rear vertical bar, C, and formed in two pieces adapted to be placed on either side of the gate, mortised into the vertical bars D and E, and riveted together by the bolts *h*, passed through above and below the horizontal bars G, H, and I.

A barbed wire, L, is fastened to the vertical bar F, passing through the bars D and E, and connected to a screw-threaded bolt M, which is contained between the two sections of the rear vertical bar, C, and held in place by the bolts *i*, passed across between the two sections of the bar C, above and below said bolt M. This bolt is also provided with a nut, N, by means of which the wire can be tightened whenever it becomes necessary.

The gate's being bolted together in the manner above described facilitates its being tightened when it has become loose from frequent use or by action of the weather. The gate is further strengthened by the lateral braces O O, which are secured at their outer ends to a bolt, *j*, passed through the vertical bar D and the cross-brace K, and at their inner ends to a rock-shaft, P. This rock-shaft P is placed at right angles to the gate, and is mortised into each section of the rear vertical bar, C, and firmly fastened to the same by the bolts *m*. This rock-shaft P is journaled at either end in a pair of upright standards, R, which are each provided with a removable cap, *n*, over the journals to facilitate lubricating them when necessary. These upright standards R are firmly planted in the ground on either side of the gate, and are reenforced by a pair of short posts, *r*, driven into the ground beside either standard and screwed to the same.

At a convenient height upon each standard a hand-lever, S, is pivoted at an angle of about sixty degrees to the standards, and their long arms form handles with which to operate the gate. Enough space is left between inner ends of the short arms *x x* to allow the gate to pass between them when it is thrown back. A rope or piece of cord, *t*, may be attached to the outer arm or handle of each le-

ver to facilitate operating the same. A pair of eyes, *u u*, are fastened into the lower extremities of the levers S and engage a pair of rods, T T, which are of equal length, and pass down on either side of the gate to the bell-crank lever U, to which they are attached. This bell-crank lever U is fulcrumed on the vertical bar D, just above the cross-brace K, and consists of a rod bent in the form of a yoke, *y*, and passed on either side of the gate, around the pivot *z*, (which passes through the vertical bar D and the horizontal bar I,) and thence bent to form short arms V of equal length, which are connected, respectively, to the lower extremities of the rods T T. When the gate is closed, the yoke *y* of the bell-crank lever rests against the back side of the bar D, while the arms V V extend parallel with the cross-brace K. It will thus be seen that the arrangement on each side of the gate is precisely the same, and therefore the gate can be operated as well from one side as from the other. The yoke *y* of the lever is placed astride a locking-bolt, Z, and is held in place thereon by means of a projection, *e'*, formed upon said bolt, against which it bears. This bolt Z is situated just above the horizontal bar H of the gate and passes between the two sections of the vertical bars D and E and the cross-brace K and into the hole *a'* in the vertical bar F, and enters the aperture *c* in the latch-post A, which is provided with a roller, *x'*, to facilitate the movement of the bolt. This bolt is provided between the vertical bars E and F with a spring, a^2, which bears against a plate, *b'*, secured to the bar E, and holds the bolt in locking adjustment until withdrawn by the action of the bell-crank lever U. The forward and backward movement of the bolt is limited by means of a pin, *c'*, which passes through the vertical bar E and engages the walls of a longitudinal slot, *d'*, in the bolt Z.

The construction of my device having been set forth, I will now proceed to describe its operation. A person walking, riding, or driving, who wishes to pass through the gate, grasps the handle of one of the levers S, or, if he cannot reach the handle, the rope *t*, and pulls down upon the same. This action will raise the short arm *x* of the lever, and thereby the rod T connected thereto. This rod, being connected at its lower extremity to one of the short arms V of the bell-crank lever U, raises the same, which operation throws back the yoke *y* of said lever and thereby withdraws the bolt Z. The opposite lever and connection will operate simultaneously with the parts just described. The gate will thus be released from the latching-post, and when the bolt reaches the limit of its backward movement will be raised and thrown back between the standards R and assume a vertical position, the rear vertical bar, C, resting on the ground. When the gate is in this open position, the lower ends of the rods T T are carried back of the pivotal point of the gate, so that when the operator has passed through by pulling down upon the handle of the opposite lever the gate will be raised from its vertical position and thrown back and locked by means of the spring-actuated bolt Z.

My device can easily be employed as a field-gate by substituting ropes and weights for the operating-levers.

It is evident that many slight changes which might suggest themselves to a skilled mechanic might be resorted to without departing from the spirit and scope of my invention; hence I do not limit myself to the precise construction herein shown.

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

1. In a tilting gate, a pair of hand-levers pivoted to upright standards, a bell-crank lever pivoted to the gate and consisting of a rod bent to form a yoke and extending on either side of the gate, and a spring-actuated bolt engaged by said yoke and operated thereby, in the manner and for the purpose described.

2. In a tilting gate, the combination of a pair of hand-levers pivoted to upright standards erected on either side of the gate, a bell-crank lever consisting of a U-shaped portion and a pair of short arms located on either side of the gate, a pair of rods connecting the hand-levers and the short arms of the bell-crank lever, and a spring-actuated bolt engaged by the U-shaped portion of said bell-crank lever and operated thereby, all arranged and adapted to operate as set forth.

3. In a tilting gate, a bell-crank lever pivoted to the gate and consisting of a U-shaped portion and a pair of short arms extending on either side of the gate, in combination with a pair of hand-levers, a spring-actuated bolt, a projection upon the end of said bolt engaging the U-shaped portion of the bell-crank lever, and a slot in said bolt engaged by a pin which limits the play of the bolt, substantially as described.

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

CLARK CHIDDISTER.

Witnesses:
EZRA COTTING,
D. RAILING.