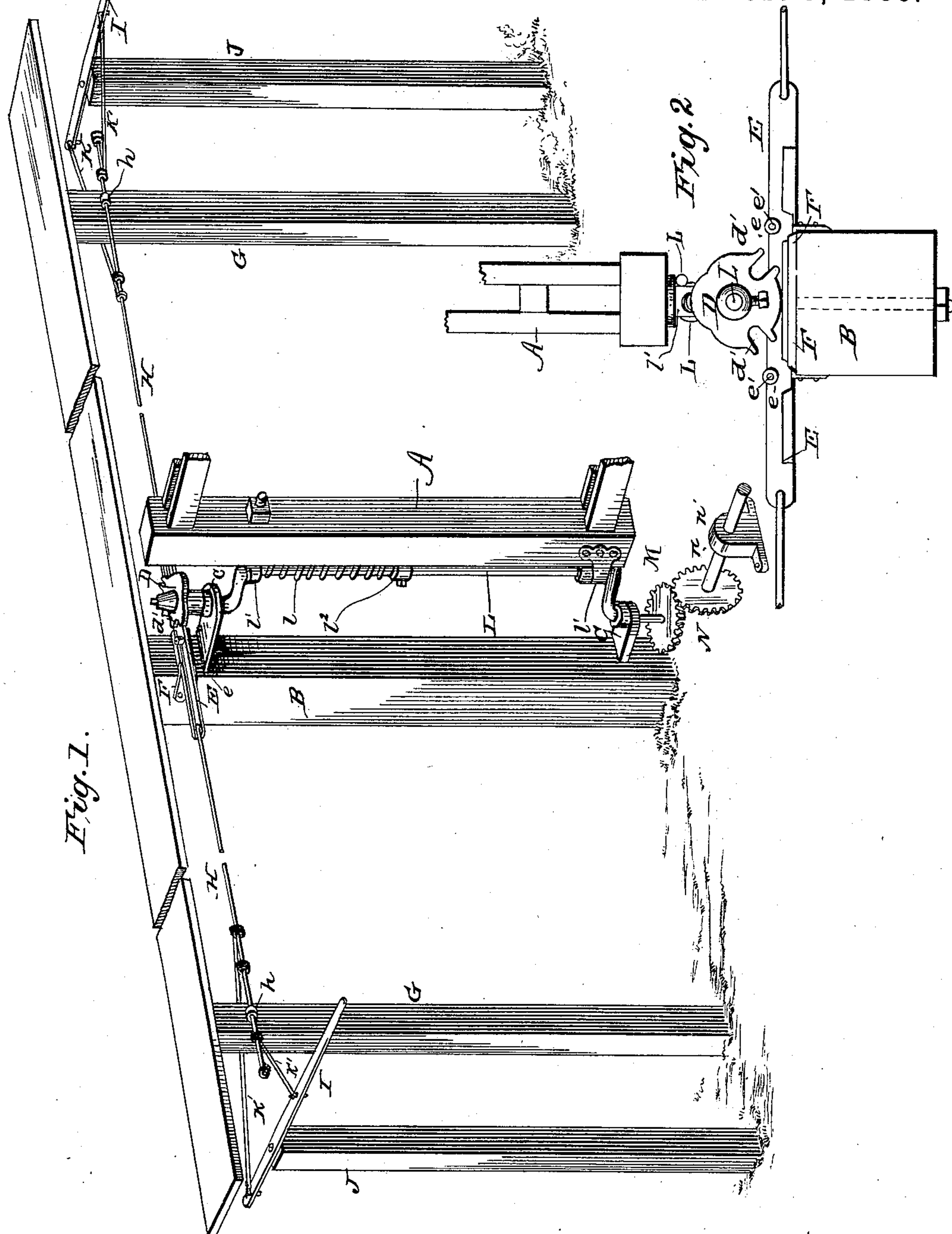


2 Sheets—Sheet 1.

GATE.

Patented Feb. 9, 1886.



WITNESSES:

Fred. G. Dieterich
John C. Kemmon

INVENTOR:

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J. Austin
Chamberlain
BY Munn & Co
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

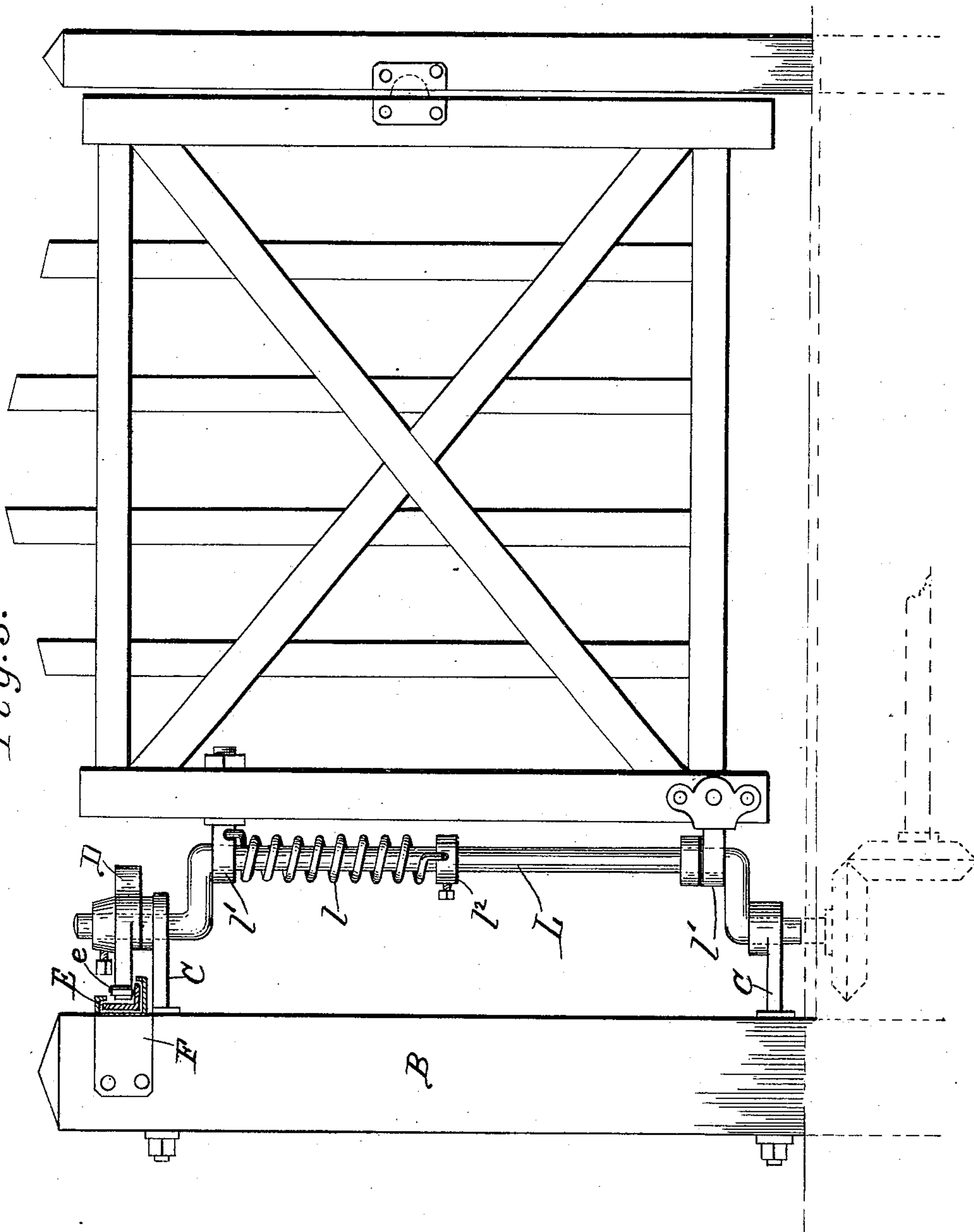
J. AUSTIN & R. CHAMBERLAIN.

GATE.

No. 336,031.

Patented Feb. 9, 1886.

Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSIAH AUSTIN AND ROSSCO CHAMBERLAIN, OF EAST LIBERTY, OHIO.

GATE.

SPECIFICATION forming part of Letters Patent No. 336,031, dated February 9, 1886.

Application filed April 7, 1885. Serial No. 161,485. (No model.)

To all whom it may concern:

Be it known that we, JOSIAH AUSTIN and ROSSCO CHAMBERLAIN, of East Liberty, Logan county, Ohio, have invented a new and useful Improvement in Gates; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of our improved gate. Fig. 2 is a plan view of the same; and Fig. 3 is a side elevation of the gate and its operating parts, with the guide for the sliding bar in section.

Our invention relates to gates; and it consists in the detailed construction and combination of the parts hereinafter described, by which the gate may be opened or closed at some distance away from it, and which may also be used for opening and closing double gates as well as single ones.

In the accompanying drawings similar letters of reference indicate corresponding parts in all the figures.

A is a gate, which may be framed together in various ways, and be constructed of any convenient material.

B is the gate-post, on which the gate A is hung by means of the hinges C, the rod L and the supports l' , secured to the vertical gate-bar, through which supports said rod loosely passes.

D is a plate rigidly secured to the top of the double-cranked rod L, and provided on its rearedge with recesses d' . A spiral spring, l , is placed on the rod L, and one end of the spring is secured to a collar, l^2 , on the rod, and the other end is secured to the upper bearing, l' , of the gate. It will thus be seen that the rod L turns in the hinge-sections C, and that the gate turns on the rod L, between the cranked portions thereof.

E is a bar sliding in guides F, attached to the top of gate-post B. Two rollers, e , are journaled on pins e' on the top of bar E. These rollers are adapted to engage with the recesses d' in plate D and move the gate in either direction, according to the movement given to the bar E.

G are posts, situated at some distance from the main gate-post B, and covered with a suit-

able board or scantling to secure them in position and connect them with the said main gate-post.

H are rods, one of which is connected to either end of the bar E, and which have their other ends carried by the guides h , attached to the posts G.

I are levers pivoted on the top of posts J, near the posts G.

K K' are rods, connected at one end to the levers I on opposite sides of their fulcrum-points, and movably connected with the rods H at their inner ends. Stop-shoulders are placed on the rods H in rear of the inner ends of the rods K, to limit the movement of the said rods K, and to form shoulders by which the rods H may be pulled to operate the slide E.

The operation of the gate is as follows: If the left-hand lever I is pulled, the shorter rod, K', will be brought against the shoulder on the end of the rod H, which will cause the said rod and the slide E to throw the gate in the direction of the arrow. If the lever is pushed, the longer rod, K, will operate the slide. After passing through the gate the driver pushes the right-hand lever, and the short rod K' will pull the rod H and slide E and close the gate. When the plate D is acted upon, it will turn the rod L against the torsional strain of spring l and draw the rear end of the gate toward the post B, which will of course release its front end and allow it to swing open, when the torsion-spring l will cause the said gate to resume its normal position in relation to the rod L and post B. This bar L forms the pivot on which the gate A turns.

When the gate is made double, a bevel-wheel, M, is securely fastened on the bottom of bar L. This bevel-wheel gears into another bevel-wheel, N, fastened upon the end of the horizontal shaft n , which is supported in suitable bearings, n' , and extends across underneath the road. The other end of shaft n is provided with another bevel-wheel similar to bevel-wheel N, which gears into a bevel-wheel fastened on the pivot of the opposite half of the gate, and exactly similar to bevel-wheel M, secured upon the pivot-bar L of gate A.

The movement of gate A in opening or closing will be communicated to the other and opposite half of the said gate, when made

double, by means of the bevel-gears M and N and the horizontal shaft *n*.

Having thus described our invention, what we claim as new, and desire to secure by Letters
5 Patent, is—

The combination, with the gate A, having the bearings *l'*, the cranked rod L, passed loosely through said bearings and provided with collar *l''*, the spring *l* on said rod, and secured
10 at its ends to the collar and to one of the bearings *l'*, the hinge-sections C, pivotally connect-

ing the rod L to the gate-post, a recessed plate secured rigidly to one end of the rod L, and mechanism for operating the recessed plate from opposite sides of the gate, substantially as set forth.

JOSIAH AUSTIN.
ROSSCO CHAMBERLAIN.

Witnesses:

JOHN S. WREN,
J. W. HAMILTON.