

No. 698,851.

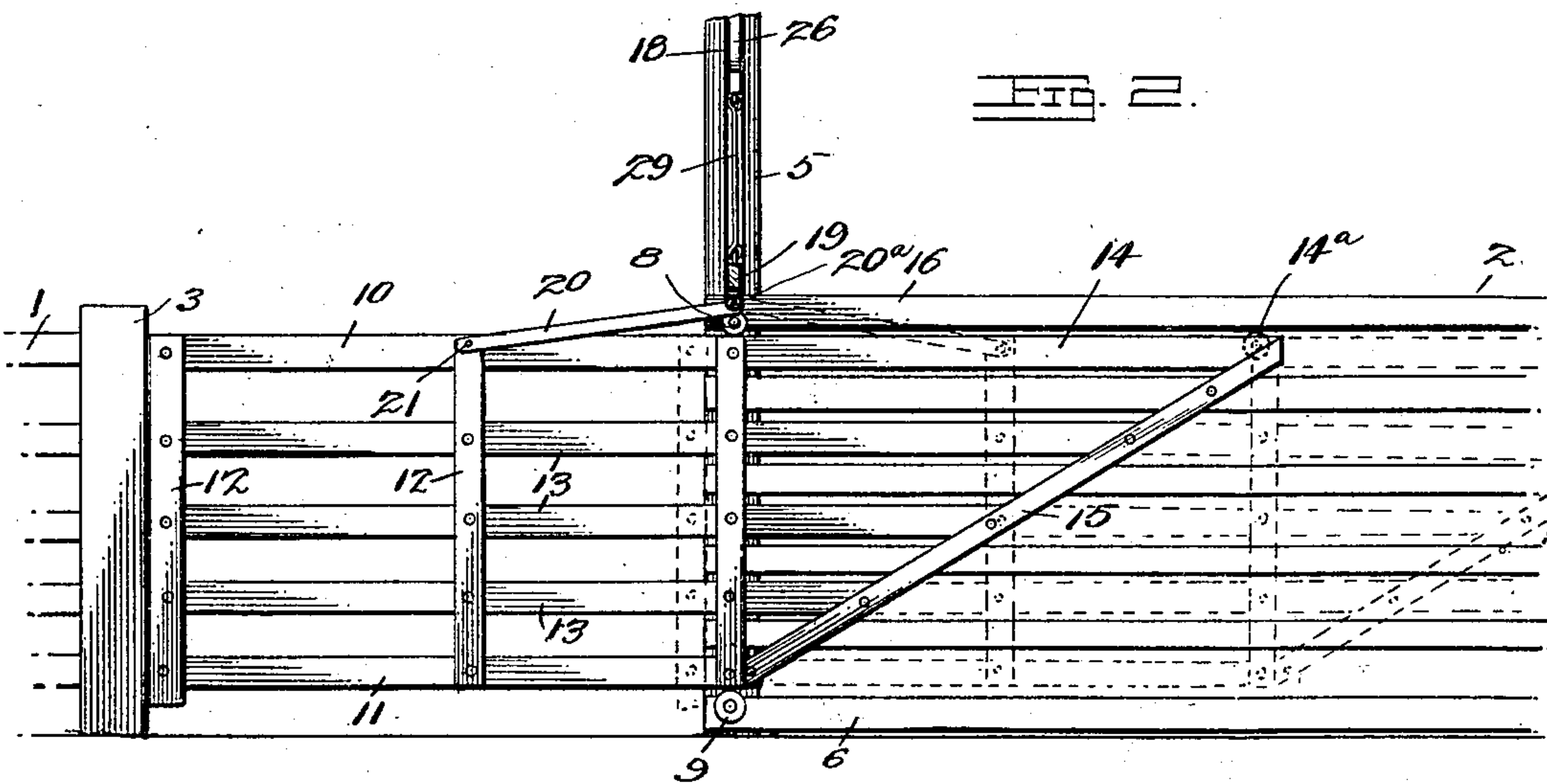
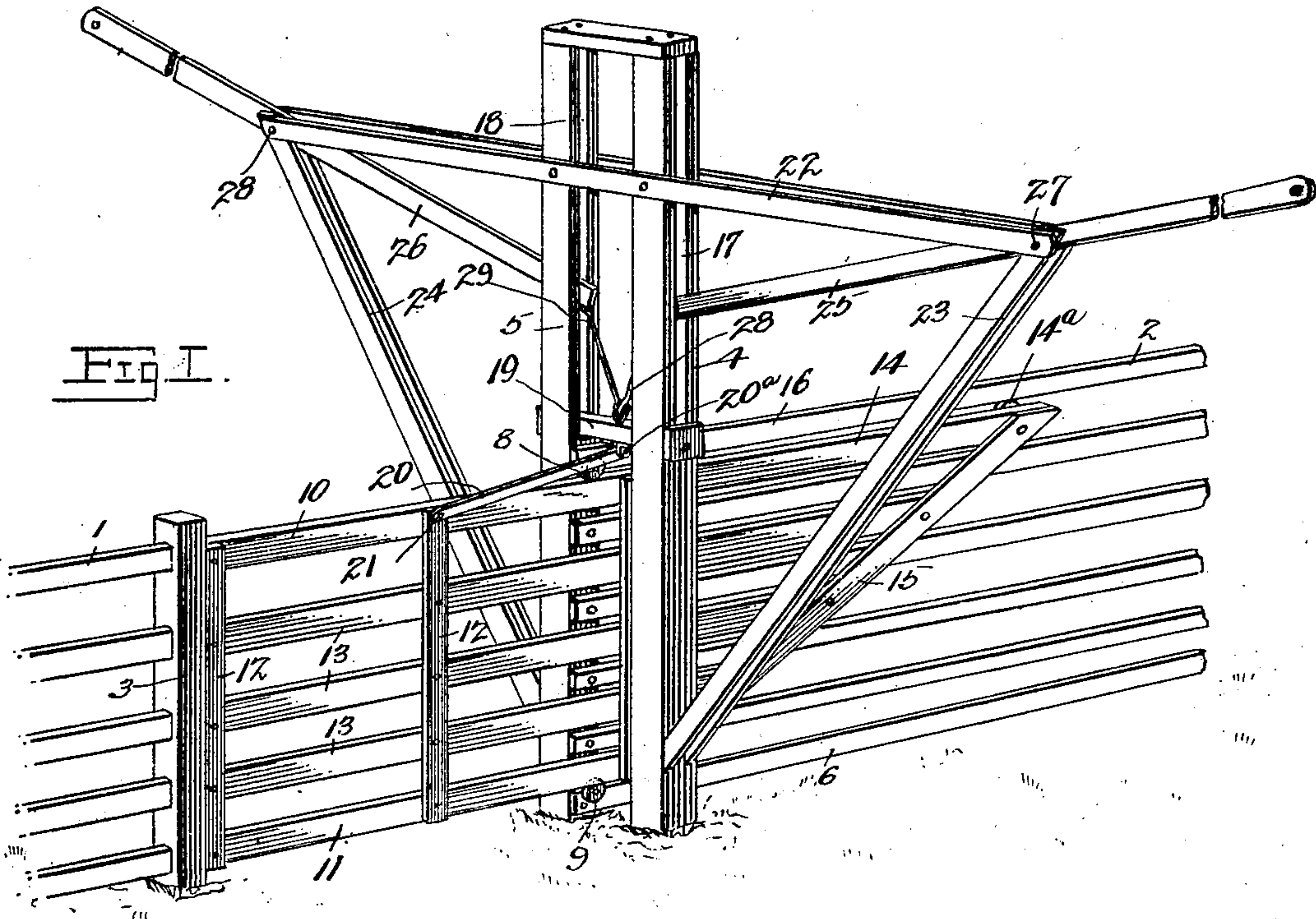
Patented Apr. 29, 1902.

E. PHILLIPS.

GATE.

(Application filed May 22, 1901.)

(No Model.)



Witnesses

J. E. Alden.  
C. H. Woodward.

E. Phillips, Inventor  
by C. A. Snow & Co.  
Attorneys



# UNITED STATES PATENT OFFICE.

EDWARD PHILLIPS, OF NEWPORT, ARKANSAS.

## GATE.

SPECIFICATION forming part of Letters Patent No. 698,851, dated April 29, 1902.

Application filed May 22, 1901. Serial No. 61,439. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD PHILLIPS, a citizen of the United States, residing at Newport, in the county of Jackson and State of Arkansas, have invented a new and useful Gate, of which the following is a specification.

This invention relates to gates of the class which are adapted to be operated from a distance; and it consists in the construction, combination, and arrangement of parts, as hereinafter shown and described, and specifically pointed out in the claim.

In the drawings illustrative of the invention, Figure 1 is a perspective view of the gate complete and closed. Fig. 2 is a sectional elevation illustrating the construction of the follower-block and its attachments.

This gate may be erected in the gateway-opening in any fence, and for the purpose of illustration I have shown it arranged in connection with ordinary fence-panels, 1 and 2 representing sections of the fence on opposite sides of the gateway-opening, the post 3 forming the usual abutment for the end of the gate when closed.

4 5 are two posts set parallel to each other and spaced apart at the gate side of the gateway-opening, between which the gate slides in opening and closing.

The ends of the rails 6 of the fence-section 2 are secured to the inside of the post member 5, and to this post is journaled an anti-frictional roller 8, forming a guide for the top rail 10 of the fence, and a similar anti-frictional roller 9 is similarly journaled to said post under the lower rail 11 of the gate.

The gate is formed of horizontal upper and lower rails 10 and 11 and vertical cross-bars 12 and intermediate rails 13, the rail 10 being extended, as shown at 14, and connected by a diagonal brace 15 to the inner end of the rail 11. The intermediate rails 13 are likewise extended and secured to the diagonal brace 15.

Journaled to the inner end of the extension 14 is an anti-friction-roller 14<sup>a</sup>, adapted to engage with and travel beneath a guide-rail 16 above the top rail of the fence-section 2, as shown. By this means the gate is firmly and slidably supported by the rollers and is free to be moved back and forth between the two

spaced posts 4 5 and with very little friction, owing to the fact that all the bearings are upon anti-friction-rollers and the gate completely "balanced."

The post members 4 5 are each provided with vertical slots 17 18 in transverse alinement, and slidably disposed in these slots and adapted to be moved vertically therein is a follower-block 19. The ends of the follower-block 19 project beyond the outer sides of the post members 4 5 and have transverse extensions beyond the edges of the slots to form stops to the follower-block to prevent end movement thereof and insure the retention of the block in its proper place in the guide-slots.

20 is a connecting-rod pivotally connected to the lower side of the follower-block 19 by one end at 20<sup>a</sup> and likewise pivotally connected to the gate by the other end, as at 21.

The lower ends of the slots 17 and 18 in the post members 4 and 5 are approximately at the upper line of the gate and top rail of the fence, as shown, so that the follower-block 19 will come nearly in horizontal alinement with the top rail of the gate when in its lowermost position to insure the automatic locking of the gate either open or closed. When thus arranged, the end thrust of the connecting-bar 20 will be so nearly in a horizontal line that the follower-block will not be moved upward by any horizontal movement of the gate, and the gate can be released only by elevating the follower-block.

Attached across the posts 4 and 5 at right angles to the gate are bars 22, connected by their outer ends to the lower parts of the post members 4 and 5 by diagonal braces 23 24, each of the braces being in two parts, as shown.

25 26 are two levers, secured by bolts 27 28 to the outer ends of the two parts of the bar 22 and also between the two-part brace members 23 24 and with their inner ends projecting into the slots 17 18 in the posts 4 and 5, as shown, and connected at their inner ends by links 28 29 to the follower-block 19. By this means the follower-block may be elevated and depressed by drawing down or elevating the outer ends of the levers 25 26. The levers 25 26 are by this construction firmly supported between the diagonal brace members



23 24 and prevented thereby from lateral movement, which is an important feature of my invention.

When thus constructed, the operation is as follows: When the gate is to be opened, one of the levers 25 or 26 (it is immaterial which, as two levers are provided, so that the gate may be actuated from either side) is drawn downward, which action draws the follower-block 19 upward and through its connection to the gate by the connecting-rod 20 likewise draws the gate open. The gate by its free movement over the antifriction-rollers gains considerable momentum, which carries it past the center, and thus places the follower-block in a position to exert the force of its weight and the weight of its attachments upon the gate through the connecting-bar 20 to complete the opening of the gate and "lock" it open in the same manner as it acts in locking the gate closed.

The extended end 14 exerts an important influence in the action of the gate, as it balances the gate and effectually prevents sagging, and thereby insures a comparatively frictionless movement, so that it requires the expenditure of a very small force to actuate the operating-levers.

The gate requires no other fastening to hold it open or closed; but it will be understood that other forms of locking devices may, if desired, be added without detracting from the efficiency of the preferred means herein described.

What I claim as new is—

The combination in a gate structure, of the spaced post members 4, 5, provided with aligning slots at their upper portions, a follower-block 19 guided in said slots and extending longitudinally beyond the outer sides of the

post members, the ends of the follower-block being transversely extended beyond the adjacent walls of the slots to prevent endwise movement of the follower-block, transversely-disposed bars 22, arranged one on each side of the spaced posts and secured thereto, two-part braces extending from a point near the base of the post to the outer ends of the bars 22, securing-bolts uniting the ends of the bars and braces, levers 25 and 26 pivoted on said securing-bolts and having their inner ends projecting within the slots of the post members, links extending from the inner ends of said levers to a central eye or loop on the follower-block, gate-supporting rollers 8 and 9 carried by one of the post members, and a gate structure comprising a substantially rectangular main-gate section adapted to close the gateway-opening and an inner braced angular portion extending beyond the spaced posts and serving partly to counterbalance the weight of the main-gate section, said gate being supported by the lower roller 9 and being guided by the upper roller 8, an antifriction-roller 14<sup>a</sup> journaled at the extreme inner end of the extended portion and adapted for travel in contact with the under side of the top rail of the fixed fence, and a connecting-bar 8 pivotally connected at one end to the under side of the follower-block and at the opposite end to the upper central portion of the main-gate structure, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EDWARD PHILLIPS.

Witnesses:

F. D. WILLIS,  
H. T. KIDD.