No. 762,883. PATENTED JUNE 21, 1904.

J. COMBS.

GATE.

APPLICATION FILED MAR. 21, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

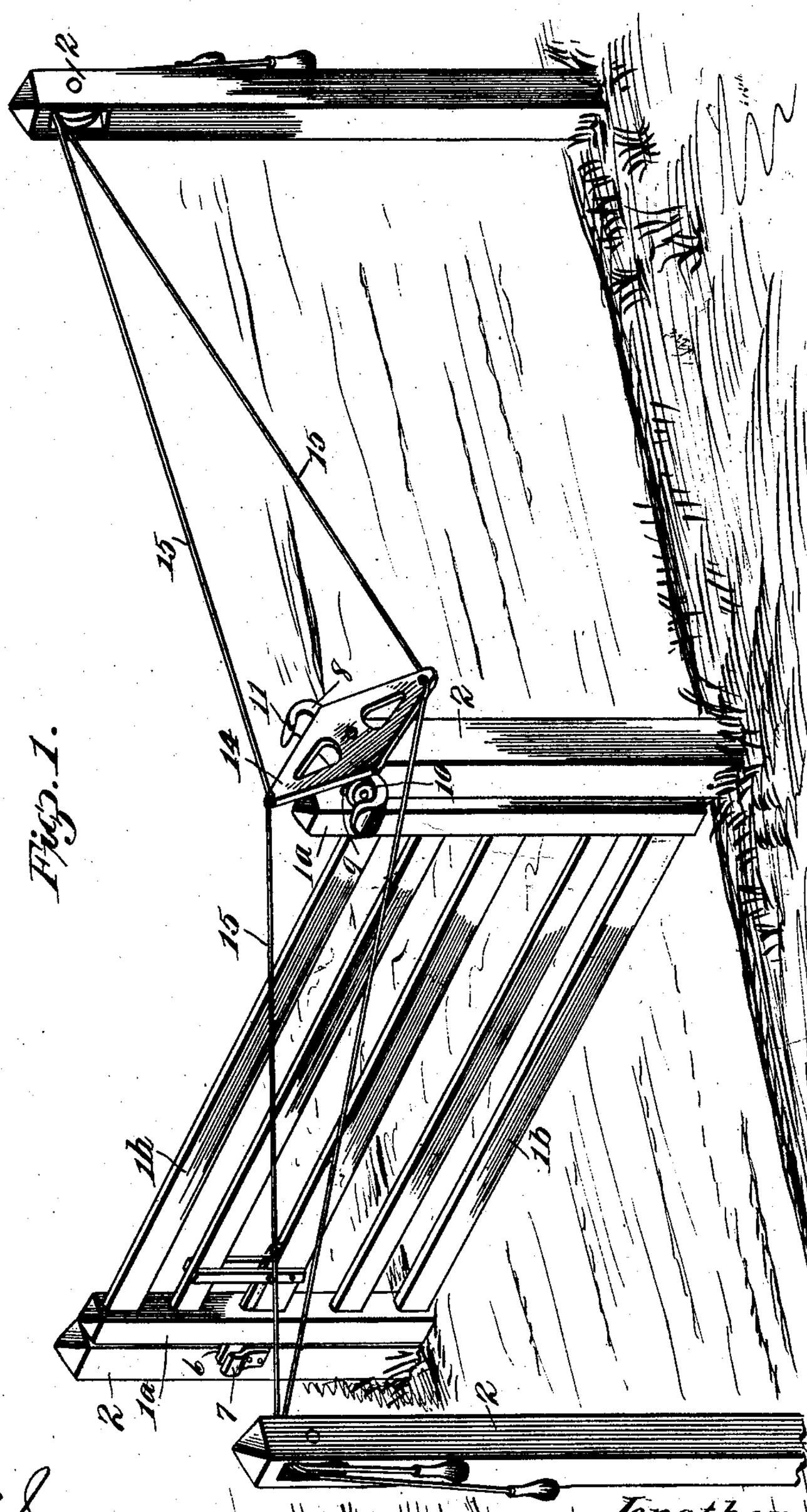

Fig. 1.

Witnesses

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NO MODEL.

2 SHEETS—SHEET 2.

Fig. 7.

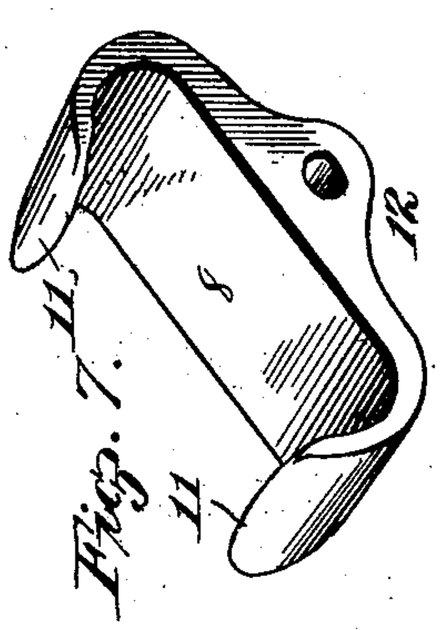

Fig. 6.

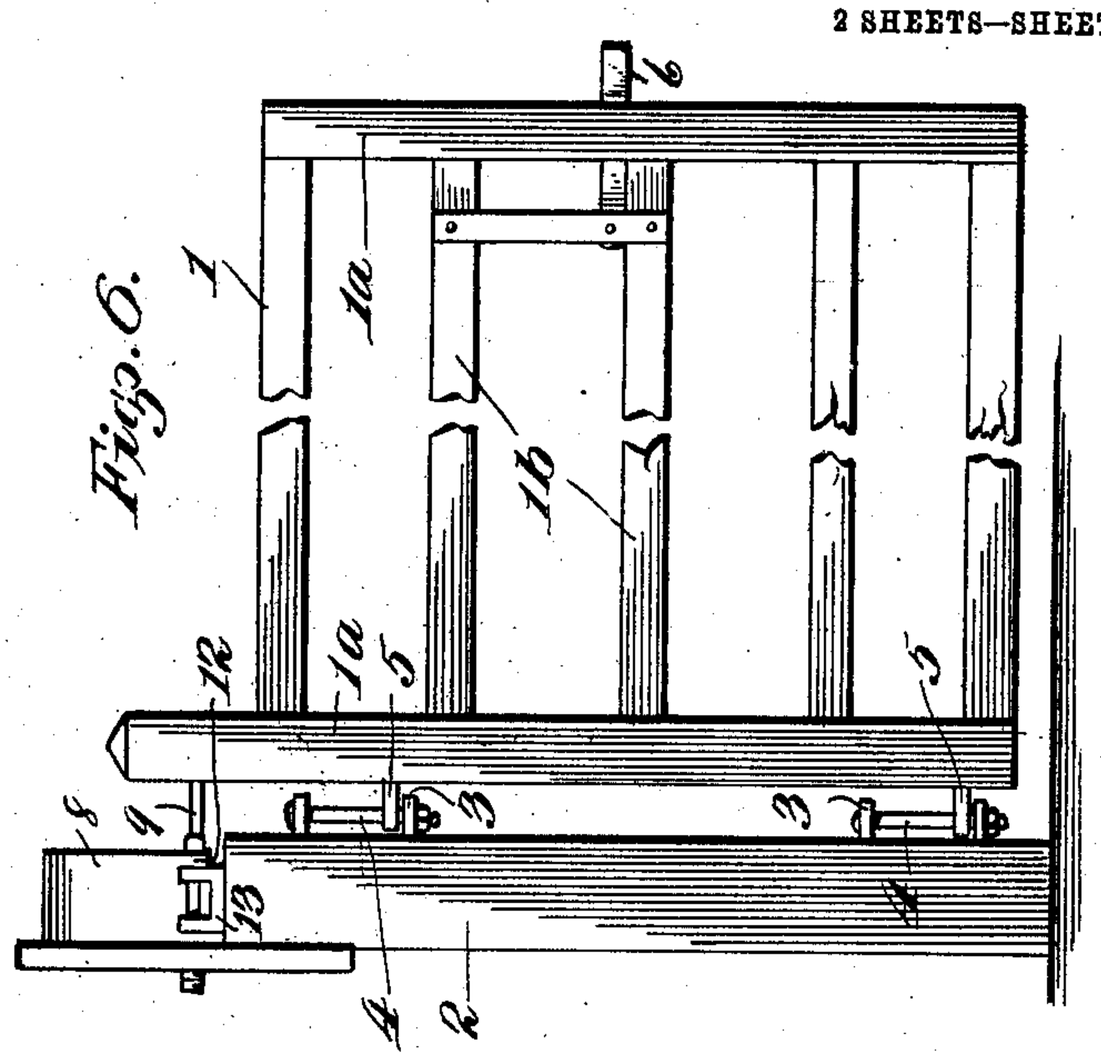

Fig. 1

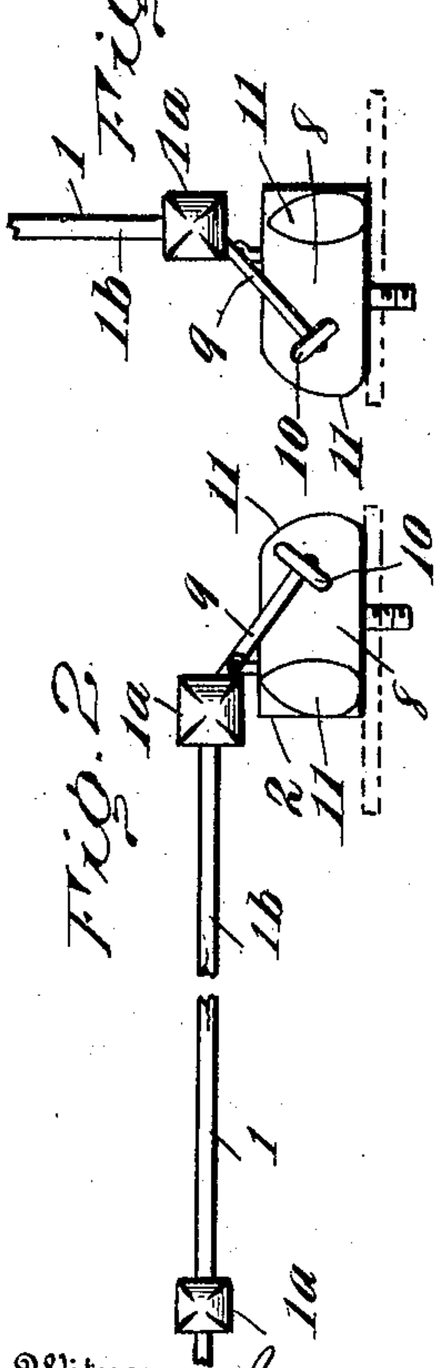

Fig. 3.

Fig. 2.

Fig. 5.

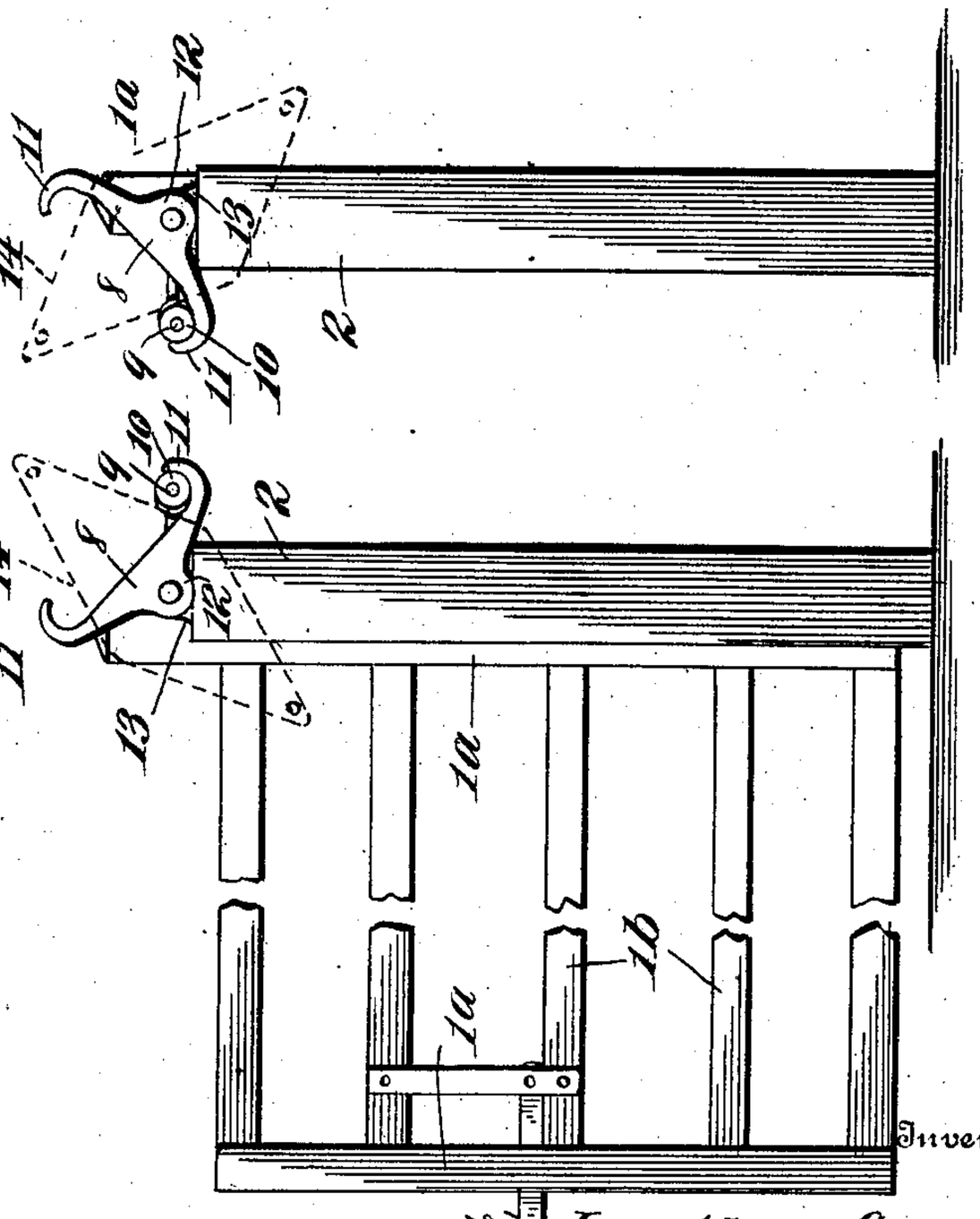

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

JONATHAN COMBS, OF MOUNT PULASKI, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 762,883, dated June 21, 1904.

Application filed March 21, 1904. Serial No. 199,277. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN COMBS, a citizen of the United States, residing at Mount Pulaski, in the county of Logan and State of Illinois, have invented certain new and useful Improvements in Gates, of which the following is a specification.

This invention relates to improvements in farm and road gates of the horizontally-swinging type.

The essential feature of the invention is to provide a gate of this class adapted to be readily opened or closed by a passer-by traveling in a vehicle of any kind without necessitating the inconvenience arising from getting out of such vehicle to operate the gate.

Further, my invention embodies peculiar operating means whereby the gate is opened or closed as the passer-by approaches and departs therefrom.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a gate embodying my invention. Figs. 2 and 3 are plan views illustrating the positions of the gate when open and closed, respectively. Fig. 4 is a side elevation, showing the gate in the position illustrated in Fig. 2. Fig. 5 is a view similar to Fig. 4, showing the gate in the position illustrated in Fig. 3. Fig. 6 is a front elevation. Fig. 7 is a detail perspective view of the tilt-bar.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In the practical use of my invention the gate 1 is mounted upon a gate-post 2, the latter being suitably positioned in any of the usual ways. The gate is susceptible of use upon roads, farms, railway-crossings, or any place where it would be desirable to secure a gate of this type. The gate itself may be of any common panel structure, as illustrated, and comprises the vertical bars 1^a and the horizontal rails 1^b. The gate 1 is adapted for a vertical movement, as well as a horizontal-swinging movement, in opening and closing, and for this reason special hinge devices are utilized in securing the gate to the gate-post 2. Projected from the gate-post 2 are bracket members 3, provided with openings receiving vertical pintles 4, and the hinge members of the gate 1 consist of eyebolts 5, journaled to the pintle members 4 in a manner which will be readily comprehended. The brackets 3, which support the members 4, are spaced from each other to admit of a vertical movement of the journal members 5 of the gate along the same under the actuation of means which will be more fully described hereinafter. The gate 1 is provided with a latch 6, which may be rigidly or otherwise secured to the gate and which coöperates with a gate-post 7 to lock the gate closed.

The operating mechanism, which, together with the mounting of the gate, constitutes a primal feature of my invention, consists, essentially, of a tilt-bar 8, pivoted to the upper end of the gate-post 2, and this tilt-bar coöperates with a gate-bar 9, projected from the gate 1 to effect an opening or closing movement of the gate under the actuation of proper operating means. The tilt-bar 8 comprises an inclined plane, being pivoted at a point about between its ends, and the gate-bar 9 is adapted to move longitudinally of the tilt-bar in operating the gate. The gate-bar 9 is provided with a friction-roller 10, which directly engages the tilt-bar 8, thereby reducing the frictional contact, so as to admit of a perfect and easy working of the device.

The gate-bar 9 is projected angularly relative to the plane of the gate, and its longitudinal movement along the tilt-bar 8 is limited by means of stop members or flanges 11, which are formed adjacent the end portions of the said tilt-bar. The flanges 11 project upwardly from the tilt-bar 8 and form rigid stops to limit the movement of the roller 10 of the gate-bar, which rides into engagement with

the said flanges 11. The tilt-bar 8 is provided upon its under side with downwardly-projecting ears 12, located about at points between the ends of the tilt-bar, which ears 12 constitute journal members, which are pivotally mounted upon a supporting-plate 13, secured to the upper end of the post 2. The tilt-bar, being pivoted about between its ends, is normally adapted to rest in an inclined position under all conditions of service, so that the normal position of the roller 10 of the gate-bar 9 is in engagement with the tilt-bar at points adjacent either one end or the other thereof. When the roller 10 is engaging the tilt-bar 8 at one end thereof, the gate is held either open or closed, as the case may be.

To effect tilting movement of the member 8, an operating-lever 14 is provided, which is rigidly secured to the outer side of the tilt-bar, and pivotal movement of the lever 14 is adapted to effect a tilting or pivotal movement of the tilt-bar in a manner which will be readily seen. To operate the lever 14, operating-cords 15 may be secured to the opposite ends of the lever and extended to some distant point upon both sides of the gate. The operating-cords 15 may be provided with handles adapted to be gripped so as to effect a pull upon the operating-cord which carries same, and a tilting movement of the tilt-bar 8 may be thus effected. The tilting of the bar 8 will of course cause the roller of the gate-bar 9 to move longitudinally along the tilt-bar, whereby the opening or closing movement of the gate is secured.

As the passer-by approaches the gate he pulls the shorter operating-cord, and thereby tilts the bar 8. Tilting movement of the bar 8 causes the roller 10 to ride upwardly until said roller passes the point of pivotal support of the tilt-bar, when the said roller moves downwardly to the other end of said bar 8. As the roller 10 rides along the tilt-bar the upward movement thereof lifts the gate vertically, and this vertical movement of the gate in opening unlatches the same. A similar operation from the opposite side will close the gate.

Having thus described the invention, what is claimed as new is—

1. The combination of a gate, a gate member projected rearwardly from the gate and at an angle to the plane thereof, a tilt-bar pivoted at a point between its ends and engaging the gate member to effect longitudinal movement of the gate member along said gate-bar, and means for actuating the tilt-bar.

2. The combination of a gate-post, a gate pivoted to the said post, an inclined tilt-bar pivoted to the post at a point about intermediate its ends, stop means projected from the end portions of the tilt-bar, a gate-bar projected from the gate at an angle to the plane thereof, a roller carried by said gate member and engaging the inclined tilt-bar and movable longitudinally of said tilt-bar, and an operating-lever for tilting the tilt-bar.

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

JONATHAN COMBS. [L. S.]

Witnesses:
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