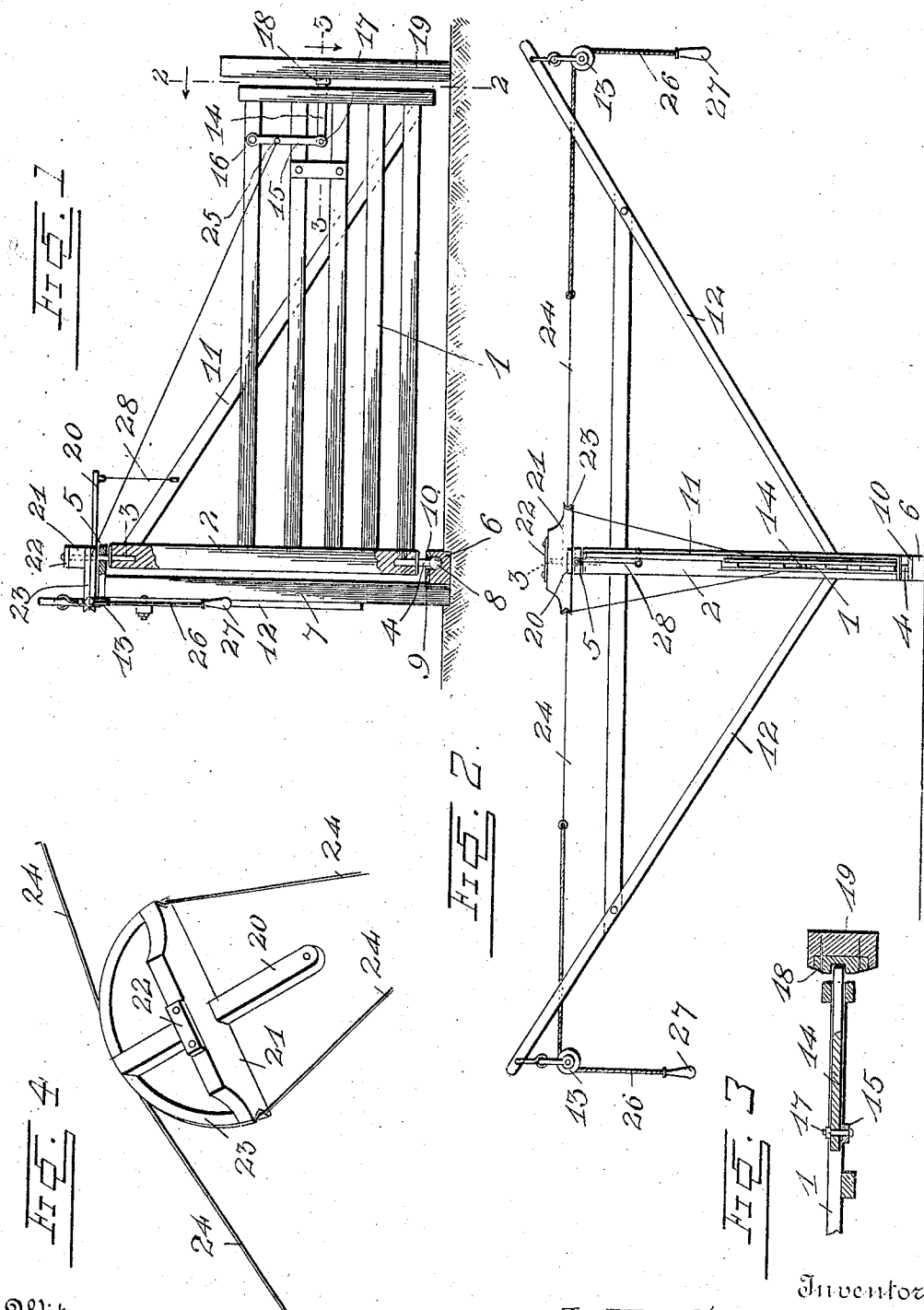


No. 800,335.

PATENTED SEPT. 26, 1905.

J. E. STIRTON.
GATE.

APPLICATION FILED JUNE 15, 1905.



Witnesses

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JAMES E. STIRTON, OF MONROE, WASHINGTON.

GATE.

No. 800,335.

Specification of Letters Patent.

Patented Sept. 26, 1905.

Application filed June 15, 1905. Serial No. 265,345.

To all whom it may concern:

Be it known that I, JAMES E. STIRTON, a citizen of the United States, residing at Monroe, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in Gates; and I do 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 improvements in gates, particularly with reference to means for opening, closing, and latching the gate; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an elevation of a gate embodying my improvements. Fig. 2 is an elevation at right angles to Fig. 1 and on the plane indicated by the line 2 2 of Fig. 1. Figs. 3 and 4 are detail views.

The gate 1 may be of the form here shown or of any other suitable form and is provided at its inner end with the heel 2, having vertical pins 3 4 at its upper and lower ends, respectively, which are respectively journaled in bearings 5 6 on the inner side of a post 7, to which the gate is hung. The said bearings may be of any suitable construction. The pin 3 extends entirely through and projects upwardly above the bearing 5. The lower end of the pin 4 is recessed and fits on a bearing-ball 8 on the bearing 6. A plate 10, which is secured on the said bearing 6, has an opening through which the said pin extends. The gate is here shown as provided with an inclined brace-bar 11, the upper end of which is secured to heel-post near the upper end of the latter and the lower end of which is secured to the lower outer corner of the gate. Inclined arms or supports 12 project from opposite sides of the post 7, which are connected together by a brace, as shown, and serve at their outer ends to support pulleys 13, which hang therefrom.

The gate is provided at its free end with a latch-bar 14, which is movable longitudinally. A link-bar 15 has its upper end pivotally connected to the gate, as at 16, and its lower end pivotally connected to the latch-bar near the inner end of the lever, as at 17. The latch-bar is adapted to engage and disengage a notched catch 18, which is secured to the inner side of the post 19, against which the gate closes.

On the upper bearing-pin 3 of the gate-heel is pivotally mounted a latch-operating and gate-swinging device, which I will now describe. The said device comprises a pair of crossed bars 20 21 of suitable dimensions, secured together at their centers. The pin 3 passes through aligned openings in the centers of the said crossed bars, and on the bar 21, which is at right angles to the bar 20 and which is also normally at right angles to the plane of the gate, is secured a plate or strap 22 of metal, which bears on the upper end of the said pin 3. A curved semicircular angle steel or iron bar 23 has its ends secured to the ends of the bar 21 and its central portion secured to the outer end of the bar 20. The angle-bar 23 has its channeled side turned outwardly to form a groove for the reception of operating-wires 24, which are disposed in overlapping relation in the groove formed in said curved bar 23 and have their inner ends secured to the link-bar 15, as at 25. The outer ends of the said wires, which extend in opposite directions, are secured to operating cords or ropes 26, which pass over the pulleys 13, depend from the latter, and are provided with weight-handles 27, the weight of which is sufficient to keep the said operating-wires under such tension as to prevent them from becoming disengaged from the groove of the segmental bar 23 of the swinging and latch operating device.

The operation of my improved gate is as follows: Assuming that the gate is closed, a person approaching it from either side, either on foot, in a vehicle, or on horseback, grasps one of the weight-handles 27 and pulls downwardly on the same, thereby exerting such tension on one of the operating-wires as to cause the latter to partly turn the latch-operating device, so that the said wire draws the link 15 inwardly, causing the latter to release the latch 14 from the catch 18, the continued tension of the said wire causing the gate to swing open and away from the person operating the same. After having passed through the opened gate the person then draws downwardly on the other weight-handle, thereby causing the gate to be swung reversely to the closed position, the latch-bar 14 automatically engaging and becoming caught by the catch 18.

To prevent the latch-operating and gate-swinging device from sagging, I connect the inner end of the bar 20 to the brace-bar 11 of the gate by means of the wire 28, as shown in Fig. 1.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

In combination with a swinging gate having a latch, a latch-operating and gate-swinging device comprising a pair of crossed arms 20 21 pivotally mounted on the heel of the gate at a point coincident with the point of their intersection, said bar 20 lying substantially parallel with the gate and said bar 21 be-

ing substantially at right angles to the gate, a curved bar connecting the ends of the cross-bar 21 and the rear end of the bar 22, said curved bar extending in rear of the heel of the gate, a connection 28 between the gate 25 and the front end of the bar 20 to prevent the latch-operating and gate-swinging device from sagging, operating-wires reversely disposed on said curved bar and having their inner ends connected to the latch for operating the latter, and operating-device guides 30 for the outer ends of said wires.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES E. STIRTON.

Witnesses:

JOHN P. AUSTIN,
JAMES FANNER.