(No Model.)

B. F. PRICE.

DRIVE GATE.

No. 473,958. Patented May 3, 1892.

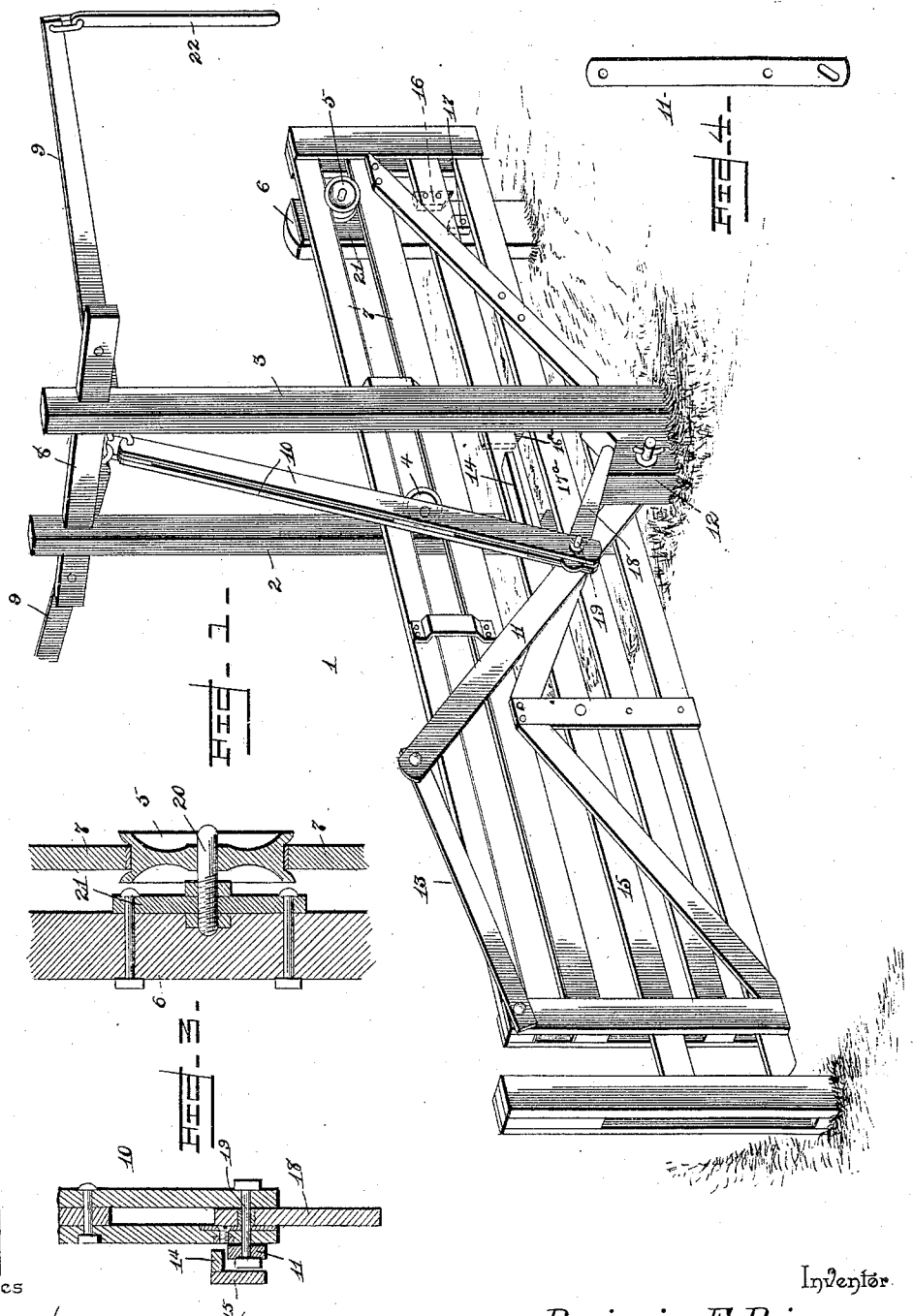

Fig. 1.

Fig. 3.

Fig. 2.

Witnesses

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BENJAMIN F. PRICE, OF BLOOMINGTON, ILLINOIS.

DRIVE-GATE.

SPECIFICATION forming part of Letters Patent No. 473,958, dated May 3, 1892.

Application filed May 13, 1891. Serial No. 392,915. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. PRICE, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented a new Improvement in Drive-Gates, of which the following is a description.

The invention relates to improvements in sliding gates.

The object of the present invention is to simplify and improve the construction of sliding gates and to enable them to be readily operated from a vehicle or on horseback.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the accompanying drawings, Figure 1 is a perspective view of a gate constructed in accordance with this invention. Fig. 2 is a detail sectional view showing the swinging link-bar. Fig. 3 is a similar view illustrating the manner of attaching the pulleys. Fig. 4 is a detail view of the swinging lever.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a sliding gate arranged between uprights 2 and 3 and suspended from grooved pulleys 4 and 5, which are mounted on the upright 2 and a fence-post 6 and receive within their grooves the two uppermost bars 7, forming track-bars. The uprights 2 and 3 have their upper ends connected by a horizontal bar 8, projecting beyond the uprights and forming with them a supporting-frame and having fulcrumed on it operating-levers 9, which have their inner ends flexibly connected to links 10. The latter has its lower end pivoted at a point intermediate the ends of a swinging lever 11, which has its lower end fulcrumed on a short post 12 and its upper end connected with the front of the gate by a bar 13. When the outer ends of the operating-levers are depressed, the swinging lever 11 is raised to actuate the gate. The top of the post 12 is provided with a V-shaped recess, the inclined sides of which support the bar when the gate is opened or closed. The swinging lever 11 is provided at its lower end with a slot and has a limited longitudinal movement to engage a projection 14 of a latch-bar 15, which is pivoted intermediate its ends and is provided at its inner end with beveled blocks 16 and 16^a, arranged to engage keeper-blocks 17 and 17^a, secured to the fence-post 6 and the upright 2. The swinging links 10 are spaced, and have pivoted between their lower ends a swinging bar 18, which has its lower end fulcrumed on the short post 12 and is pivoted to the swinging links 10 by a pin 19, which also pivots the swinging lever 11 to the links 10. The bar 18 has its fulcrum-point at one side of the fulcrum-point of the swinging lever and carries the latter beyond the perpendicular.

When the gate is closed, a short downward pull on the operating-lever will lift the lever 11 slightly, so as to bring it against the projection 14 and lift the rear end of the latch-bar 15, thus disengaging the latches from the keeper-blocks, the lifting motion of the lever 11 being permitted by the slot in the lower end of the same, which engages the pivot thereof on the post 12. As the movement of the operating-lever continues the gate will start to open and the swinging bar 18 will approach a perpendicular position, and thus allow the end of the lever 11 to continue its upward movement until in a perpendicular position. When the lever has reached the perpendicular position, the bar 18 has not yet assumed a vertical position, and the links 10, by continuing the draft, bring the bar 18 to a vertical position. Then the lever is beyond a vertical position and is pushed by the links 10 to open the gate. In closing the gate the action is reversed.

The grooved pulleys are journaled on bolts 20, having their inner ends threaded and secured by nuts to plates 21, which are bolted to the upright 2 and the fence-post 6.

The outer ends of the operating-levers are provided with depending handles 22.

What I claim is—

1. The combination, with a sliding gate, of a supporting-frame, a post, an oscillating lever fulcrumed on the post and connected with the gate, an operating-lever fulcrumed on the frame, a link connecting the operating-lever and the oscillating lever, and a swinging bar fulcrumed on the post and pivoted to the link, substantially as described.

2. The combination of a sliding gate, a supporting-frame, a post 12, having its upper end provided with a V-shaped recess, an oscillating lever fulcrumed on the post and connected with the gate, an operating-lever fulcrumed on the frame, a link connecting the levers, and a swinging bar pivoted to the said link and fulcrumed in the recess of the post, substantially as described.

3. The combination, with the supporting-frame, the gate, and means for operating the same, of a pivoted gate-rail forming a latch-bar for the gate, latches secured rigidly to the side of the latch-bar, one at the rear of the gate proper and the other at the end of the gate extension, and keeper-blocks secured to the supporting-frame and adapted to be engaged by the latches.

4. The combination of the gate, the supporting-frame, a post anchored at the one side of the gate, a keeper-block secured on the supporting-frame, a latch secured on the side of one of the gate-bars and adapted to engage the keeper-block, said gate-bar being provided with a lateral projection, suitable operating mechanism, and an oscillating lever connected to the operating mechanism and to the gate and having its lower end loosely fulcrumed on the anchored post, whereby the said lever is enabled to impinge against the lateral projection, lift the latch-bar, and disengage the latch from the keeper-block before it begins to oscillate.

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Witnesses:
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