(No Model.) 2 Sheets—Sheet 1.

D. H. ISEMINGER.

GATE.

No. 457,722. Patented Aug. 11, 1891.

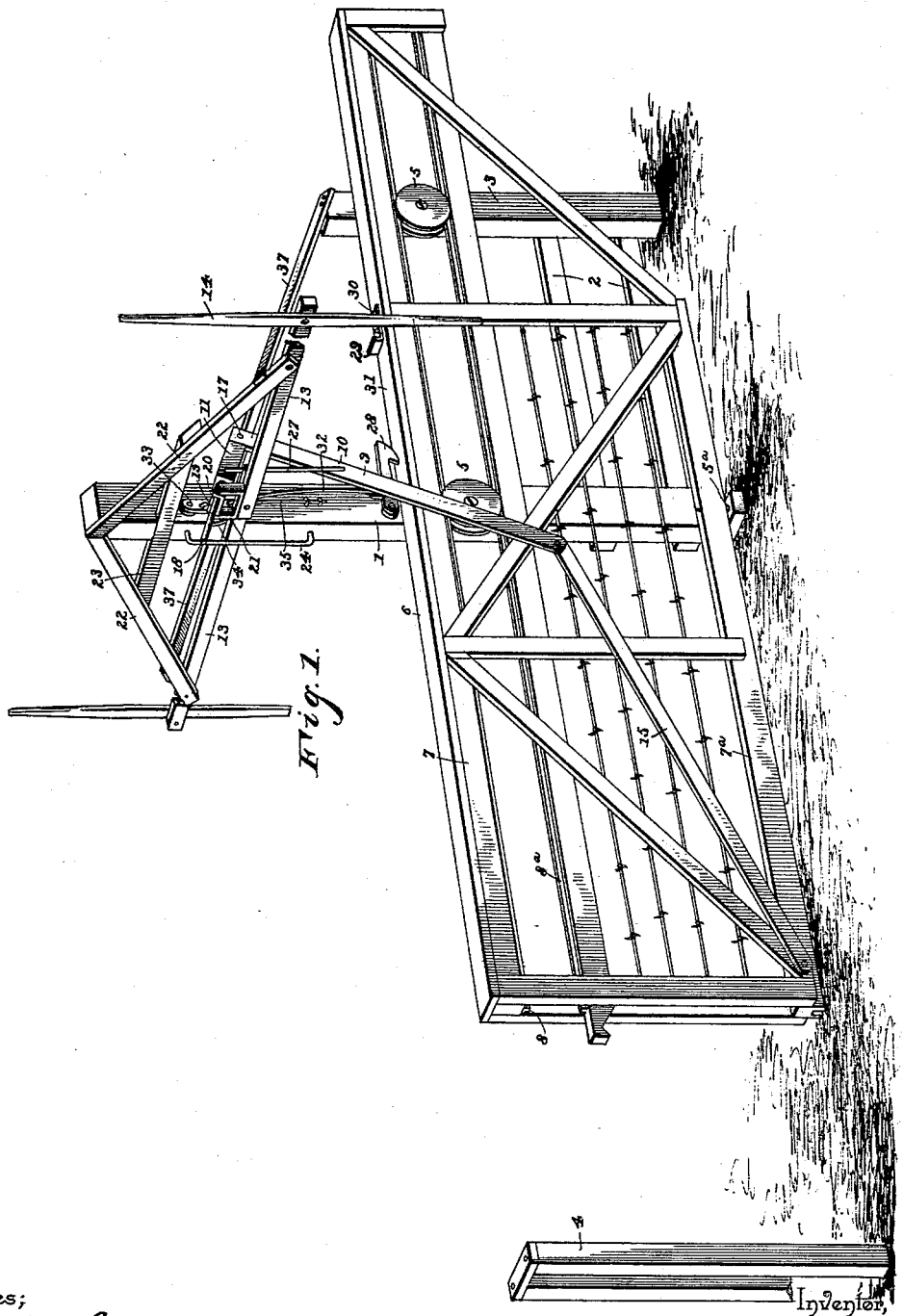

Fig. 1.

Witnesses;

J. M. Whitmore

H. F. Riley

Inventor,

Daniel H. Iseminger,

By his Attorneys,

C. A. Snow & Co.

(No Model.) 2 Sheets—Sheet 2.

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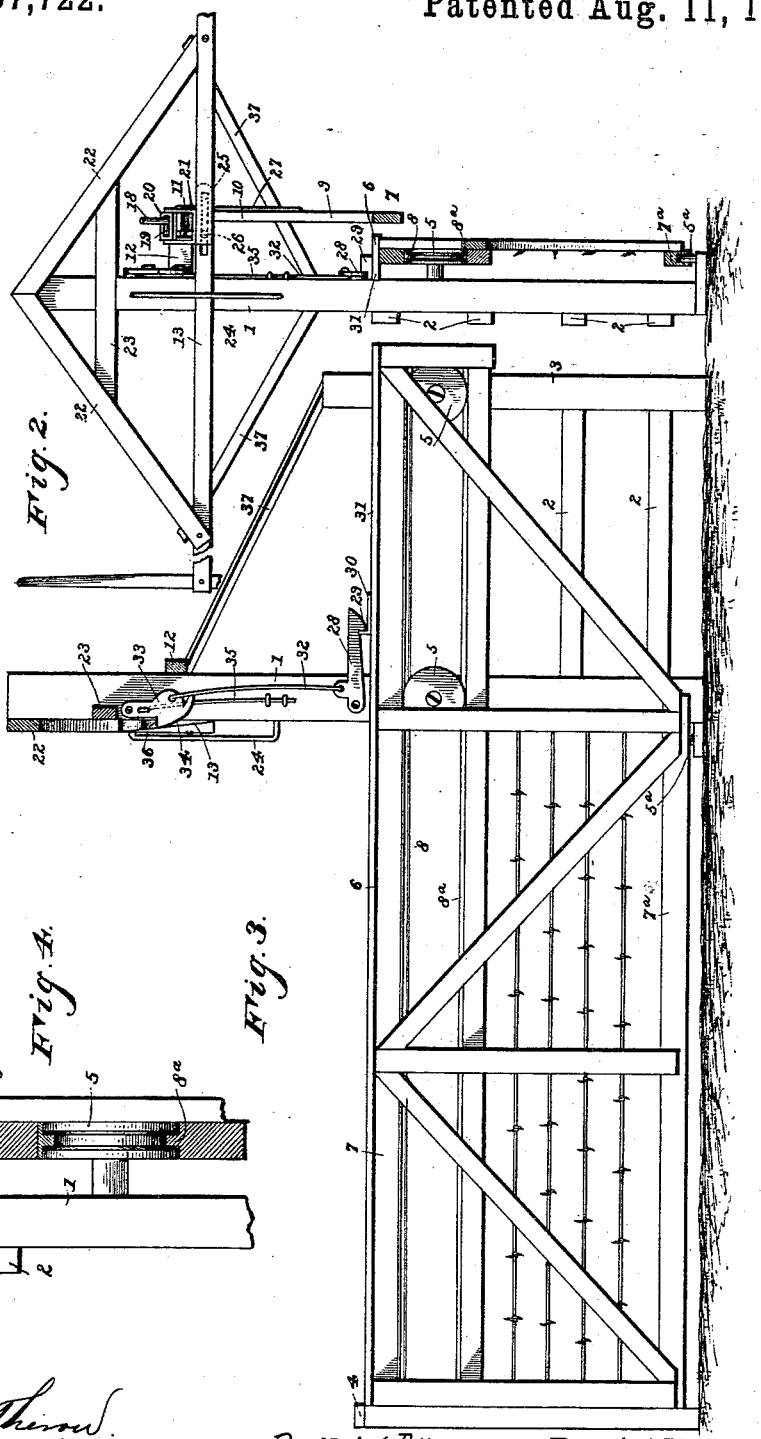

Fig. 2.

Fig. 3.

Fig. 4.

Witnesses;

J. M. Whitehead

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UNITED STATES PATENT OFFICE.

DANIEL H. ISEMINGER, OF BLOOMINGTON, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 457,722, dated August 11, 1891.

Application filed February 20, 1891. Serial No. 382,208. (No model.)

To all whom it may concern:

Be it known that I, DANIEL H. ISEMINGER, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

The object of the present invention is to simplify and improve the construction of sliding gates and to enable the same to be readily operated from below or from above—as, for instance, from the top of a load of hay.

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 drawings, Figure 1 is a perspective view of a gate constructed in accordance with this invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a vertical longitudinal sectional view, partly in elevation. Fig. 4 is a detail enlarged section through the gate rollers and track.

Referring to the accompanying drawings, 1 designates a main supporting-post connected by rails 2 with a post 3, arranged in a line with the main supporting-post and a latch-post 4, and the posts 1 and 3 are provided with grooved rollers 5 and constitute a hanger, from which is suspended a sliding gate 6. The top rail 7 of the gate 6 has secured to its lower edge a metal track 8, which is approximately V-shaped and rests in the grooves of the rollers 5, and the upper edge of the next lower rail is provided with a longitudinal rib 8^a. The bottom rail 7^a is provided with a longitudinal groove to receive a vertically-disposed roller 5^a. The gate is composed of horizontal rails or wires, vertical bars, and inclined braces, and the inclined braces and vertical bars are secured to the faces of the rails, and a free and unobstructed longitudinal opening for the rollers 5 is provided between the top rail 7 and the next lower one.

The gate 6 is moved longitudinally by an angle-lever 9, which consists of a long arm 10 and a short arm 11, and which is fulcrumed at its angle to a piece 12, projecting horizontally from the upper portion of the main supporting-post 1, and the angle-lever 9 is operated by approximately horizontal levers 13, which are provided at their outer ends with handles 14, centrally pivoted to the levers 13 and projecting above and below the levers and adapted to be operated from the ground or from the top of a load of hay or a similar elevated position. The lower end of the long arm 10 of the angle-lever 9 is pivoted to one end of a bar 15, which has its other end pivoted to the front of the gate, and when the angle-lever moves on its pivot 17 the gate is moved backward and to decrease the friction. The short arm 11 of the angle-lever 9 has projecting from it a rod 18, which engages an opening 19 of a block 20, pivotally mounted in a bracket 21, carried by one of the levers 13, and adapted to turn and conform to the movement of the rod 18. The levers 13 are fulcrumed on inclined braces 22, which have their upper ends secured to the post 1 at the top of the same, and are secured to a cross-bar 23 at a point intermediate their ends, and the said levers 13 are guided in their movement by a keeper 24, and the inner end of one of the levers 13 is provided with a slot 25, which is engaged by a screw or projections 26 of the other lever, whereby the levers are connected together and permitted to move freely. The arms of the angle-lever 9 are supported and strengthened by a brace 27.

The gate is locked in its closed position by a spring-actuated latch 28, which has one end pivoted to the post 1 and the other end provided with a head having a beveled nose and arranged to engage a vertical flange 29 of a plate 30, secured to the upper face of a top board 31 of the gate. The latch 28 is connected by a rod 32 with a pivoted latch-plate 33, mounted on one side of the main supporting-post 1 and having its lower edge 34 beveled and adapted to be engaged by the adjacent lever 13 to force the latch-plate backward against the action of a spring 35 to lift the latch 28 and release the gate. The latch-plate is provided with a shoulder 36, which engages the adjacent lever 13 and holds the same against accidental operation when the gate is closed, and the spring 35 has one end secured to the post 1 and the other end engaging a

perforation of the latch-plate. The straight operating-lever 13, which actuates the latch-plate 33, is pivoted intermediate its ends, and as its outer end ascends its inner end descends and engages the shoulder 36 of the latch-plate 33, which is forced aside, raising the latch 28 and releasing the gate. When the inner end of the lever 13 ascends, it engages the beveled edge of the latch-plate, which is pushed aside, allowing the inner end of the lever to rest upon the shoulder 34. The inclined braces 22 are supported by braces 37, extending from their outer end to the upper end of the post 3. The post 3 and the rails 2, connecting the said post 3 with the post 1, are designed to form a portion of a fence.

By employing the angle-lever 9 and arranging the same as shown and described there is no dead-center, and the gate can be readily started and moved in either direction.

It will be seen that the gate is simple and inexpensive in construction and adapted to be readily opened from above or below, and is capable of being started and put in any point.

What I claim is—

1. The combination of the post 1, the sliding gate, the angle-lever fulcrumed at its angle and having one arm connected with the gate and the other arm provided with a rod, the operating-levers having their inner ends connected, and the bracket mounted on one of the levers and provided with a block journaled in it and having an opening to receive the rod, substantially as described.

2. The combination of the post 1, the sliding gate, the bar 15, pivoted to the gate, the angle-lever fulcrumed at its angle and having one arm pivoted to the bar 15 and having its other arm provided with a rod, the levers 13, one of which has its inner end provided with a slot and the other having a projection engaging the slot, the bracket mounted on one of the levers 13 and provided with a block journaled in it and having an opening in it to receive the said rod, and the handles centrally pivoted to the outer ends of the levers 13, substantially as described.

3. The combination of the post 1, the sliding gate, the latch pivoted to the post and arranged to engage the gate, the pivoted latch-plate having its lower edge beveled and provided with a shoulder, and the rod connecting the latch and the latch-plate, substantially as described.

4. The combination of the post 1, the sliding gate, the latch arranged to engage the gate, the latch-plate pivoted to the post and having its lower edge beveled and provided with a shoulder, the rod connecting the latch and the latch-plate, the spring secured to the post and engaging the latch-plate, and the levers 13, connected to the latch-plate and arranged to engage the latch-plate, substantially as described.

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

DANIEL H. ISEMINGER.

Witnesses:

SAIN WELTY,

JOHN A. STERLING.