

(No Model.)

L. D. LATIMER.
GATE LATCH AND SUPPORT.

No. 507,231.

Patented Oct. 24, 1893.

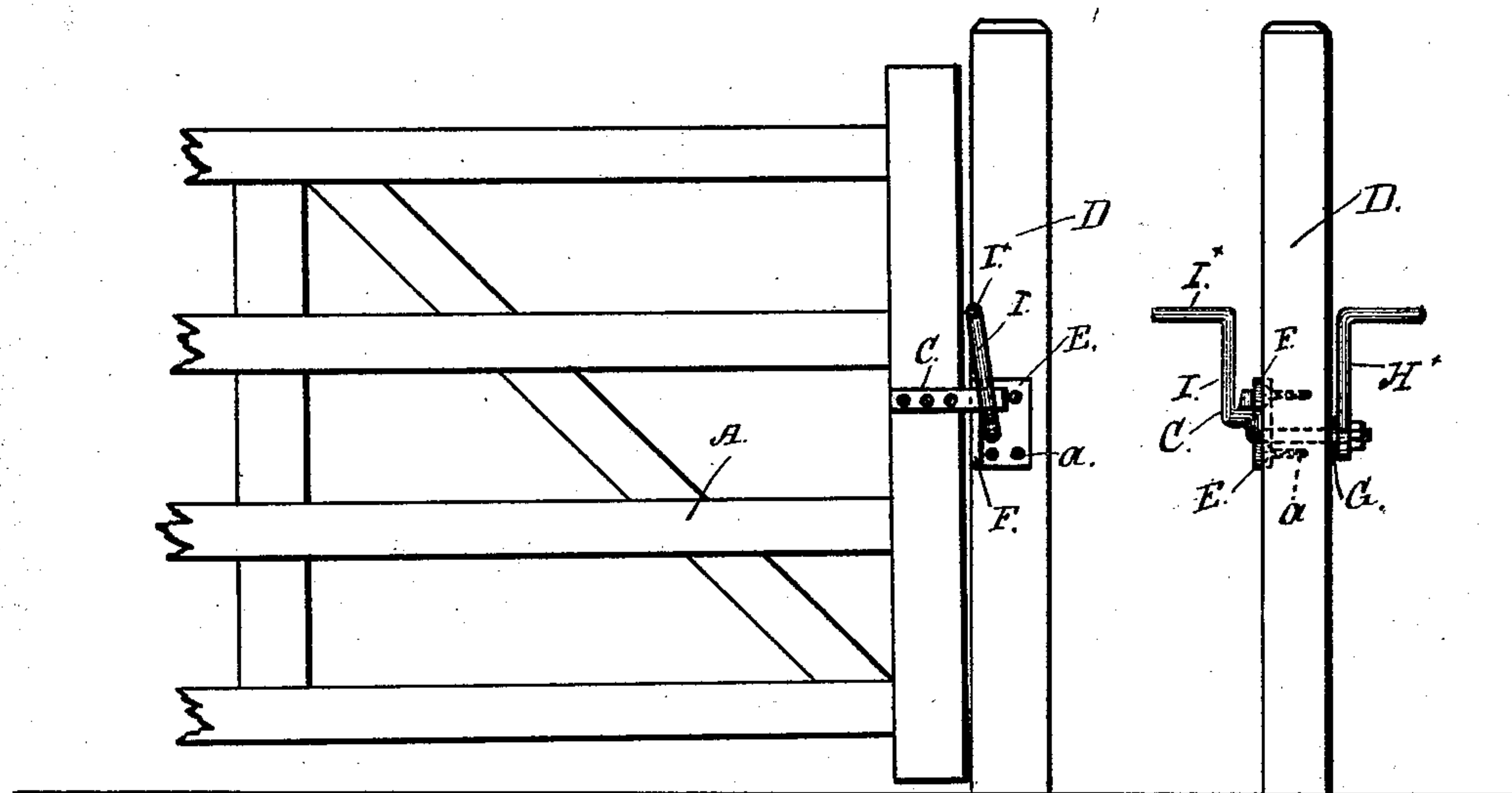


Fig. 1.

Fig. 2.

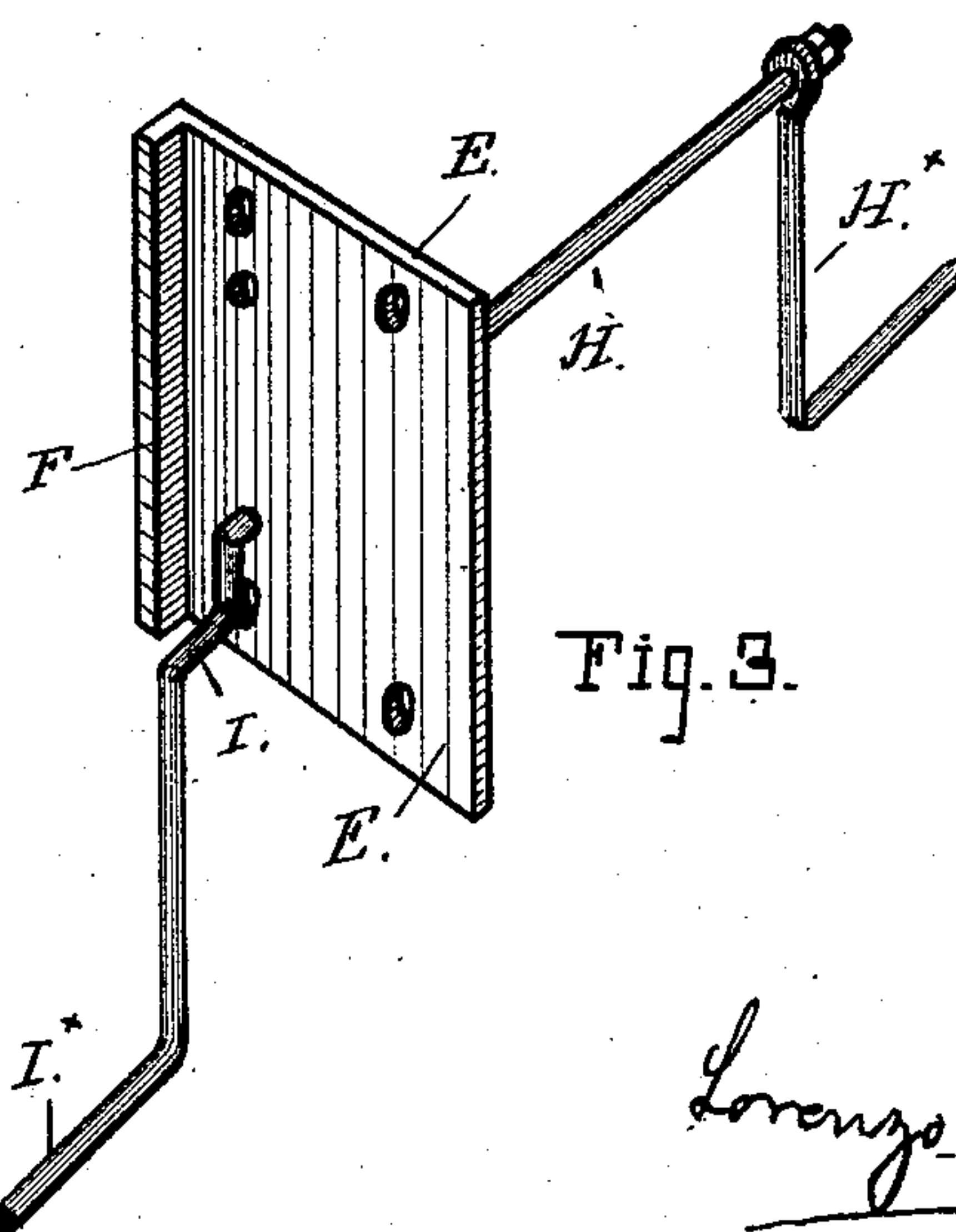


Fig. 3.

Witnesses

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GATE LATCH AND SUPPORT.

SPECIFICATION forming part of Letters Patent No. 507,231, dated October 24, 1893.

Application filed February 27, 1893. Serial No. 463,783. (No model.)

To all whom it may concern:

Be it known that I, LORENZO D. LATIMER, a citizen of the United States, residing at Windsor, in the county of Sonoma and State of California, have invented a new and useful Gate Latch or Fastening and Gate-Support, of which the following is a specification.

My invention relates to certain improvements in gate latches or fastenings, and to gate supports.

The tendency of every gate is to sag, and to drag or pull the post to which it is hinged from its perpendicular, thus allowing the free end of the gate to settle, and the gate to get out of shape, whereby the opening and closing of it are often rendered difficult and laborious.

My invention consists in the novel construction and appliance of a gate-latch or fastening, whereby when closed, a gate is latched or fastened and at the same time the end of the gate where the latch or fastening is placed is supported and suspended by it; and in the novel construction of such latch or fastening, whereby by means of leverage and other mechanical powers, it may be easily operated; and in the novel manner of securing the latch or fastening in its position when the gate is closed, by the pressure of the weight of the gate itself thereon, all as hereinafter explained.

The details of the construction and appliance of my invention are more fully explained by reference to the accompanying drawings which form part of this specification, and in which—

Figure 1 is a side elevation of the gate and gate-post with my latching or fastening device in position when the gate is closed. Fig. 2 is a front view of the gate-post with my latch or fastening device in position when the gate is closed. Fig. 3 is a view in perspective of plate, and lifting and locking cranks and levers.

A is the gate, which is hinged and swings on its pivotal point in the usual way. To the swinging end of the gate is permanently and rigidly fixed the latch C. To the post D a plate E is affixed by means of screws or bolts a, a, a, and a stay-plate G is fixed in like manner to the opposite side of the post. The plate E has a raised rim or rib F which forms

a stop for the latching or fastening lever when turned upward and a little past an upright position and against it the latch C closes.

The crank rod H passes through the post D and the plates at right angles with the gate. The outer end of this rod is provided with a detachable lever or arm H* and the inner end is formed with a crank having a bent arm, as at I terminating in a short handle I*.

In practice when the crank is in the position shown at Fig. 3 and the gate swings to, the fixed latch on the gate will take a position across the raised rim or rib F on the plate E and above and at right angle with the axis of the bent crank I, so that while the crank is turned a half turn or a little more upward the bench or step formed by the bend in the arm of the crank engages the fixed latch, and that end of the gate is lifted and raised so that the gate is entirely suspended at one end by the hinges and at the other by the said step or bench in the crank, by which it will be seen that at the same time, and by the same motion of the crank the gate is both fastened and suspended, and in that position it is impossible for the gate to sag, or to pull over the post or get out of shape.

The longer arm of the crank I being turned past a perpendicular when the gate is closed, and resting against the stop formed by the raised rim or rib F on the plate E with the weight of that end of the gate pressing on it, will prevent the gate from being opened until sufficient force shall be used to turn the crank back again over its dead center, or past an upright position. Also, in practice, the rigid latch which is attached to the gate A and the crank latch or fastener which is attached to the post D should be adjusted relative to each other so that in closing the crank-latch or fastening by turning the crank, the end of the gate will be lifted and raised far enough to cause the weight of the gate to rest on the crank or fastener when closed, but not far enough to prevent the crank being turned past its upright position. It will thus be seen that the crank can be operated from either side of the gate.

There are two holes in the plate E through which the crank rod or shaft may be passed, by which means the plate and crank may be used on either side of the post.

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

1. In a gate latch and support of the character described the combination of the fixed latch C, with a crank rod H having a bench or off-set thereon, adapted to engage the fixed latch C on the gate, as set forth.

2. In a gate latch and support of the character described the combination of the fixed latch C, with a crank rod H having an off-set or bench thereon, adapted to engage the latch C and securely lock it, and a plate E having a rib or rim E, as set forth.

3. In a gate latch and support of the character described the combination of the fixed latch C, with a crank rod H having a bench or off-set thereon, and a handle I* for operating said rod, and a handle H* on the other

end of the said rod H, constructed and arranged as set forth.

4. A gate latch consisting of a fixed latch C secured to the gate, a crank rod H having a bench or off-set thereon fitted in the post at right angles to the gate, and a handle on said rod for operating the same, whereby the said bench or off-set on the rod H is made to engage the fixed latch C and hold the end of the gate to which the latch C is secured elevated so as to remove the strain of its entire support from the post upon which it is swung, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

LORENZO D. LATIMER. [L. S.]

Witnesses:

R. M. SWAIN,

A. D. LAUGHLIN.