

(No Model.)

G. W. SANFORD.
GATE.

No. 424,134.

Patented Mar. 25, 1890.

Fig. 1.

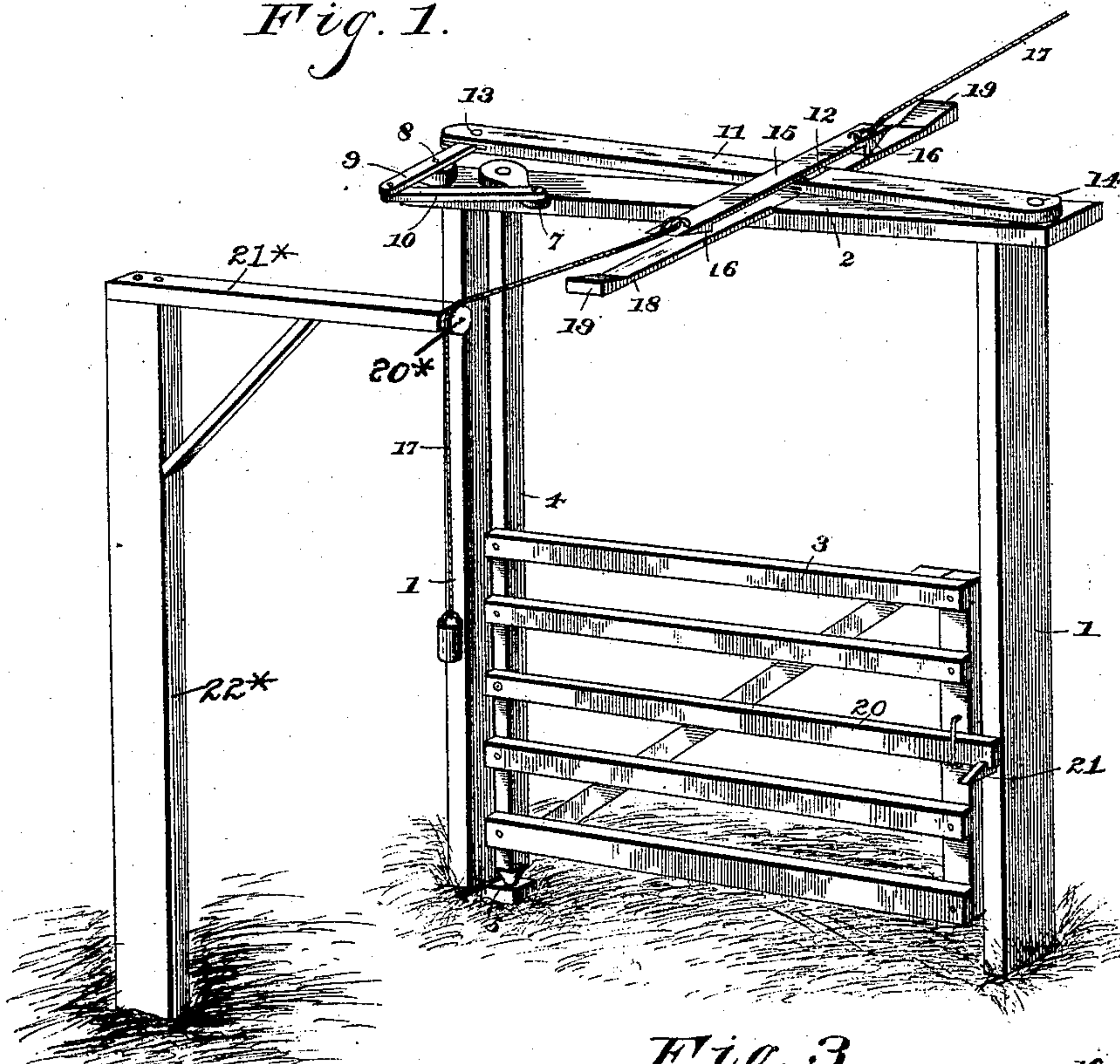


Fig. 2.

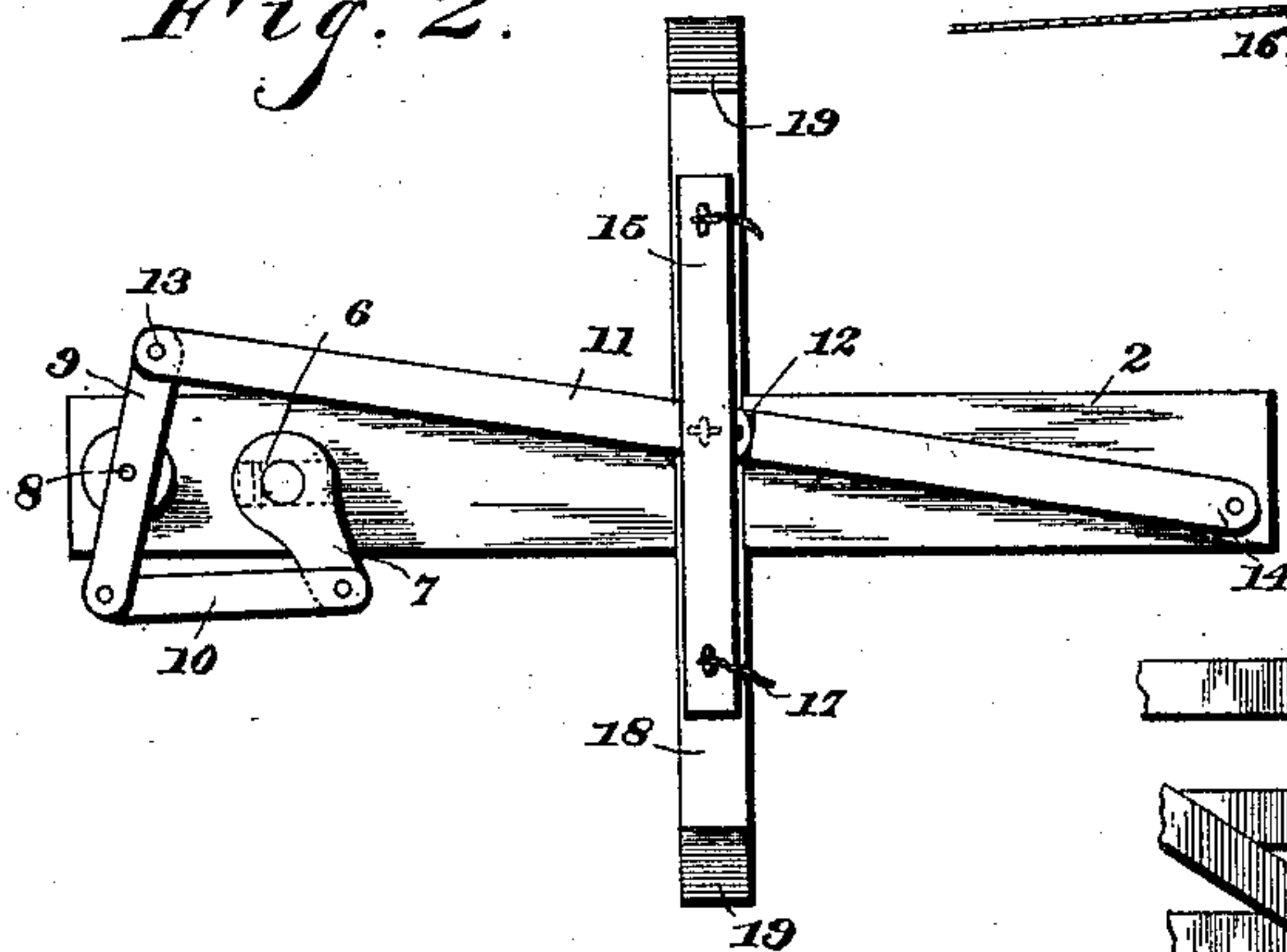
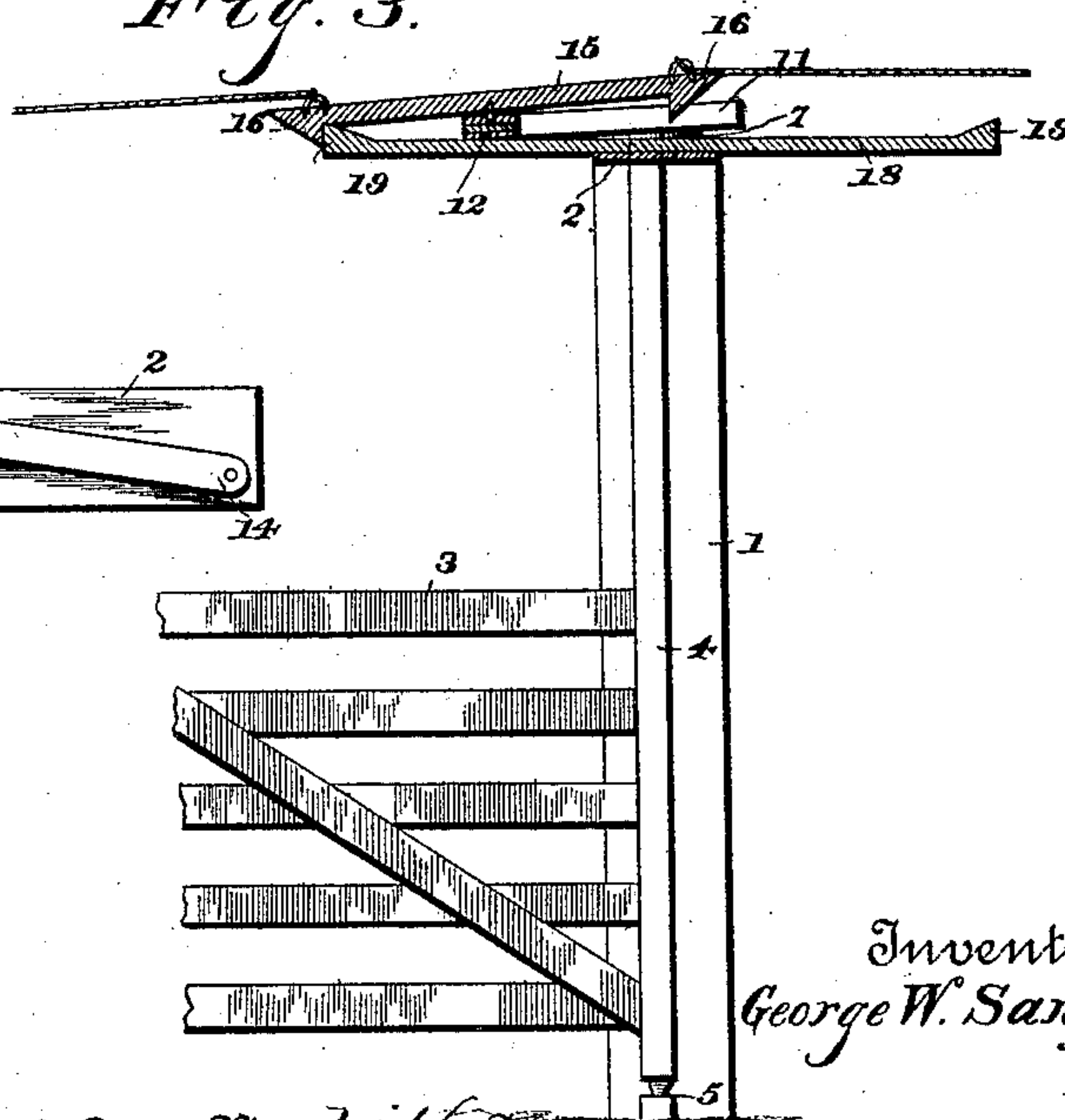


Fig. 3.



Witnesses;

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George W. Sanford,

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UNITED STATES PATENT OFFICE.

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GATE.

SPECIFICATION forming part of Letters Patent No. 424,134, dated March 25, 1890.

Application filed October 29, 1889. Serial No. 328,537. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON SANFORD, a citizen of the United States, residing at Mountain Home, in the county of Baxter and State of Arkansas, have invented a new and useful Gate, of which the following is a specification.

This invention has relation to swinging gates, and among the objects in view are to provide mechanism for opening the gate from either side while upon horseback or in a vehicle and locking said gate in its open position and against closing while passing there-through.

With these general objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a gate constructed in accordance with my invention. Fig. 2 is a plan. Fig. 3 is a transverse section, the gate being open.

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

1 1 represent the opposite gate-posts, the two being connected at their upper ends by a transverse bar 2, the ends of which project beyond their respective posts.

3 represents the gate, which is of ordinary construction, and the hinge-post 4 of the same is stepped in a bearing 5 at its lower end, and at its upper end passes through an oblong opening 6, formed in the transverse bar 2, and from it, above the bar, there extends a crank 7.

At the pivoted side of the gate, upon the bar 2, there is pivoted by means of a bolt 8 an oscillating lever 9, one end of which, by a link 10, is pivotally connected with the crank-arm 7.

11 represents a pair of toggle-levers pivoted at their adjacent ends, as at 12, the outer end of one lever being pivotally connected at 13 to the remaining end of the oscillating lever, and the outer end of the opposite toggle-lever being pivoted at 14 to the opposite end of the cross-bar 2.

15 represents a loosely-pivoted double latch provided at its ends with locking-shoulders 16, said latch being pivotally connected to the joint between the toggle-levers and projecting at each side of the bar 2. From each end

of the latch there depends an operating-cord 17 within easy grasp of a person in a vehicle or on horseback, said cords passing over pulleys 20^x, provided at the ends of supporting-arms 21^x, projecting from posts 22^x, located at each side of the hinge-post.

Secured at the center of the bar 2, and extending at each side thereof, is a locking-bar 18, which is arranged in the path of the double locking-latch and terminates in inwardly-inclined shoulders 19, adapted to engage the locking-shoulders of the latch. The double latch 15 is pivoted at its center, so that it is balanced, and therefore after one of its latch ends rides up and over the inclined shoulder 19 said double latch resumes a horizontal position, and consequently an engagement is effected, which remains unbroken until the opposite end of the double latch is drawn downward or tilted in the act of closing the gate.

The gate being closed and latched, it will be apparent that by drawing upon either of the operating-cords the toggle-lever and locking-latch will be drawn in that direction, and in either direction the levers will serve to oscillate the oscillating lever, and thus operate the crank to open the gate. As the gate opens, the shoulder of the latch rides up and engages the locking-shoulder of the locking-bar, and the gate is maintained in the open position while a team passes therethrough. After having passed through the gate it simply remains to draw upon the opposite cord, which disengages the latch and returns the parts to their normal positions.

When the crank is partially revolved by the levers described, it not only acts to revolve the gate-post 4, but, by reason of the elongated opening 6, (see dotted lines, Fig. 2,) said post is also tilted to the rear or toward the post 1, thus elevating the front end of the gate, and consequently the latch 20 pivotally mounted thereon, and disconnects or raises the locking end of the latch from the catch 21.

Having thus described my invention, what I claim is—

1. The combination, with the opposite posts and the connecting cross-bar, of a gate pivoted between the posts and having one of its end bars passed through a slot in the cross-

bar and provided with a crank, an oscillating lever 9, mounted upon the cross-bar at one end the same, a link 10, pivotally connecting the crank-arm with one end of the oscillating lever, a pair of toggle-levers 11, pivoted together at their adjacent ends and pivoted at one end to the other end of the oscillating lever and at the opposite end to the other end of the cross-bar 2, a double locking-latch 15, loosely mounted on the joint of the toggle-levers, operating-cords depending therefrom, and a locking-bar 18, mounted on the bar 2 and provided with locking-shoulders arranged in the path of those of the latch, substantially as specified.

2. The combination, with a gate-post pivoted in bearings, of toggle-levers 11, pivoted at their ends to each other above the gate, mechanism connecting one of said levers with the gate-post, whereby by throwing the levers out of line with each other the gate-post is moved so as to unlatch the gate and then rotated to swing the gate, a double locking-latch 15, mounted on the levers and terminating in locking-shoulders, a locking-bar 18, mounted

under the latch and terminating in locking-shoulders adapted to be engaged by those of the latch, and means for oscillating the toggle-levers, substantially as specified.

3. The combination, with the posts 1 and the connecting-bar 2, having the elongated opening 6 near one end thereof, of the gate-post 4, having the gate 3 and latch 20, the catch 21, the latter located upon the post 1, the crank 7, mounted on the ends of the post 4, the lever 9 and link 10, the latter pivotally mounted on the cross-bar, and the opposite toggle-levers 11, having their opposite ends pivoted to the cross-bar and lever 9, respectively, and their inner ends pivotally connected to each other, and means for operating the levers, substantially as specified.

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

GEORGE WASHINGTON SANFORD.

Witnesses:

J. A. CARTER,

F. M. SIMS.