(No Model.) 2 Sheets—Sheet 1.

J. R. STANBROUGH.

GATE.

No. 396,517. Patented Jan. 22, 1889.

Fig. 1.

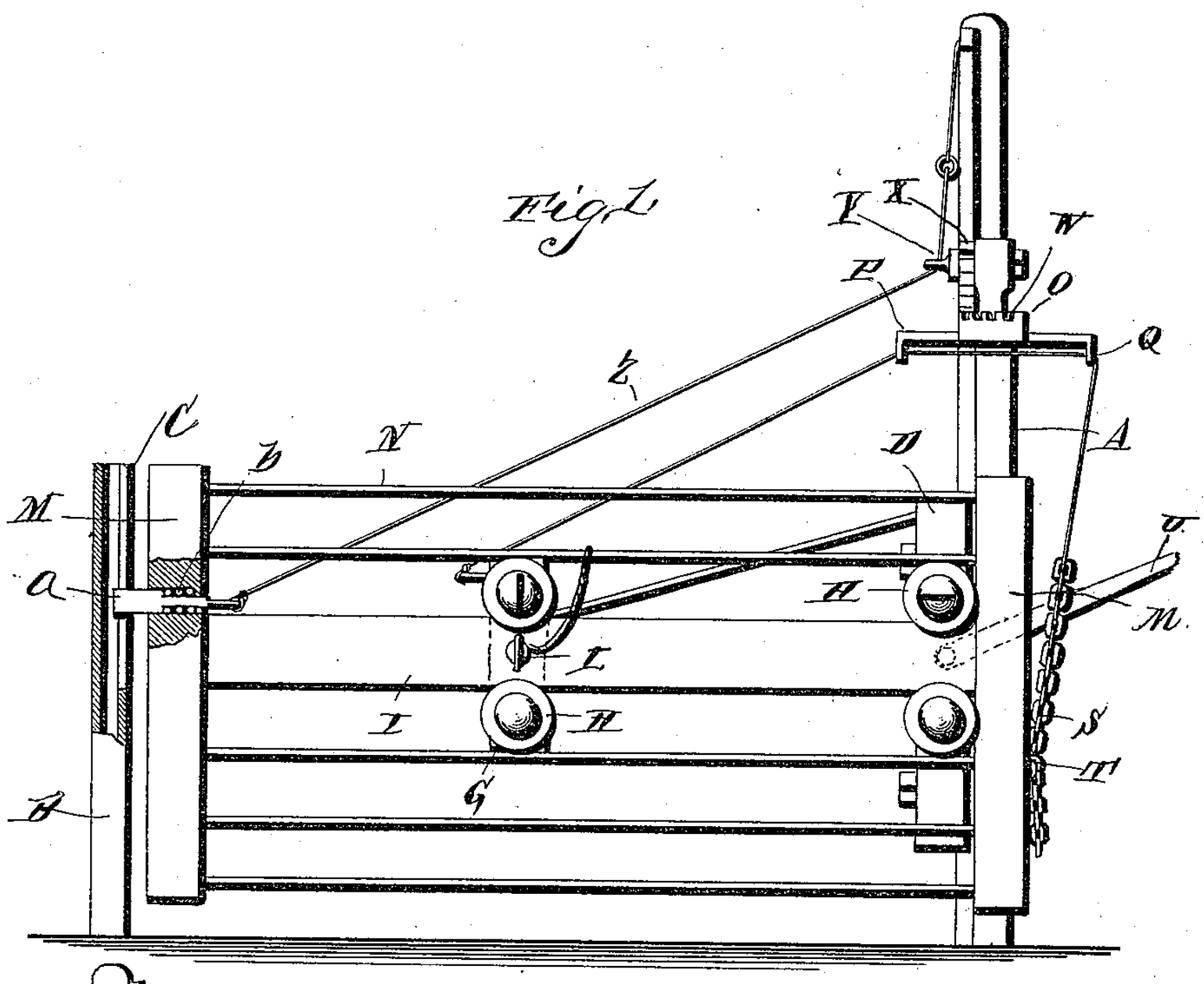
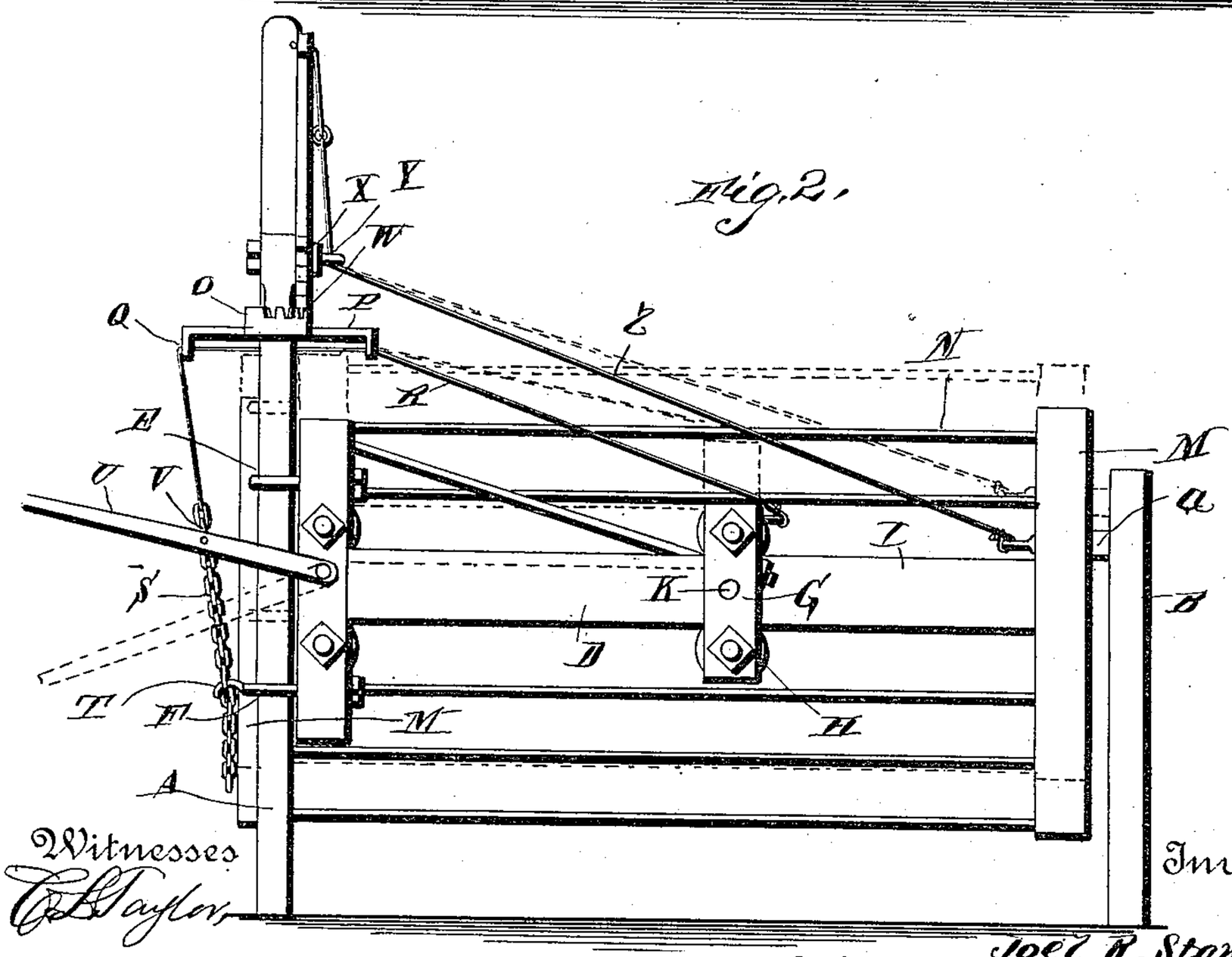


Fig. 2.



Witnesses
C. L. Taylor,
R. N. Bishop.

Inventor,
Joel R. Stanbrough,
By his Attorneys
C. A. Snow & Co

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

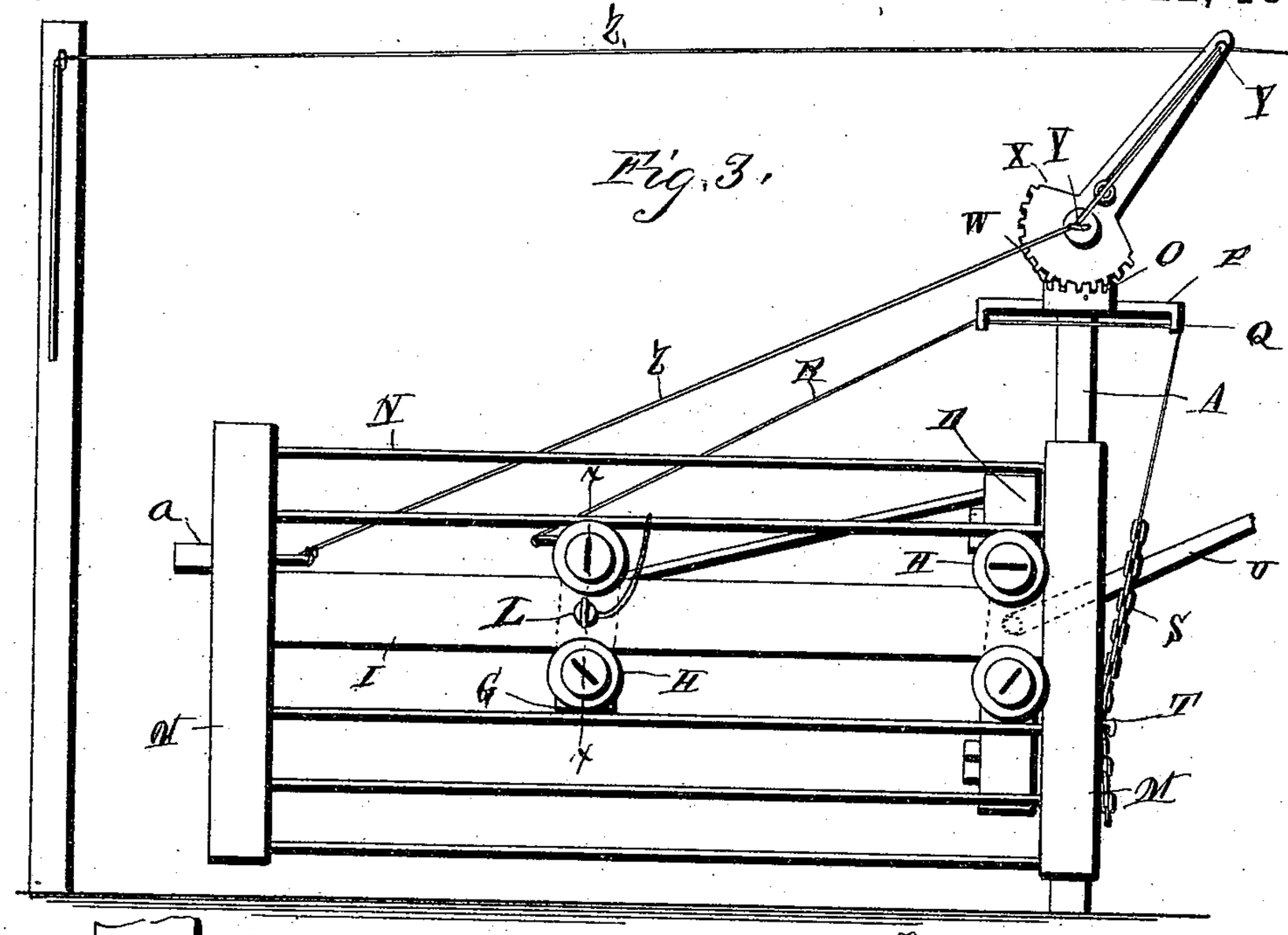


Fig. 5.

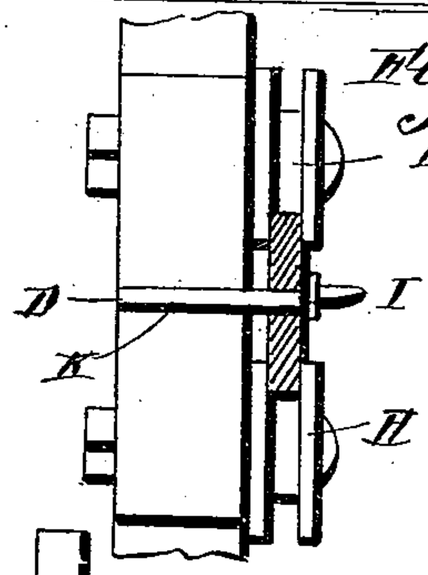
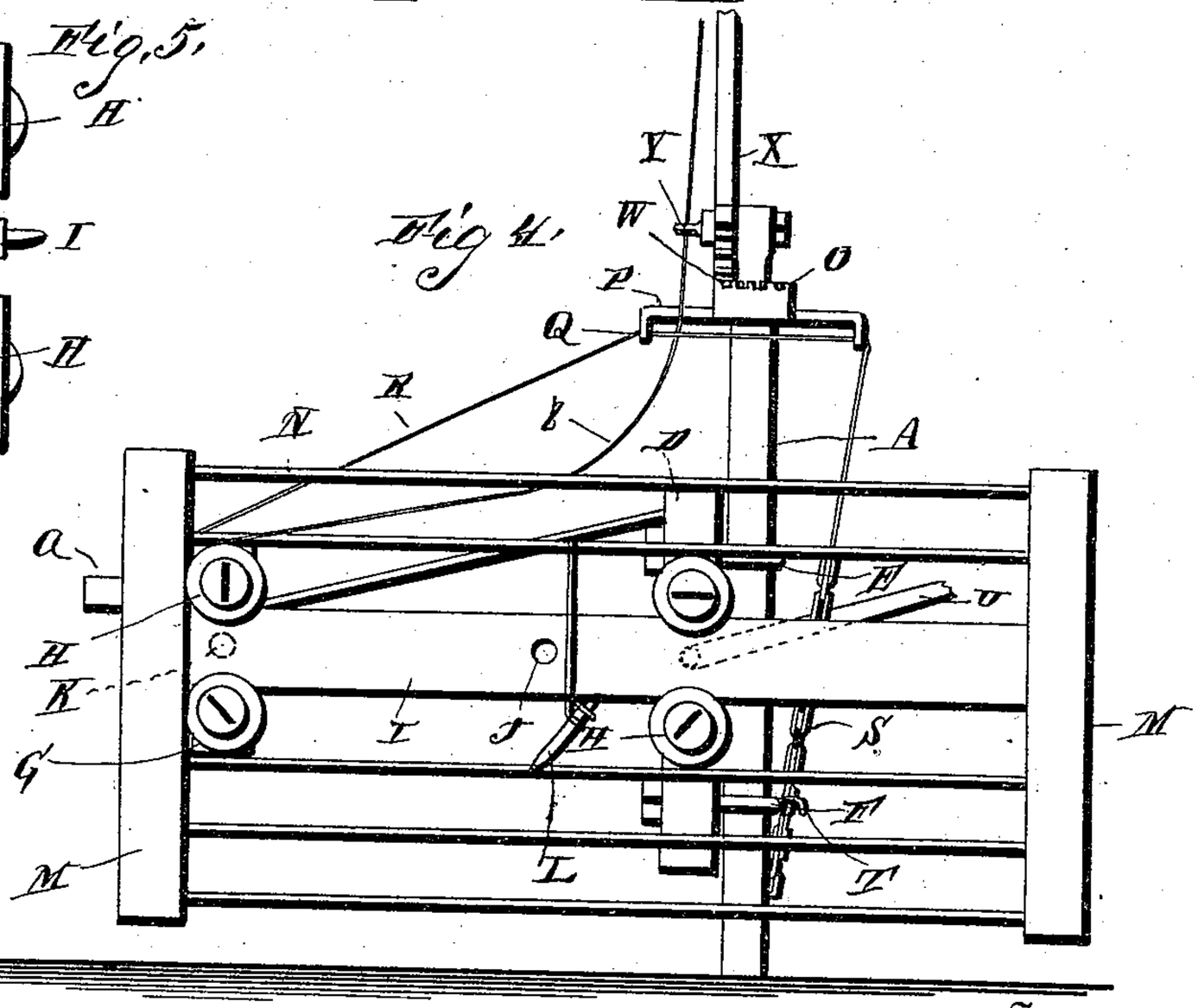


Fig. 4.



Witnesses.
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Inventor
Joel R. Stanbrough,
By his Attorneys
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UNITED STATES PATENT OFFICE.

JOEL ROBINS STANBROUGH, OF SHERIDAN, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 396,517, dated January 22, 1889.

Application filed September 25, 1888. Serial No. 286,345. (No model.)

To all whom it may concern:

Be it known that I, JOEL ROBINS STANBROUGH, a citizen of the United States, residing at Sheridan, in the county of Hamilton and State of Indiana, have invented new and useful Improvements in Gates, of which the following is a specification.

My invention relates to improvements in gates; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of my gate, showing it closed and lowered. Fig. 2 is a similar view illustrating the manner of raising the gate. Fig. 3 is a front view showing the gate swung open. Fig. 4 is a side view showing the gate rolled back. Fig. 5 is a detail section on the line *x x* of Fig. 1.

Referring to the drawings by letter, A designates the hinge-post, and B the latch-post, which are set in the ground on opposite sides of the roadway, as will be readily understood. These posts are both cylindrical, and the latch-post B is provided in its upper portion with a vertical groove or slot, C, which is engaged by the latch of the gate, as will be presently more fully referred to.

D designates a T-shaped frame, which is provided with the rings E and F, encircling the hinge-post A and serving the purpose of hinges for the gate. These rings are secured in the head of the T-shaped frame and the arm of said frame projects horizontally from said head toward the latch-post and is provided at its ends with a short cross-bar, G, as shown. On one side of this T-shaped frame I provide the rollers H, which have annular grooves in their peripheries, which receive the rail I of the gate. This rail I is provided at about its center with a perforation, J, which is adapted to align with a socket, K, in the cross-bar G and receive a pin, L, whereby the gate can be fastened to said frame, so as to be allowed to swing, but be prevented from rolling.

The gate consists of the rail I, the vertical end bars, M, secured to the ends of said rail, and the wires N, secured between said end bars. At the upper end of the hinge-post I mount a collar, O, having the arms P projecting from it in diametrically-opposite directions and standing parallel with the gate. These arms P are provided at their ends with eyes Q, through which a rope, R, passes. The said rope R has one end secured to the cross-bar G of the T-shaped frame D and has its other end connected to a chain, S, which is adapted to engage a hook, T, on the rear side of the ring F.

U designates a lever, which is pivoted at one end to the frame D, and is provided at an intermediate point of its length with a hook, V, which is adapted to engage one of the links of the chain S to raise or lower the gate, as will be presently more fully described.

On the upper side of the collar O, I form a series of teeth, W, which are engaged by the teeth of a segmental rack-bar, X, fulcrumed to the upper extremity of the hinge-post and projecting above the same. This segmental rack-bar is provided on its front side and at its upper end with the eye Y, through which pass the operating-ropes Z, which have their front ends connected to the latch *a* and pass from the eye Y at the upper end of the rack-lever in opposite directions along the edge of the roadway. The latch *a* is mounted in a recess in the front end bars of the gate, and is normally thrown into engagement with the groove or slot C in the latch-post by a coiled spring, *b*, wrapped around the latch and bearing against the rear end of the recess in the end bars of the gate.

In operation a person riding along the road in a carriage or wagon pulls upon the rope Z, thereby releasing the latch, and upon continuing the pull on the rope causing the segmental rack-bar to vibrate, so as to rotate the collar O, as will be readily understood. The rope R, passing through the eyes of the arm P, extending from the collar O, is connected to the gate, so that when the said collar is rotated it will carry the said rope R around with it, and thereby cause the gate to swing, as shown in the drawings. The vehicle is then driven through the gateway, and the driver by drawing upon the rope Z on the opposite side will cause the gate to swing in the reverse direction into its former closed position, the spring-latch automatically engaging the latch-post, so as to lock the gate.

A foot-passenger or one on horseback reaching the gate can open the same sufficiently by simply withdrawing the pin L and then slid-

ing the gate backward upon the rollers, as will be readily understood upon reference to Fig. 4.

When it is desired to raise the gate, so as to enable it to clear snow-drifts or large obstructions or to permit small stock to pass through and at the same time prevent the passage of large stock, the lever U is raised, so that the hook V will engage one of the links of the chain S, as shown in Fig. 2. The lever is then turned dowward, drawing upon said chain and the rope R, so that the front end of said rope will lift the frame D, and thereby raise the gate to the desired height. One of the links of the slack portion of the chain below the lever is then caused to engage the hook T of the lower hinge-ring, so that the gate will be held in its elevated position.

It will be observed from the foregoing description, taken in connection with the accompanying drawings, that I have produced a very simple and efficient gate which combines in one device the advantages of both the swinging and the rolling gate, and its superiority is thought to be evident.

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

1. The combination of the hinge-post, the vertically-movable frame mounted thereon, the gate carried by said frame, the collar secured to the upper end of the hinge-post, the rope and chain having one end secured to the frame, supported by said collar, and engaging a hook on the gate, and the lever pivoted to the frame and having a hook adapted to engage the chain, as set forth.

2. The combination of the hinge-post, the frame mounted thereon, the gate carried by the frame, the lower hinge of the frame provided with a hook, T, the collar at the upper end of the hinge-post having the arms P, provided with the eyes Q, the rope secured to the frame passing through said eyes, the chain connected to said rope and adapted to engage the hook T, and a lever pivoted on the frame and having a hook, V, adapted to engage one of the links of the chain, as set forth.

3. The combination of the hinge-post, the gate supported thereby, the collar at the upper end of the hinge-post, connections between said collar and the gate, the segmental rack-bar fulcrumed at the upper end of the hinge-post and engaging said collar, the latch at the front end of the gate, and the operating-rope secured to the latch and passing through the segmental rack-bar, and then in opposite directions from said rack-bar, as set forth.

4. The combination of the hinge-post, the frame D, mounted thereon, the gate carried by said frame, the collar on the upper end of the hinge-post, the rope and chain connected to the frame D and operated by said collar, the segmental rack-bar pivoted at the upper end of the hinge-post and engaging said collar, the latch at the front end of the gate, and the operating-rope secured to the latch and passing to the rack-bar and in opposite directions therefrom, as set forth.

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

JOEL ROBINS STANBROUGH.

Witnesses:
ASA H. BOULDEN,
JACOB F. STOTLER.