S. W. ERWIN.

Gate.

No. 198,588. Patented Dec. 25, 1877.

Fig. 1

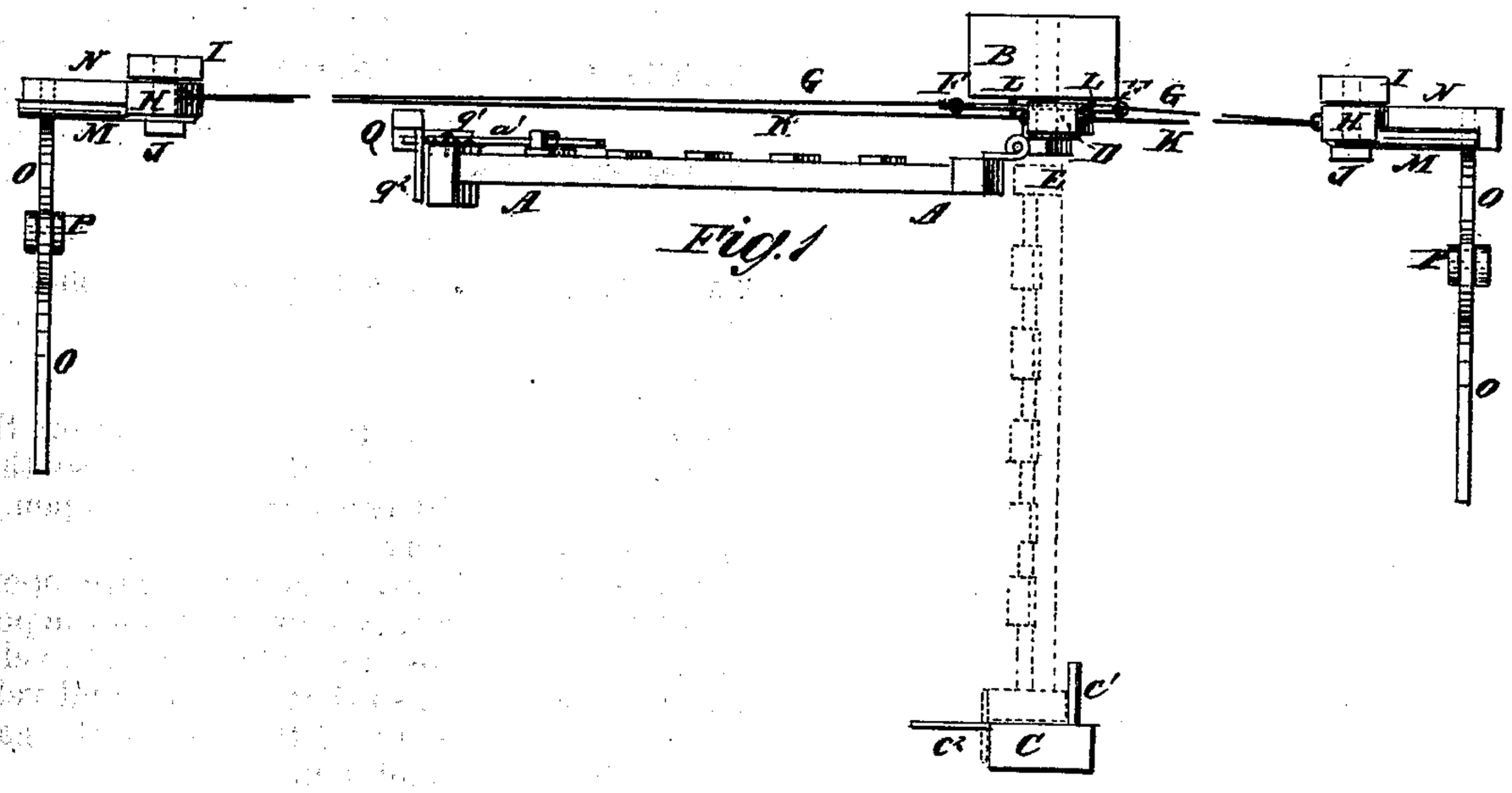


Fig. 2.

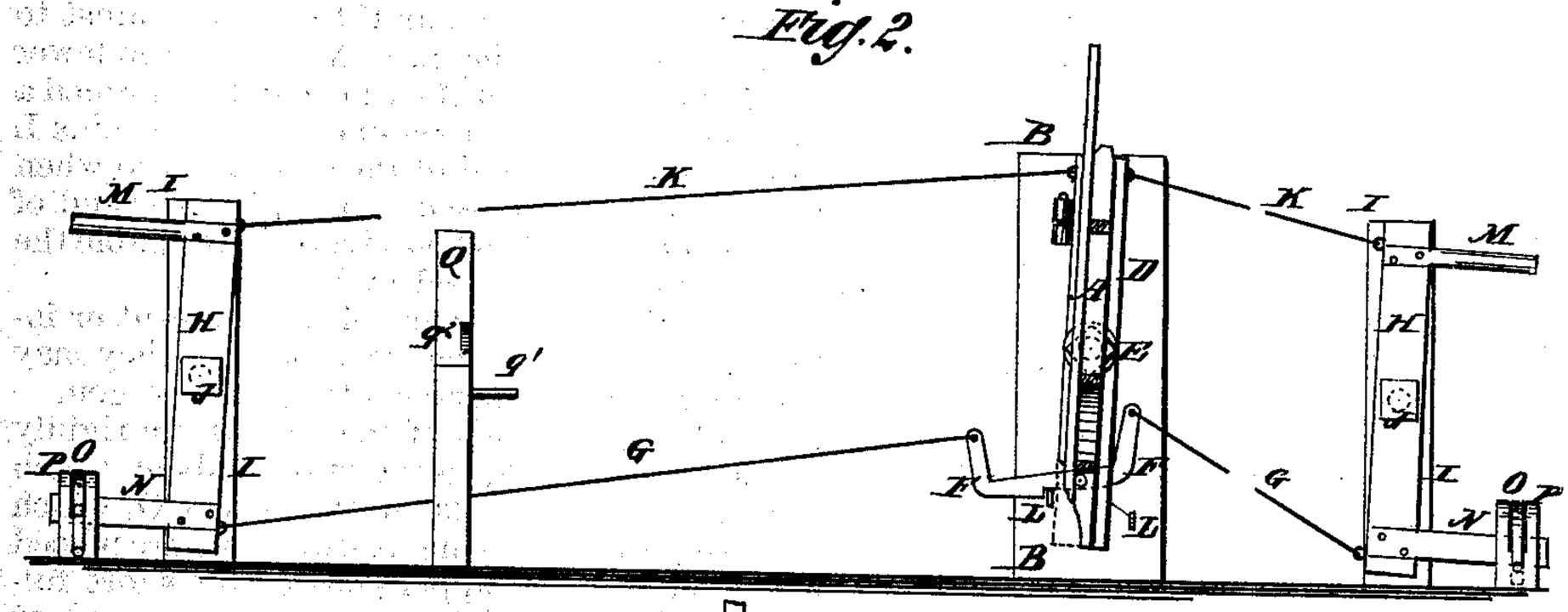
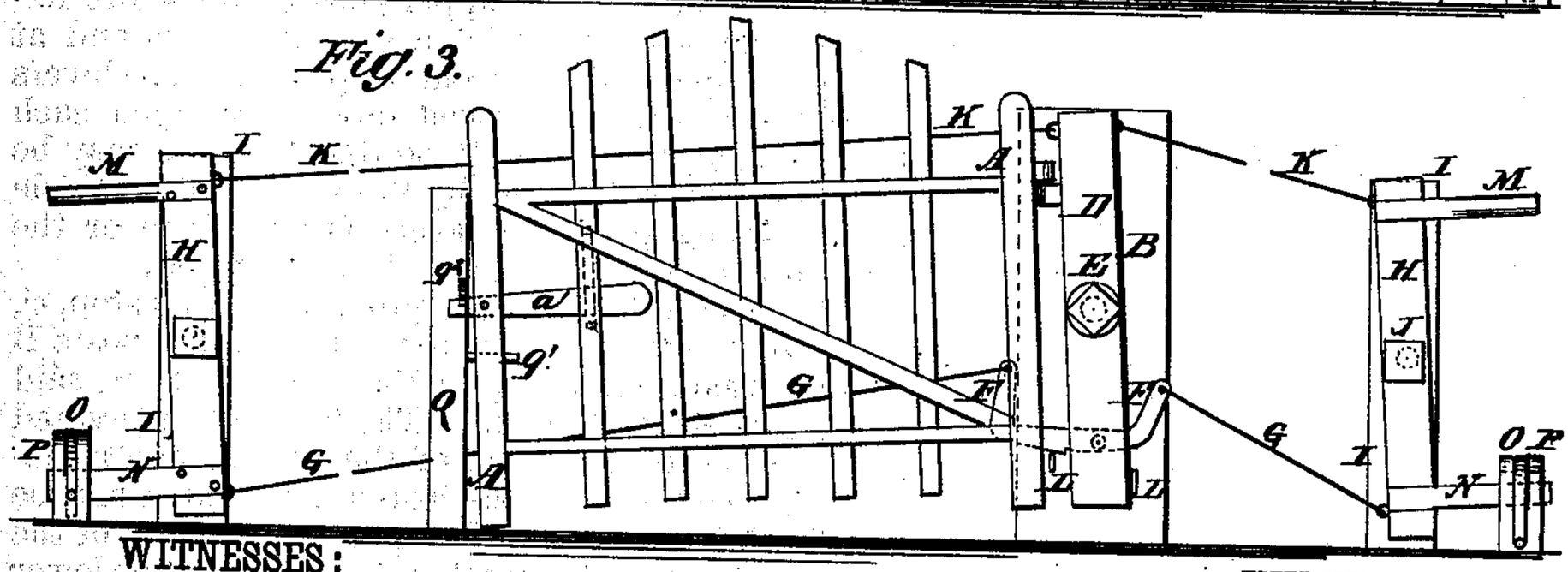


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SANFORD W. ERWIN, OF FAYETTE COUNTY, INDIANA.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **198,588**, dated December 25, 1877; application filed December 1, 1877.

To all whom it may concern:

Be it known that I, SANFORD WHITE ERWIN, of the county of Fayette and State of Indiana, have invented a new and useful Improvement in Gate-Openers, of which the following is a specification:

Figure 1 is a top view of a gate to which my improved opener has been applied, the gate being shown open. Fig. 2 is a front view of the device, the gate being shown in cross-section. Fig. 3 is the same view as Fig. 2, but showing the gate open.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device for attachment to a gate, to enable it to be conveniently opened by hand or by the wheels of a passing vehicle, and which shall be simple in construction and reliable in operation.

The invention consists in the combination of the pivoted bar, the cross-bar, the four wires, the two pivoted bars, and their levers with the gate and the three posts; in the combination of the pivoted bar, its cross-bar, the four wires, the two pivoted bars, the rigid levers, the two bent bars, and their fulcrum-posts with the gate and the three posts; and in the latch pivoted to the gate, and having its inner end the heavier, to adapt it to catch upon the lower side of its catch, and be unlatched by the tilting of the rear end of the gate, as hereinafter fully described.

A represents a gate of any ordinary construction. B is the rear or hinge post, and C is the front or catch post.

The rear upright of the gate A is hinged to an upright bar, D, which is pivoted at its middle part to the rear post B by a bolt, E, so that it will swing laterally. To the lower end of the swing-bar D is attached a cross-bar, F, the ends of which are bent upward, and have wires G attached to them. The other ends of the wires G are attached to the lower ends of the upright bars H, which are pivoted at their centers to the posts I by bolts J. To the upper ends of the swinging bars H are attached the ends of the wires K, the other ends of which are attached to the upper ends of the bar D.

By this construction, by turning either of the bars H in one or the other direction the rear end of the gate A will be tilted, so that its own weight will cause it to swing open or shut, as the case may be.

The post I toward which the gate opens should be about twenty-four feet from the post B, and the other post I should be about twelve feet from said post, so that the team and vehicle may always be out of the way of the gate as it swings open and shut.

To the lower part of the post B are attached two pins, L, for the bar F to strike against to limit the tilt of the gate A, and in the lower edge of one arm of the said bar E is formed a shoulder, to catch upon one of the said pins L to hold the rear end of the gate in place when the said gate is closed. To the upper end of the bars H are attached levers M, to enable the said gate to be opened by hand.

If desired, the levers M may be bent or inclined toward the roadway, so that they may be operated by a person sitting in a wagon.

To the lower ends of the bars H are rigidly attached levers N, to the outer ends of which are pivoted the ends of the levers O, which project inward into the roadway, and are placed in notches in the upper ends of the short fulcrum-posts P, which are set in the ground at a proper distance from the posts I. The levers O are slightly curved downward upon each side of the posts P, so that the gate may be opened and closed by the wheels of a vehicle passing over the levers O upon one or the other side of the posts P, as required.

The front post C is provided with a stop, c^1, to stop the gate when in line with the posts B C, and a catch, c^2, for the latch a' of the said gate to catch upon. The latch a' is pivoted to the front upright of the gate A, and its inner end is made the heavier, so that it may be unlatched by the tilting of the rear end of the said gate. The latch a' latches upon the lower side of the catch c^2. In proper position at the side of the post B is set a side catch-post, Q, to hold the gate when open, and which is provided with a stop, q^1, and a catch, q^2, in the same manner as the front post C.

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

1. The combination of the pivoted bar D, the

cross-bar F, the wires G K, the pivoted bars H, and the levers M with the gate A and the posts B I, substantially as herein shown and and described.

2. The combination of the pivoted bar D, the cross-bar F, the wires G K, the pivoted bars H, the rigid levers N, the bent levers O, and their fulcrum-posts P with the gate A and the posts B I, substantially as herein shown and described.

3. The latch *a'*, pivoted to the gate A, and having its inner end the heavier, to adapt it to catch upon the lower side of its catch, and be unlatched by the tilting of the rear end of the gate, substantially as herein shown and described.

SANFORD WHITE ERWIN.

Witnesses:

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