No. 615,950. Patented Dec. 13, 1898.

R. N. BARGER.

GATE.

(Application filed Apr. 11, 1898.)

(No Model.)

Fig. 1.

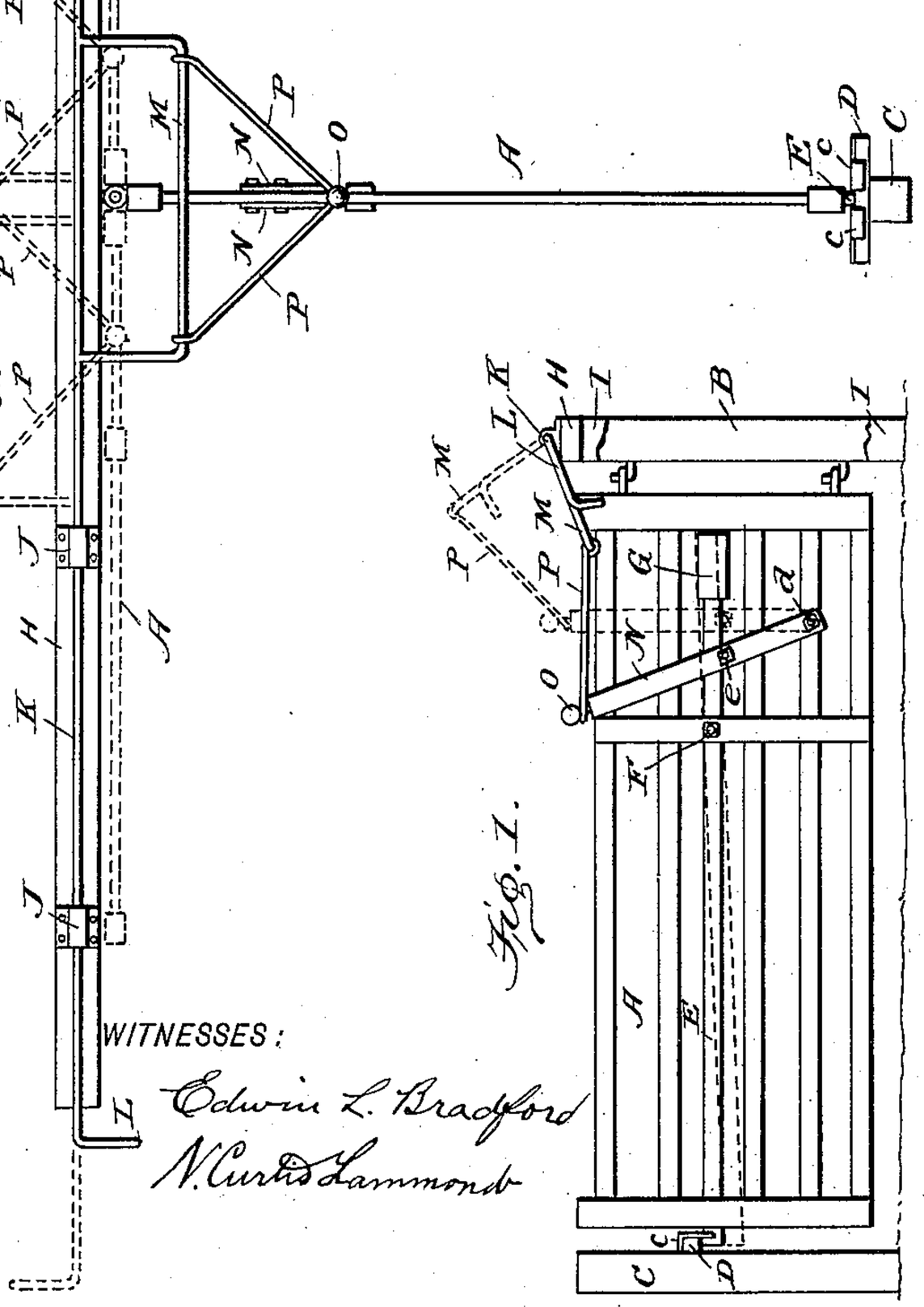


Fig. 2.

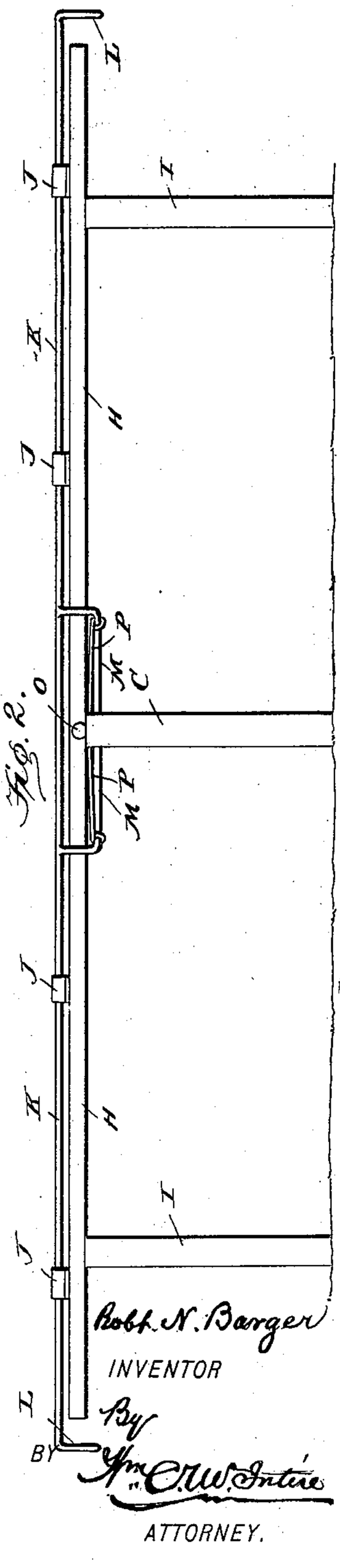
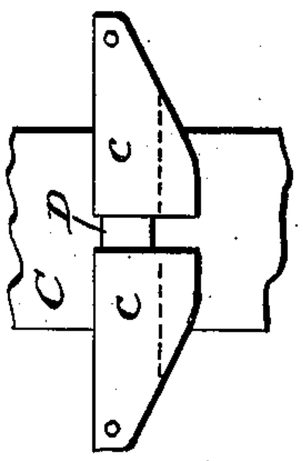


Fig. 3.

Fig. 4.



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ROBERT N. BARGER, OF HOPEDALE, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 615,950, dated December 13, 1898.

Application filed April 11, 1898. Serial No. 677,187. (No model.)

To all whom it may concern:

Be it known that I, ROBERT N. BARGER, a citizen of the United States of America, and a resident of Hopedale, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Gates, of which the following is a specification.

My invention relates to certain new and useful improvements in gates.

It has for its object to provide a gate which shall be capable of being readily and successfully opened and closed from the approaches, so that riders and drivers will not be required to leave their seats.

It has also for its object simplicity and economy of construction; and with these ends in view my invention consists in the details of construction, arrangement, and operation, as will be hereinafter more fully described.

In order that those skilled in the art may fully understand my invention, I will proceed to describe the construction and arrangement of the several parts and the manner in which they operate, referring by letters to the accompanying drawings, in which—

Figure 1 is an elevation from one of the approaches, the gate being shown in its closed position and the dotted lines showing the position of the operating mechanism when the gate is opened through the medium thereof. Fig. 2 is an elevation at right angles to the position shown at Fig. 1. Fig. 3 is a top or plan view with the gate in a closed position, the dotted lines representing the gate opened each side of the latching-post and showing the position of the gate-operating devices; and Fig. 4 is a face or front view of the gravity-latches which engage with the locking-bar of the gate.

Similar letters of reference indicate like parts in the several figures of the drawings.

A represents the gate, which is hinged in any suitable manner to a post B and adapted to swing in both directions, as indicated by dotted lines in Fig. 3.

C is the latching-post, which is provided with gravity-latches *c c*, pivoted to a short support D, as clearly shown at Fig. 4, the space between the free ends of the latches constituting a recess to house the outer end of the locking-bar E, which is pivoted at F to the gate and provided at its rear end with a weight G, which tends to force and hold the front end of the bar upward and in the space between the latches *c c*, as clearly shown at Fig. 1.

H is a frame or rail secured to the top of post B and additional posts I I each side of said post B. On top of the rail H at suitable localities are arranged sleeves or boxes J to receive an operating rod or bar K, each end of which is bent at right angles to constitute operating-handles L L at each approach to the gate, and the central portion of the bar K is formed with a rectangular extension or frame M, all as clearly shown at Fig. 3.

N is a bifurcated arm pivoted at its lower extremity, as shown at *d*, to one of the lower rails of the gate A and is provided with a transverse bolt or pin *e* just below the lower edge of the rear end of the locking-bar, which bolt or pin *e* rides against the under edge of the bar E as the bifurcated arm N is vibrated toward the hinge-post B and lifts the rear end of said bar E, causing the forward end to travel downward, whereby it is released from the gravity-latches *c c*, thus unlocking the gate. In the top of the arm N is secured a knob and shank O, and from the shank of the knob extends a stiff wire or rod P, which is coiled around the shank of the knob and has its outer ends extending obliquely in opposite directions and connected by a coil to the front bar of the rectangular frame M. The connection between the frame M, wire P, and knob and shank O and the proportions are such that when the gate is in its closed position the front of the frame M will be below the plane of the knob and shank, and hence the oblique arms of the stiff wire P operate as toggles and hold the bar K steady in position.

When it is desired to open the gate on approaching the same, the rider or driver grasps the handle-shaped end of the operating rod or bar K and, lifting the handle upward, causes the rod to rotate within the boxes or sleeves J and lifts the frame M upward into the position shown in dotted lines at Fig. 1. This movement causes the stiff-wire connection P to pull the bifurcated arm N rearward and the pin *e* to operate the locking-bar, as hereinbefore described, to release the same from the catches *c c*. When this has been done, the operating-rod K is pushed or pulled in a lon-

gitudinal direction, and the corresponding movement of the rectangular frame M causes one or the other end of said frame to contact with one or the other coiled end of the stiff wire or rod P, which pulls or pushes, as the case may be, against the knob and shank O and swings the gate upon its hinges into an open position, when, if the operating-rod is then rotated a little farther backward, the wire P will operate as a toggle to keep the gate from accidentally closing and will hold it securely until it is closed by a reverse movement of the operating-rod K.

Having described the construction and operation of my improved gate, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the hinged gate B, longitudinal rail H and the rotating and reciprocating rod K and frame M, the wire or rod P, knob and shank O and arm N, substantially as and for the purpose set forth.

2. In combination with the swinging gate A, latch-post C, hinge-post B, side posts I, I, and rail H secured to said side and hinge posts; the operating-rod K and vibrating frame M; the connecting-rod P; the bifurcated bar N, pivoted at its lower end to one of the rails of the gate; the latch-bar E, pivoted to the gate; and the pin *e* passing through bar N, below latch-bar E, substantially as and for the purpose set forth.

3. In combination with the operating-rod K and frame M, and with the bifurcated arm N pivotally connected with the gate, the knob and shank O secured to the arm N, and the stiff wire P coiled about the shank, and the frame M, and adapted to act as a toggle, substantially as and for the purpose set forth.

Signed by me, at Hopedale, Illinois, this 4th day of April, 1898.

ROBERT N. BARGER.

Witnesses:
BEN S. FORD,
W. A. PHILLIPS.