

W. E. NICHOLS.

Gate.

No. 81,196.

Patented Aug. 18, 1868.

Fig 1

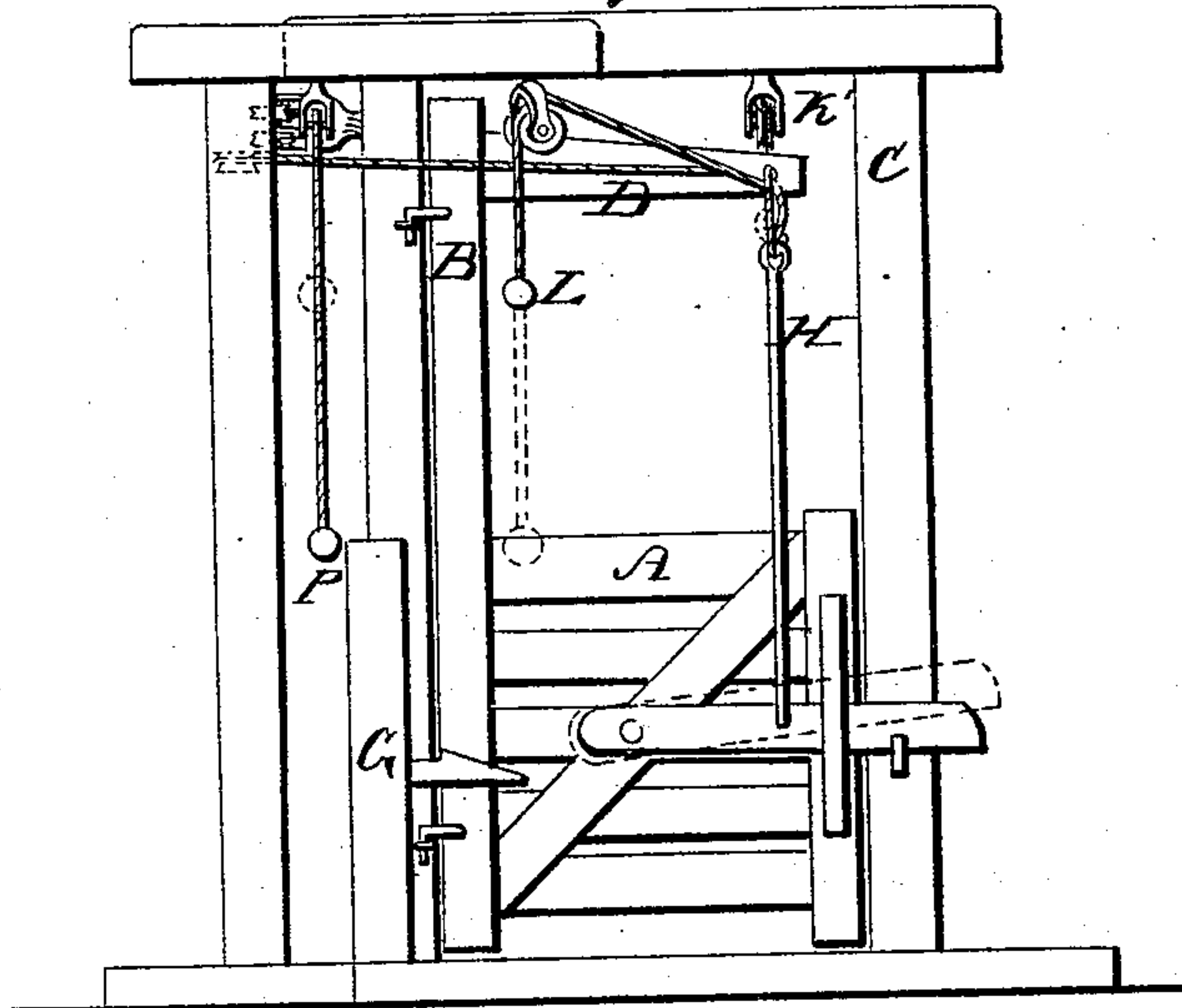
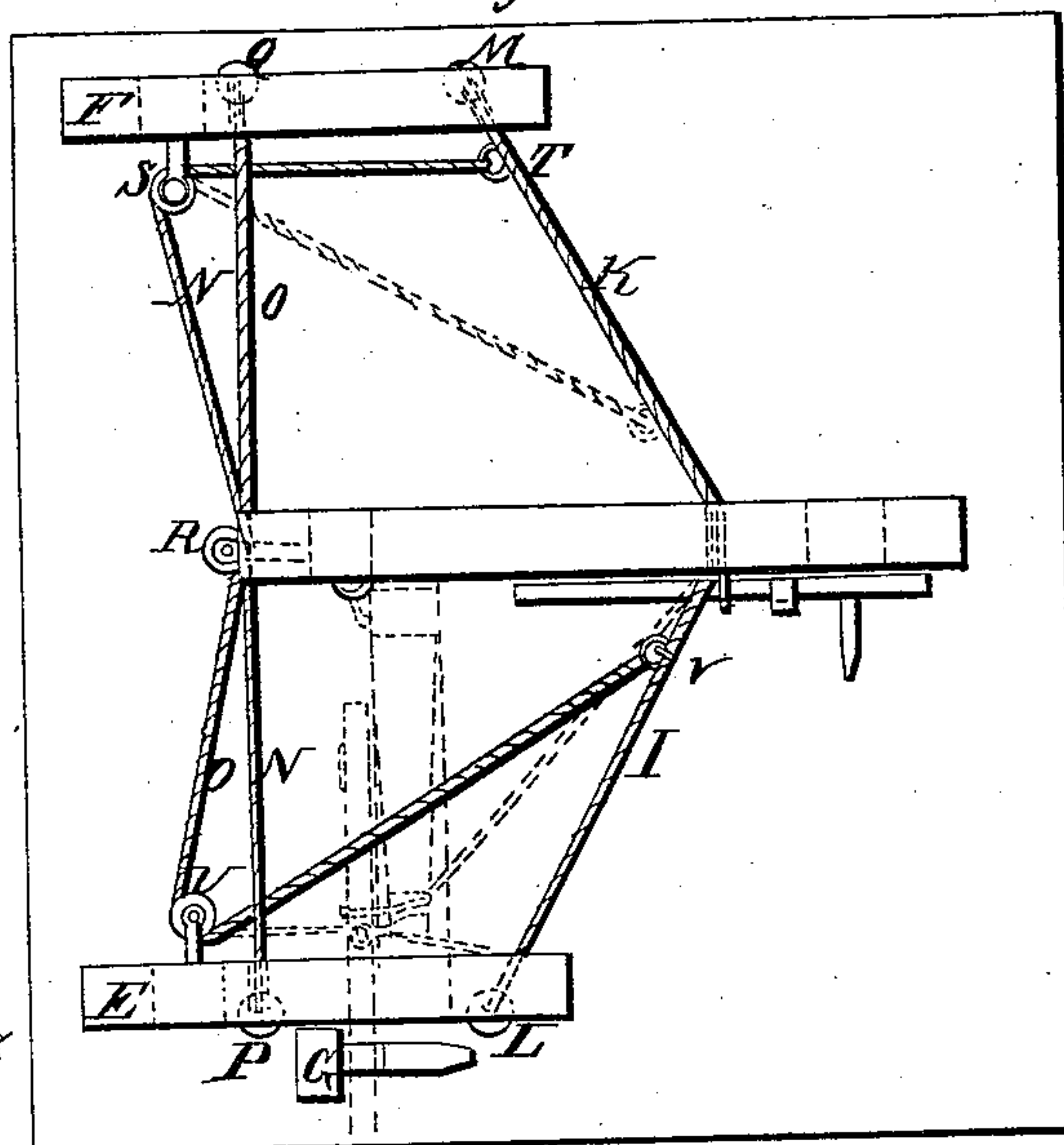


Fig. 2.



Witnesses

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WILLIAM E. NICHOLS, OF BALDWIN, MISSOURI.

Letters Patent No. 81,196, dated August 18, 1868.

IMPROVEMENT IN GATE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM E. NICHOLS, of Baldwin, in the county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Gates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of my improved apparatus, and

Figure 2 represents a plan view of the same.

Similar letters of reference indicate like parts.

The nature of my invention relates to improvements in gates for road and farm-use, the object of which is to provide a simple and convenient means for opening and closing them without dismounting from the carriage or horse.

It consists in an arrangement of cords and pulleys for effecting the above-described object, and the necessary posts for supporting the same, as will be more fully described on reference to the accompanying drawings, wherein—

A represents a gate of ordinary construction, having a high hinge-post, B, and supported in a gateway, C. The post B is provided with an arm, D, near the top, arranged in the same vertical plane as the bars of the gate.

E and F represent posts arranged on each side of the gate, at suitable distances therefrom, at or about in line with the side of the gateway to which the gate is hinged, the said posts being provided with arms at the top, arranged parallel with the gateway.

G represents a latch-post, provided with a catch for holding the gate open.

H represents a vertical rod connected to the latch of the gate, and projecting upward nearly to the arm D, where it is connected to the cords I and K, which are supported by pulleys arranged, respectively, on the arms of the posts E and F, as shown at L and M, and which pass through an eye in the end of the arm D, before being fastened to the latch-rod H. The cord K is also passed over a pulley, K', before being passed through the eye of the arm D.

The cord I is intended to be used for opening the gate, and K for shutting it.

As it is desirable to open and close the gate from either side, the cords N and O are also provided and arranged to work over pulleys, one on each of the posts E and F, as shown at P and Q.

The cord N is passed over a guiding-pulley, R, on the gateway, and a pulley, S, on the post F, and secured to the cord K, at T, and the cord O is passed over a similar guiding-pulley, at R, and another at U, and secured to the cord I, at V.

If the gate be approached from the front, as shown in fig. 1, the position of the rider will be such that he can readily lay hold of the cord I, as it is suspended from the pulley L, and pull thereon to raise the latch and swing the gate open, the latch of which will catch in the notch of the catch in the post G, whereby it will be held open, the gate being arranged so that the momentum will carry it sufficiently beyond the vertical plane of the pulley L; or the post G may, if desired, be arranged so as to be in the same perpendicular plane with the pulley L.

The rider, having passed through the gateway, will lay hold of the cord K, whereby he will unlatch the gate from the post G, and pull it shut, as will be readily understood.

If the gate be approached from the opposite side, the rider will take hold of the cord O, suspended from the pulley Q, which being attached to the cord I, will, in like manner, open the gate, and latch it with the catch of the post G, and when he has passed through from that direction, he will, by taking hold of the cord N, suspended from the pulley P, close the gate, as described.

In practice, the posts E and F will be set proportionately further from the gate than represented in the drawings. The post E will require to stand further away from the gate than the post F, owing to the gate being arranged to swing in that direction.

Various modifications of the arrangements of the pulleys may be made, as, for instance, the guide-pulleys R may be arranged inside of the gateway, above the top of the post of the gate.

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

1. The combination, with the gate A, provided with the arm D, of the latch-rod H and cords I and K, suspended as described, for opening and closing the same, substantially as and for the purpose set forth.

2. The combination, with the cords I and K, of the cords O and N, suspended as described, for opening and closing the gate, the same, substantially, as and for the purpose described.

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Witnesses:

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