M. JEFFRIES.

Gate.

No. 201,614. Patented March 26, 1878.

Fig. 1.

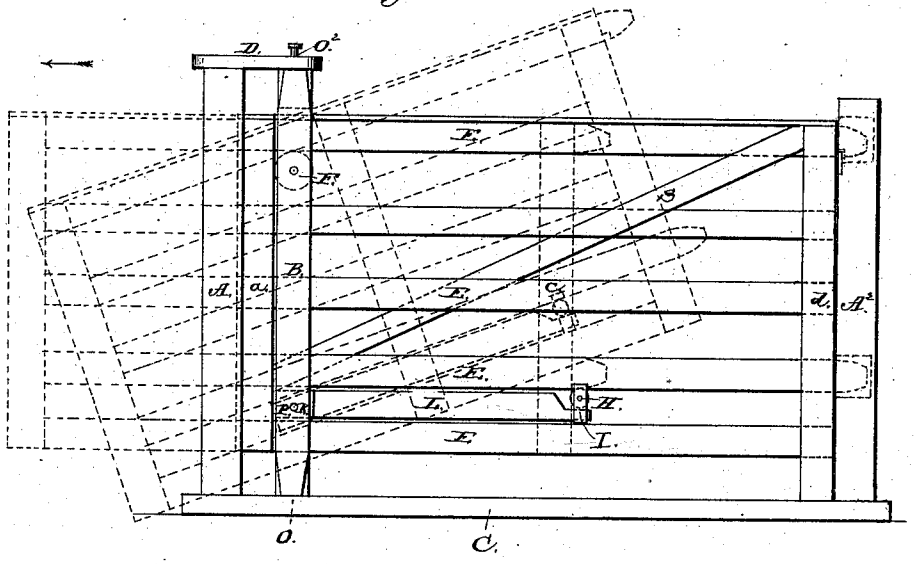
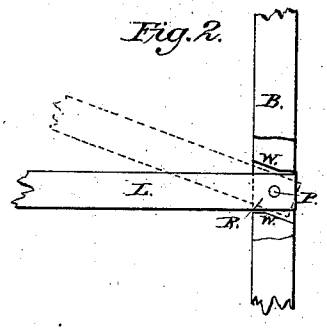


Fig. 2.



Attest:

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UNITED STATES PATENT OFFICE.

MORTEMER JEFFRIES, OF COLLINS, INDIANA.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **201,614**, dated March 26, 1878; application filed November 19, 1877.

To all whom it may concern:

Be it known that I, MORTEMER JEFFRIES, of Collins, in the county of Whitley and State of Indiana, have invented a new and useful Improvement in Gates, which improvement is fully set forth in the following specification and accompanying drawings.

The object of my invention is to furnish a farm-gate that shall be easily opened and closed, cheaply and easily made without hinges, capable of admitting the passage of footmen, horses, or other farm-stock without opening the gate its full width, and provided with an auxiliary revolving post and a supporting-lever, in connection with a central roller, on which to move the gate back and forth in opening and closing the same.

In the drawings, A and A^2 are the principal posts, inserted in the ground in the usual manner. B is the auxiliary post, having its lower end pivoted, as shown at O, to its ground-piece C, which is firmly driven or set in the earth to hold the lower end of auxiliary post B in position. Post B is held in place at its top by being pivoted at O^2 to cap D, which is firmly attached to principal post A, as shown.

The body of the gate is constructed in the usual manner, being composed of longitudinal bars E, perpendicular cleats *a c d*, and braces S. F is a roller, on which the upper bar of the gate rests and moves back and forth. L is the supporting-lever, inserted between two bars, as shown. To the end of lever L two guides, I, are attached firmly and immovably, as shown at K. Between these two guides is held the roller H, on which one bar of the gate rests, the roller H being always held in position under the bar by the two guides I, one on each side of the bar. One end of supporting-lever L is pivoted to auxiliary revolving post B, as shown at P. The post B is cut away, in the manner shown in Fig. 2, sufficiently to admit a part or the whole of the thickness of lever L, which is pivoted to post B. The cutting away of post B is so done as to leave two bearings, W, one above and one below the pivoting-point P, and on opposite sides of post B, as shown. The cutting away or mortising is done obliquely across post B with an upward inclination toward the center of the gate, thereby permitting the inner end of lever L and the part of the gate over it to be considerably raised; but the lever cannot be depressed below a horizontal position, because the bearings W will not permit.

The gate is held in position on top of roller F by means of a perpendicular cleat attached on the opposite side of post B, and all the bars of the gate, the cleat holding the gate up to post B, and yet permitting it to move freely back and forth on the rollers in opening or closing, and also permitting it to be raised with lever L to swing over snow or other obstruction.

Operation: If it is desired to open the gate for the passage of footmen or farm-stock only, the gate is pressed in the direction of the arrow until the cleats *a c d* are brought to the position indicated by the perpendicular dotted lines; but when wagons, carriages, &c., are to pass through, the gate is swung in either direction by turning post B on its pivots O and O^2 by the act of opening. Post B and ground-piece C are placed just far enough from post A to permit cleat *a* to swing inside of post A as the gate is opened or closed.

To raise the gate to open it over snow or other obstructions, I press it in the direction of the arrow a few inches, and then, owing to the arrangement of the lever L in connection with the mortise R, as before described, the gate is readily raised until it will swing over the obstruction.

It is not intended that the weight of the gate shall constantly rest on roller H, and be supported by lever L, because the fastening of the gate to post A^2 will generally relieve lever L to some extent; but lever L will at all times, when required, support a considerable portion of the weight of the gate, as well as serve as a lever for turning the gate and post B on the pivots O and O^2. Lever L is therefore especially useful in supporting the weight of the gate, in permitting it to be raised, as before stated, as a lever for turning the gate and post B on the pivots of post B, and as a means of support for guides I and roller H.

It is evident that two or more supporting-levers like L may be used in the same gate, if thought necessary.

Lever L is strongly made, and its pivoted end is increased in thickness to give it additional strength.

I do not claim the broad idea or principle of constructing sliding or rolling gates as embraced in the patent of Sam. B. Cooper, No. 63,861, dated April 16, 1867, or that of A. J. Dimick, No. 110,750, dated January 3, 1871.

I claim as my invention—

The supporting-bar L, carrying an anti-friction roller at its outer end, on which the gate may rest, said bar being hinged to and within a mortise in the rotable post B, in such manner that the pintle of the hinge and the bottom of the mortise jointly shall prevent the bar from sagging at its outer end, so as to permit it to follow the movement of the gate when the latter is raised at its far end, all substantially as described and shown.

MORTEMER JEFFRIES.

Witnesses:
C. B. TULLEY,
JOS. W. ADAIR.