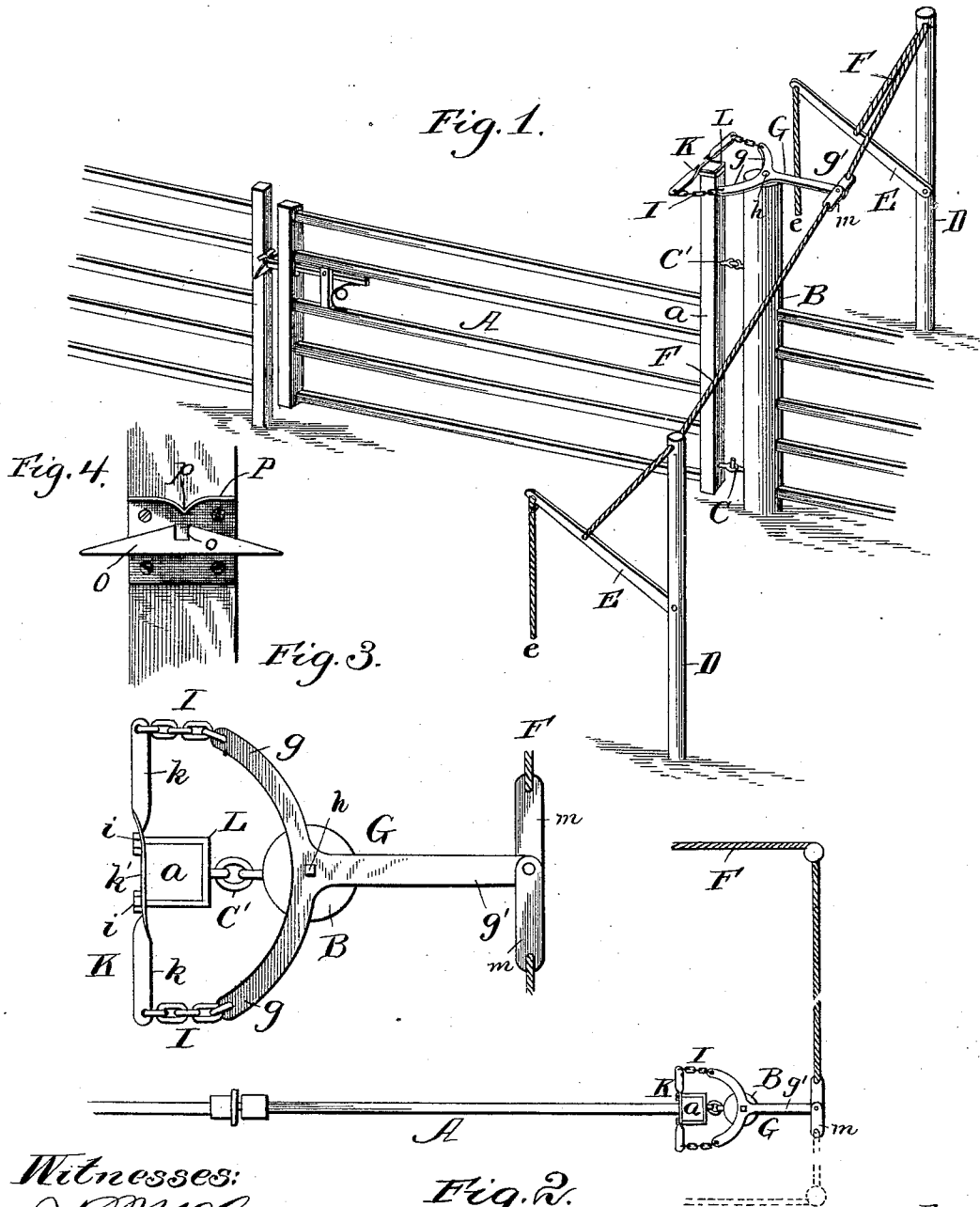


(No Model.)

C. M. CLARY.
SWINGING GATE.

No. 484,847.

Patented Oct. 25, 1892.



Witnesses:

J. B. McGirr.

J. S. Barker,

Fig. 2.

Inventor:

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UNITED STATES PATENT OFFICE.

CHARLES M. CLARY, OF LEWISTOWN, MONTANA.

SWINGING GATE.

SPECIFICATION forming part of Letters Patent No. 484,847, dated October 25, 1892.

Application filed May 17, 1892. Serial No. 433,312. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. CLARY, a citizen of the United States, residing at Lewistown, in the county of Fergus and State of Montana, have invented certain new and useful Improvements in Swinging Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to improve swinging gates which are provided with hand-operated devices, whereby the gate may be opened and closed on either side thereof; and it consists in the improvements in the gate-operating devices to be hereinafter described.

In the drawings, Figure 1 is a perspective view of a gate embodying my invention. Fig. 2 is a plan view thereof. Fig. 3 is a plan view, on an enlarged scale, of the gate-operating devices. Fig. 4 is a detail view showing the gate-catch.

In the drawings, A represents the gate, which is supported from the post B by the hinges C C', the upper hinge C' being by preference jointed to give it a degree of flexibility which is desirable.

The gate may be of any usual or preferred construction and can be provided with any desired style of latch N. The catch with which the latch engages is shown in Fig. 4. It consists of a notched plate O with a double inclined upper face. In combination with this catch-plate is a guide flange or rib P, situated above the catch and having its central portion curved downward from either side, as at *p*, directly over the notch *o* in the catch-plate. This flange or rib serves to prevent the latch from passing the notch *o* without entering therein, as otherwise might be the case were the gate closed rapidly.

There may be any usual style of connecting means between the hand-operated devices by which the gate is swung and the latch, whereby the latter will be lifted when the gate is to be opened; but such means are not shown in the drawings, as they form no part of my present invention.

D D represent posts situated at the side of the roadway and some distance from the gate, one on either side thereof. To the posts

D are pivoted the arms or levers E, which, if desired, may be provided with depending handles or cords *e*, by which to operate them. 55

F F are cords or other suitable connections attached at one end, respectively, to the arms E and at their opposite ends to the arms *g'* of a Y-shaped lever G, fulcrumed upon the top of the post B. The cords F pass over pulleys 60 mounted in the upper ends of the posts D. The arm *g'* of the lever G extends rearward—that is, in a direction away from the gate, and its arms *g* extending outward and toward the gate, being by preference curved slightly. The 65 fulcrum *h* of the lever G is situated at the junction of the three arms *g g g'*. The rear end piece *a* of the gate extends upward to a height equal to that of the post B, and is provided at its upper end with a cross-bar K, 70 the outer ends of which are connected by the cords, chains, or other connections I with the ends of the arms *g* of the lever G. The cross-bar K is formed of a piece of flat metal twisted in two places between its ends, so 75 that when secured to the piece *a* its central portion *k'* lies flat against the said piece, while its end portions *k* are situated in a horizontal plane. This gives to the bar great strength at the points where strength is re- 80 quired, and permits it to be securely fastened to the gate-piece *a*. The cross-bar K may be secured to the gate-piece in a suitable manner; but I prefer to employ a clevis L for this purpose, which surrounds the upper 85 end of the piece *a* and is secured at its ends to the cross-bar by nuts *l*.

Instead of connecting the cords F directly with the arm *g'* of the lever G, I connect them to the ends of short bars or plates *m*, 90 preferably made of iron. This arrangement gives a leverage to the operating devices when the gate is to be closed, which would not be obtainable were the cords connected directly with the end of the arm *g'*, and in 95 this respect they are advantageous.

The parts of the gate-operating device which I have invented and herein described are exceedingly simple and of such character that they can be made or procured in all parts 100 of the country, as only the most elementary knowledge and skill in wood and metal working are required to make the various parts.

What I claim is—

1. The combination, with the gate, of a Y-shaped lever fulcrumed beside the gate, a cross-bar or arm extending from the gate in opposite directions, connections between two 5 of the arms of the lever and the said cross-bar, and means connected with the third arm of the said lever and extending to the side of the roadway for operating the gate, substantially as set forth.
- 10 2. The combination, with the gate, of the Y-shaped lever G, fulcrumed to the post to which the gate is hinged, the cross bar K, secured to the rear piece *a* of the gate and having the flat portion *k'* lying against the 15 face of this piece, and the horizontally-arranged portions *k'*, the connections I between the ends of said cross-bar and diverging arms of the lever, and the flexible cords F, secured to the rearwardly-extending arms of the lever and extending to the sides of the road- 20 way, substantially as set forth.
3. The combination, with the gate, of a Y-shaped lever fulcrumed beside the gate, a cross-bar or arm extending from the gate in opposite directions, connections between two 25 arms of the lever and the said cross-bar, the bars or plates *m*, secured to the third arm of the lever, and the cords connected with the said bars or plates and extending to side of the roadway, substantially as set forth. 30
- In testimony whereof I affix my signature in presence of two witnesses.
- CHARLES M. CLARY.
- Witnesses:
EDGAR G. WORDEN,
E. W. MORRISON.