

Lewis Essig's Gate.

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PATENTED

JAN 14 1868

Fig: 1

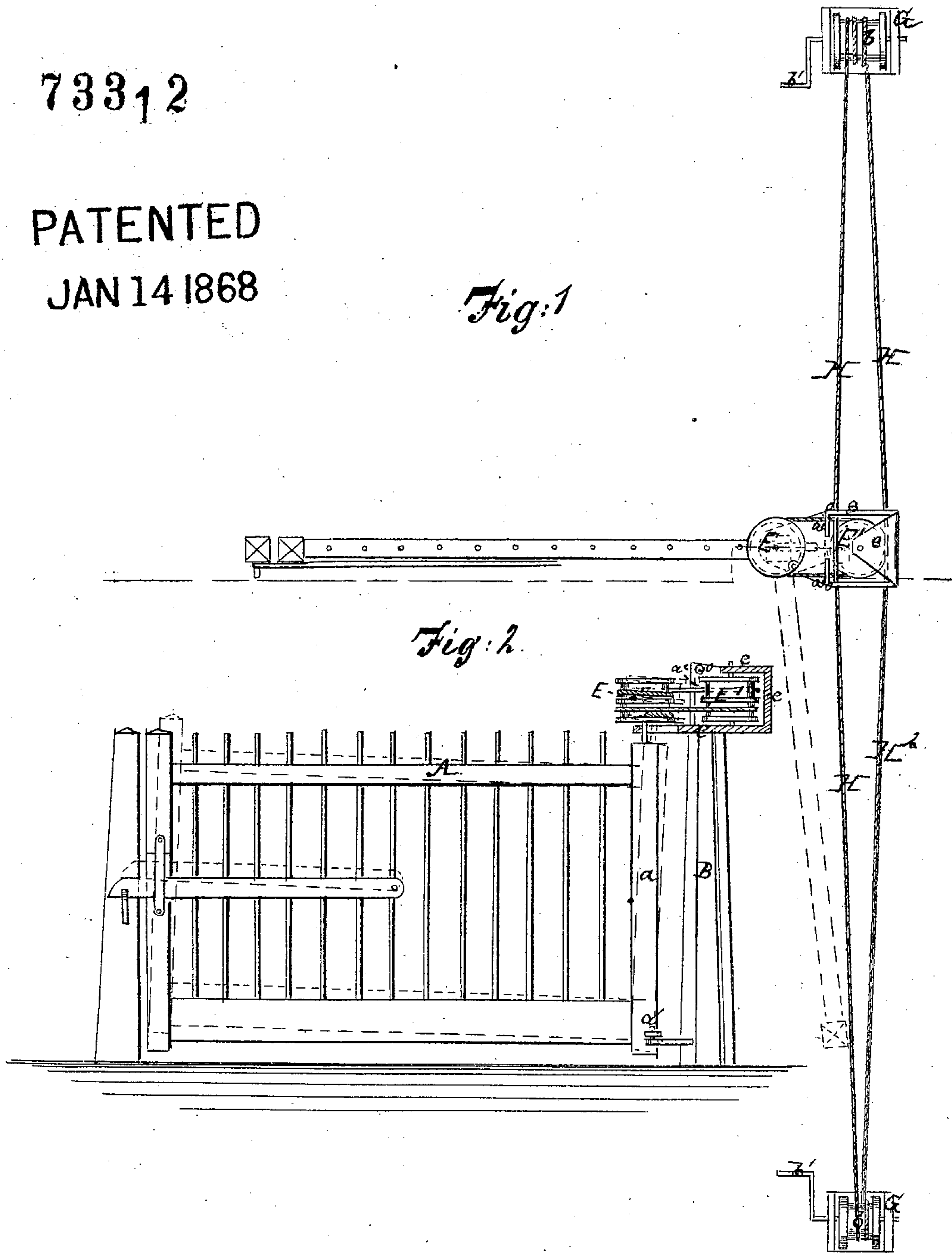


Fig: 2

Witnesses.

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LEWIS ESSIG, OF CANTON, OHIO.

Letters Patent No. 73,312, dated January 14, 1868.

IMPROVEMENT IN GATES.

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, LEWIS ESSIG, of Canton, in the county of Stark, and State of Ohio, 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.

This invention relates to a new and improved method of hanging and operating the gates of farms, plantations, &c., whereby the same are more easily opened by a rider without alighting for that purpose. It consists in hanging the top of the gate to a slotted plate or cap on the gate-post in such a manner that in the opening of the same, the latch-end of the gate will be raised, so that the latch will be disengaged from the catch, and the gate will be raised also above snow and other obstructions in the way of opening the same. It consists, also, in the gate being operated by cords, ropes, or chains, connected with a pulley on the gate, and connected also with a windlass or windlasses attached to posts at some distance from the gate, the crank by means of which said windlasses are turned, being within easy and convenient reach of a rider. In the accompanying plate of drawings—

Figure 1 is a plan view of my invention.

Figure 2 is a vertical section of the same, taken in the line *x x*, fig. 1, the different positions of the gate being shown in red lines.

Similar letters of reference indicate corresponding parts.

A is the gate. *a* is a part of the frame of the same. B is the gate-post. *a'* is a hinge, by means of which the bottom of the gate A is pivoted to the post B. *e* is a cap or support on post B, to contain the pulley E', and in which the pulley E' turns. E is a double-grooved pulley on the part *a* of the gate A. G are posts to support the windlass *b*. *b'* are cranks, by means of which the windlasses *b* are rotated. *o* are holes in the cap *e* to guide the cord H. H H¹ and H² are cords or ropes by means of which the gate A is opened and shut. *a*² are holes in box *e* to guide the cords H¹ and H². E' is a guide-pulley on the gate-post B. The gate-post B is made and set in the ordinary way, of suitable material, and is provided on the top with a cap or support, *e*, extending outwards a short distance in a direction opposite to the gate A, when shut as shown. The cap or support *e* is made of metal, the bottom of which projects in the direction of the gate A, when shut, the sides and end of the same being bent upwards and inwards, so as to form a support for the pulley E', and to furnish suitable bearings for the same, as shown, the bottom of the same being provided with a slot, so as that the pivot on the part *a* of the gate A is allowed a motion to and from the gate-post B, the object of said slot being to permit the latch-end of the gate to be raised, when the same is being opened, over and clear from snow and other obstructions, and to release the latch. The pulley E' rotates in the cap *e*, and may be made of wood or other suitable material, and of any convenient size, the object of the same being to change the direction of and guide the cords H¹ and H². The gate A is of the common form, and is hinged at the bottom of the same on the part *a* to the post B by a hinge, *a'*, in the ordinary way, said part *a* being provided on the top of the same with a pivot moving in the slot in the cap *e*. Upon said pivot, above the bottom of the cap *e*, is a pulley, E, having two grooves. The pulley E is made of wood, or other suitable material, and is rigidly secured to the pivot in the upper end of the part *a* in such a way as that by turning the pulley E the entire gate A will turn with the same. At any convenient distance from the post B, and in a straight line with the same, at equal distance therefrom, and so as that the gate A will swing between the same, are two posts, G, of a like height with the post B, each of said posts G terminating at the top in two uprights or bearings to support the windlasses *b*, and so that the said windlasses *b* will rotate in said bearings on said posts, as shown, said windlasses *b* being each provided with a handle, by means of which they are made to rotate. To the windlasses *b*, and wound two or three times around the same, and extending from one of said windlasses to the other, is attached a chain or rope, H, said rope or chain H passing through the holes *o* in the cap *e*, by means of which the same is prevented from sagging, said rope or chain H being attached to said windlasses *b* in such a way that when one of said windlasses is rotated in one direction, the other of said windlasses will be caused to rotate in the same direction. To one of the windlasses *b*, and to and wound two or three times around the same, is attached another rope, H. Said rope H¹ passes around the pulley E', and around the pulley E, where the same is wound once or more

around said pulley E, in one of the grooves thereof, and secured firmly to said pulley E in such a way that by turning the windlass to which said rope H¹ is attached, so as to wind the said cord H¹ upon the same, the gate will be opened toward the opposite windlass. To the other of said windlasses b, and wound two or three times around the same, is attached another rope, H², which passes around the pulley E', and being wound once or more around the pulley E, in the other groove in the same, is firmly secured thereto in such a way as by turning the other of said windlasses by the crank on the same, the gate A will be closed, the object of the rope H being such that the gate A may be opened or shut by turning either of the windlasses b. The cranks b', by means of which said windlasses b are turned, are of such height as to be in convenient reach of any rider, whether on horseback or in any vehicle. The windlasses b may be made of wood or other suitable material, and of any suitable size to contain the ropes H H¹ and H² and wind up the same, as above described.

The operation is readily seen from the drawing and the above description. By turning either of the windlasses b, the gate is first lifted from the ground by the pivot on the post a, sliding in the slot in the cap e, and the latch on the same disengaged from the catch. As above described, it constitutes a cheap and convenient method of hanging and operating gates, whereby the same may be operated by any rider without alighting for that purpose, and whereby the gate is raised above snow or other obstructions.

I claim as new, and desire to secure by Letters Patent—

1. The opening and closing of any farm or other gate A, by means of the windlasses b and ropes H H¹ and H², substantially as shown and described.
2. The windlasses b and the ropes or chains H H¹ and H² and the pulleys E and E', in combination with each other, and in combination with the posts G and the post B, and any gate A, substantially as shown and described, and for the purposes set forth.
3. The slotted cap e, in combination with the gate A, substantially as shown and described, and for the purposes set forth.

The above specification of my invention, signed by me, this thirteenth day of November, 1867.

LEWIS ESSIG.

Witnesses:

VIRGIL S. BROWN,
WM. SHANERFELT.