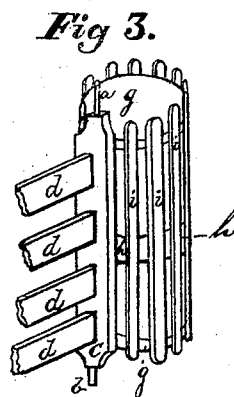
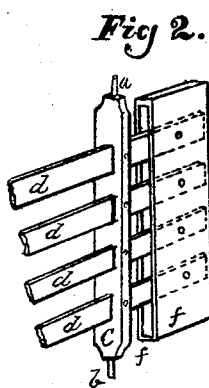
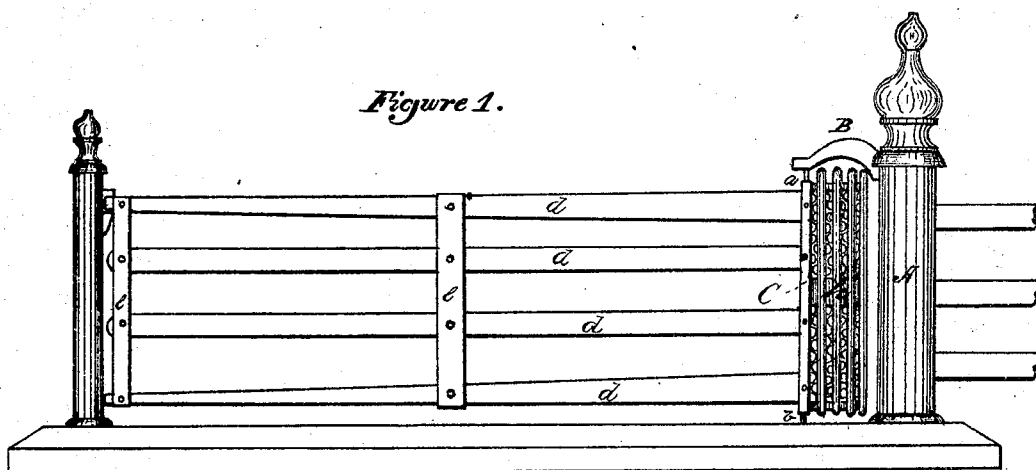


W. I. LUDLOW.
Improvement in Gates.

No. 121,181.

Patented Nov. 21, 1871.



WITNESSES:

Parker H. Sweet, Jr.
Harry M. Phillips

INVENTOR:

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Atty.

UNITED STATES PATENT OFFICE.

WASHINGTON I. LUDLOW, OF CLEVELAND, OHIO.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. 121,181, dated November 21, 1871.

To all whom it may concern:

Be it known that I, WASHINGTON I. LUDLOW, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Gates; and I do hereby declare the following to be a full and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand and use the same, reference being had to the accompanying drawing, in which—

Figure 1 represents a plan or side view of my improved gate, showing the same in an elevated position. Figs. 2 and 3 are detached views, showing the manner of forming the receptacle for the weights.

My invention relates to an improved construction of gates; and consists in a certain peculiar manner of hanging the gate, whereby I obviate the use of hinges and of balancing the gate so that the whole weight of the latter rests and swings on a single pivot. The gate is balanced by a weight pivoted to the end or ends of the boards forming the gate-frame, immediately back of the gate-post, which permits the gate to be raised or lowered, opened or closed, with the greatest facility; and by this arrangement all strain on the post to which the gate is hung is prevented, though the latter be in any position.

In the drawing, A represents the ordinary fence-post, provided with an arm or extension, B, of wood or metal, extending from the top of the said post, and this arm having at its end formed a hole, in which works a pivot, *a*, extending from the upper end of the gate-post C. The lower end of this post is also provided with a pivot, *b*, working in a suitable bearing. The gate-post A is formed or provided with a series of mortises, *c c c*, which are made somewhat longer than the width of the longitudinal boards *d d d*, forming the frame of the gate, these boards being secured in the mortises, with their ends projecting in the rear of post, by bolts or other devices. By forming these mortises of a length longer than the width of the boards will be the gate can be either raised or lowered with the greatest facility and ease. The gate proper is constructed of longitudinal boards *d d d* and battens *e e*, all suitably secured together after the manner of the ordinary mode of constructing

gates; and the gate is provided with a suitable fastening device. The ends of the board *d d* project through the mortises of the gate-post C; and upon the projecting ends of these boards is arranged a suitable weight, so that portion of the gate in front of the post C will be counterpoised or balanced, thus bringing the center of gravity of the gate immediately in line with the upper and lower pivots, and thereby taking all strain from the supporting-arm B, and consequently from the fence-post A, to which the latter is attached; and this will be equal in any position the gate may be caused to assume.

By the arrangement above described the weight can be raised over any obstruction which may be in its way in the operations of opening, and the gate can be opened in either direction desired, and set at rest in any position of its orbit, accommodating itself to any unevenness of the ground; and it can thus be held open in any place desired without the necessity of propping.

In the space between the fence-post A and the gate-post B, and attached to the projecting ends of the boards *d d*, is arranged a peculiar box or receptacle for the necessary weights by which to balance the gate; and this receptacle, in the present instance, consists of two boards, *f f*, of a length exceeding the height of the gate, secured together with cleats between them to keep their inner faces about one inch, more or less, apart; and in this space is secured the projecting ends of the boards *d d*; and upon the upper and lower ends of these boards are secured two circular or other pieces, *g g*, of wood or other suitable material, of a diameter equal to the width of the boards *f f*. Between the upper and lower ends of these boards are also secured the two sections *h h*, of similar circular pieces of wood. Longitudinally around the periphery of these circular pieces is now attached pickets or strips *i i i*, leaving a small space between each strip, and thus forming a sort of cylinder or arm, in which can be placed stones or other weights, which serve to balance the gate for the purpose above described.

By pivoting the gate-post C in the projecting arm B, secured to the top of the post A, and the lower end of the post working in a similar bearing, the use of hinges is dispensed with.

Having thus described my invention, what I

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

The boards *f f*, secured together and confining the pivoted ends of the bars *d d*, and arranged and guided within the weight-cylinder, provided with the top and bottom plates *g g*, and operating in connection with the bars *d d*, as herein set forth.

In evidence that I claim the above I have hereunto set my hand in the presence of two subscribing witnesses.

WASHINGTON I. LUDLOW.

Witnesses:

S. L. WADSWORTH,
W. N. WHITE.

(52)