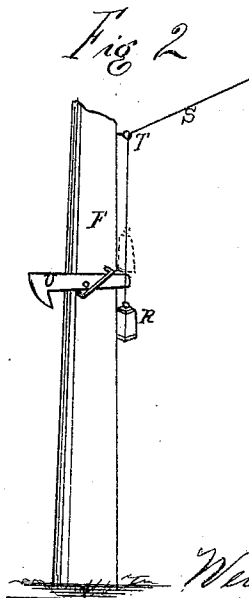
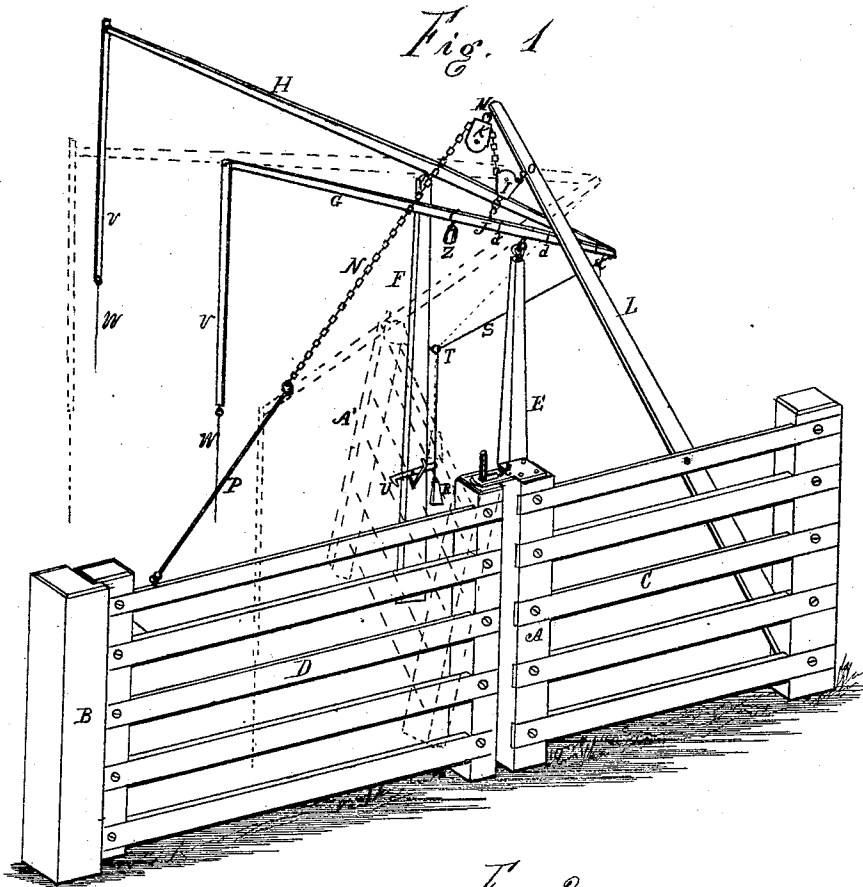


W. J. WOOSTER.  
Improvement in Gates.

No. 131,043.

Patented Sep. 3, 1872.



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM J. WOOSTER, OF HARVARD, ILLINOIS.

## IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. 131,043, dated September 3, 1872.

### SPECIFICATION.

I, WILLIAM J. WOOSTER, of Harvard, in the county of McHenry and State of Illinois, have invented an Improvement in Gates, of which the following is a specification:

The present invention relates to an improvement in that class of gates which is designed to be operated by a person in a carriage or on horseback without alighting; and the particular novelty consists in the construction and arrangement of the pivoted levers for operating the gate; the arrangement of the levers, as they are combined with the draft chain and rod, and standard; a slotted hinge, admitting the gate to be raised and detach the latch by the draft-chain; a drop-weight, for detaching the latch which holds open the gate; and balancing-weight, which may be put on one of the operating levers to balance gates of different weights; as the whole is hereinafter fully described and shown.

In the drawing, Figure 1 is a perspective representation of my improved gate, the latter being closed. The dotted lines A' show the position of the gate when open. Fig. 2 shows the drop-weight, jamb-post, and weight-cord or wire.

A represents the hanging-post; B, the jamb-post proper; C, a length of fence; and D, the gate—all of which are constructed in the usual manner, except such parts as hereinafter especially described. E F represent posts whose face-line is at right angles to the line of fence, and whose heights are a little greater than the height of a carriage or other vehicle which is to pass under the lever G H. These levers are pivoted to the top ends of the posts E F by means of slotted or swivel joints, so that they can be swung up and down without binding, and their two inner ends are connected together by any suitable loose-joint attachment, so that, when one lever is operated upon to move, the other will move the same distance. A sheave-block, I, is attached to lever G at J, and a similar block, K, is attached to an inclined standard, L, at M, and a chain, N, is fastened to the inclined standard at o, and it passes through sheave-blocks I and K and connects with a rod, P, fastening at the opposite end to the gate. The position

of the inclined standard L is such that its top end supports the sheave-block K at a point which is the axis of the curve formed by the line of the swinging end of the gate, by means of which an unequal strain is obviated, while at the same time the gate is as readily opened by one lever as the other. A drop-weight, R, is hung by a wire, S, to the inner ends of the levers, and it runs through a staple or small pulley, T, so that when the gate is to be loosened from the latch U, preparatory to being shut, all that is required is that either lever shall be raised a little at the outer end. This movement will allow the weight to strike the end of the latch U and lift the opposite end from the slot of the gate.

The means for raising the ends of levers G H consist of depending standards *v v*, pivoted to the ends of said levers, said depending standards having cords *w* attached to their lower ends for the convenience of reaching the levers when the gate is shut. The latch which holds the gate shut is an ordinary one, and that it may be lifted out of its catch without any special attachment, the upper hinge X of the gate is slotted out longitudinally, so that the chain and rod which swing the gate will also lift the gate-latch out of the catch.

In order that a light and heavy gate may be operated equally well by the devices described, a weight, Z, is arranged to be attached to one of the levers at any point indicated by lines *d, d*, and *e*, by means of which little or no more power is required to operate a heavy gate than a light one.

It will be seen from this description that the depending standards *v v* hang directly over the drive-way, and that a carriage is to be driven under them, so they are readily reached by the cords *w*.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The balancing-weight Z, arranged to be attached at different points, *d*, on the lever, when combined with said levers, draft-chain, and gate, as set forth.

2. The levers G H, pivoted to posts E F, and pivoted together at their inner ends, and

combined with the wire S and drop-weight R, for loosening the latch U by the weight falling on its end, as set forth.

3. The combination of the levers G H, inclined standard L, rod and chain N P, sheave-blocks I K, depending standards *v v*, and gate, as and for the purpose shown and described.

4. The slotted hinge X, when combined with the gate, levers G H, chain and rod N P, and sheaves I K, substantially as specified.

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Witnesses:

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