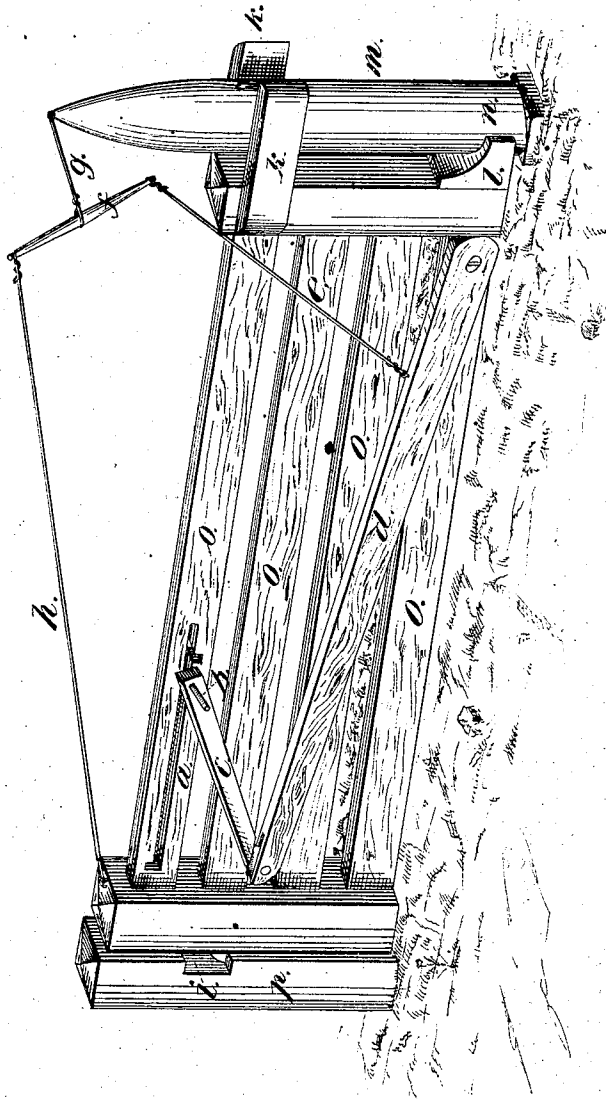


Farm - Gate.

No. 162,448.

Patented April 20, 1875.



Witnesses.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. **162,448**, dated April 20, 1875; application filed September 23, 1874.

To all whom it may concern :

Be it known that I, JOHN N. WILSON, of Carthage, in the county of Jasper and State of Missouri, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of devices for suspending and adjusting gates, so as to obviate the continuous strain on the post by the weight of the gate, to prevent the gate from losing its proper shape by the weight being continually supported at the hinges, and to allow the gate to swing clear of snow in the winter time, all as hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and which represents a perspective view of a gate embodying my invention.

o represents an ordinary gate. *m* is the inner and *p* the outer gate-post. To the lower board of the gate, at the inner end, is pivoted a lever, *d*, which extends in an inclined position slightly upward nearly to the outer end, and in a slot at this end of the lever is pivoted an arm, *c*. Through the upper end of the arm *c* is passed a pin, *b*, which passes through a horizontal slot, *a*, in the top board of the gate, and this pin may be taken hold of on either side of the gate. To the post *m* is attached a wire, *g*, of sufficient size and strength to bear the weight of the gate, the other end of this wire being fastened to the center of an arm or bar, *f*. One end of this bar is, by a wire, *h*, connected with the upper outer corner of the gate, while the other end of the bar is, by a wire, *e*, connected with the lever *d* at such a point as will give the desired fulcrum-power. The wires *e h* should be of such length as to allow the bar *f* to sustain a position at right angles with the wire *g* when the gate is at rest, and the wire *g* should be of such length

as to allow the bar *f* to play freely without interfering with the gate or inner post. The wires are, further, so regulated that there will be no strain on them when the gate is in the latch *i* of the post *p*, and the pin *b* is at the inner end of the slot *a*, the gate then resting with equal weight on both posts *m* and *p*. At the inner lower end of the gate is fastened a semicircular block, *l*, which fits the shoulder and rounded portion *n* of the post *m*, and forms a hinge to allow the gate to swing freely around the posts. The gate is held in an upright position by means of two boards, *k k*, attached to the upper inner corner of the gate, so as to project one on each side past the post *m*, and allow the gate to work to and from the same.

To operate the gate, the pin *b* is thrown to the outer end of the slot *a*, which forces down the lever *d*, and, by means of the wire *e*, draws down one end of the arm *f*, the other end thereof being thereby forced upward, which, by means of the wire *h*, raises the outer end of the gate, and vice versa. When the pin *b* is thrown back to the inner end of the slot, the lever *d* is brought upward, loosening the wires *e h g*, so that the gate will descend and the front end thereof rest on the ground or in the latch *i*, thus freeing the post *m* from all strain.

In order to allow the gate to swing clear from all snow or other obstruction it is only necessary to cut a shoulder in the post *m*, similar to the shoulder and rounded portion *n*, at the desired height, place the lower hinge *l* therein, and attach the wire *g* higher up on the post *m*.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with a gate, *o*, and inner gate-post *m*, of the lever *d*, arm *c*, with pin *b* passing through a slot, *a*, the wires *e h*, bar *f*, and wire *g*, all substantially as and for the purposes herein set forth.

JOHN N. WILSON.

Witnesses:

JAMES V. BERGEN,
JAMES M. ALLEN.