

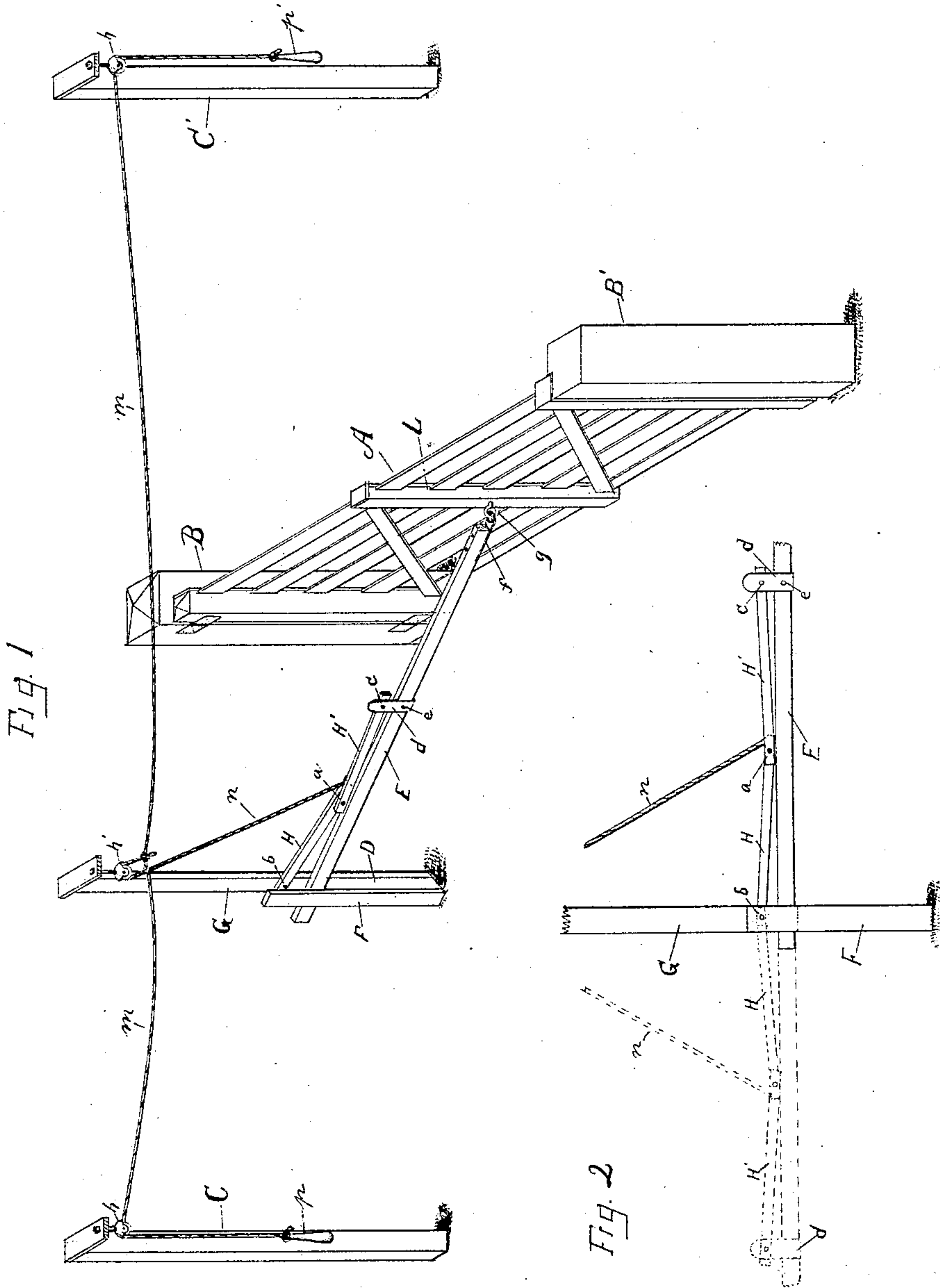
(No Model.)

T. L. MASON.

OPENING AND CLOSING DEVICE FOR FARM GATES.

No. 454,015.

Patented June 9, 1891.



Witnesses
Samuel B. Demart
James Wright.

Inventor's
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UNITED STATES PATENT OFFICE.

THOMAS L. MASON, OF CRAWFORDSVILLE, INDIANA.

OPENING AND CLOSING DEVICE FOR FARM-GATES.

SPECIFICATION forming part of Letters Patent No. 454,015, dated June 9, 1891.

Application filed February 7, 1891. Serial No. 380,642. (No model.)

To all whom it may concern:

Be it known that I, THOMAS L. MASON, a citizen of the United States, residing at Crawfordsville, in the county of Montgomery and State of Indiana, have invented a new and useful Improvement in Opening and Closing Devices for Farm-Gates, of which the following is a specification.

My invention relates to an improvement in the opening and closing devices of farm-gates arranged to open and close from one side only, the device being operated by mounted drivers or riders through the medium of cords and pulleys.

Figure 1 is a general view of a farm-gate, showing my opening and closing device properly combined therewith. Fig. 2 is an enlarged and separate side elevation of my invention proper.

A is a farm-gate hinged by its heel-post to the post B and fitting when closed against a shoulder of post B'.

L is the center post of the gate. Into the center of this center post L is inserted a screw hook or eye *g*, engaging with the eye of the strap-iron *f*, forming a joint. The strap-iron *f* is bolted firmly to the under side of the scantling E. The scantling E is placed horizontally, making an angle with the gate when closed of about forty-five degrees. At one end this scantling rests loosely on the top of a short post D, inserted in the ground. On one side of this post D is a guide F, projecting above the scantling E and spiked to the side of the post D. On the opposite side of the post D is an upright scantling G, spiked to the post D and higher than the gate-post B. This scantling has a cap spiked to its top which carries the swivel-joint pulley *h'*.

C and C' are two posts set in the ground at about equal distances from the post B, each being about thirty feet from it. These posts are somewhat higher than post B and each has a cap spiked to its top which carries a pulley *h*.

m is a strong cord or rope passing over the pulleys *h h* and having pulls or hand-holds *p p* secured at each end thereof.

In the middle of the scantling E and on one side thereof is securely bolted an upright strap-iron *d* by bolt *e*. This strap-iron carries at its upper end a pivotal bolt *c*, rigidly fixed

at right angles to the axis of the scantling E.

b is a pivotal bolt fixed on the upright G rigidly and at right angles to the axis of the scantling E as near as may be.

H and H' are wooden arms joined together by a common pivotal bolt *a* at right angles to the axis of the scantling E. At the end of the arm H next to the pivotal bolt *a* is secured a strong cord or rope *n*, passing over the pulley *h'* and securely fastened to the cord or rope *m*. Under the influence of their own weight the ends of the arms H and H' will rest at *a* against the upper surface of the scantling E. The points *b* and *c* are so placed that the straight line joining them passes above the point *a*.

In Fig. 2, on the right of the upright G, my opening and closing device is shown as it appears when the gate is closed, and on the left of the upright G the dotted lines show the position it assumes when the gate is open. As the point *a* falls below the straight line joining *b* and *c* at the time the gate is either closed or open, it locks the gate in either the closed or open position without latch or catches.

Having now described fully my invention, its manner of operation is as follows: One of the hand-holds *p* is seized and pulled down, which transmits the impulse through the cords *m* and *n* to the joining of the arms H and H' at *a*. This joint is raised, thus unlocking the gate, and the impulse being continued the gate will swing open, acquiring sufficient momentum in the first part of its swing to carry it back into the full open position against or near to the guide F. The gate is then locked open as the opening and closing device assumes the position indicated in the dotted lines of Fig. 2. When it is desired to close the gate, it is closed in precisely the same manner in which it was opened.

Having fully set forth my improvement and shown its manner of operation, what I claim is—

In a farm-gate, the opening and closing devices thereof, consisting of the combination, with a farm-gate, of the horizontal scantling E, forming with the gate closed an angle of forty-five degrees and secured to the middle of the center post L of the gate by a joint formed of strap-iron *f* and eyebolt *g*, the open-

top slideway formed by post D, guide F, and
upright G, the upright strap-iron *d*, bolted in
the middle of one side of scantling E, the two
arms H and H' revolving about a common
5 pivotal bolt *a* at their junction and at their
other ends attached, respectively, to the piv-
otal bolt *b*, set into the upright G, and the
pivotal bolt *c*, set into the upright *d*, a system
of cords and pulleys supported by posts C, C',
10 and G and attached to the arm H near its

junction with arm H', and the pivotal bear-
ings *b*, *a*, and *c*, forming an obtuse angle *a b*
c, with the opening upward adapted to lock-
ing the gate either open or closed, all substan-
tially as set forth.

THOMAS I. MASON.

Witnesses:

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