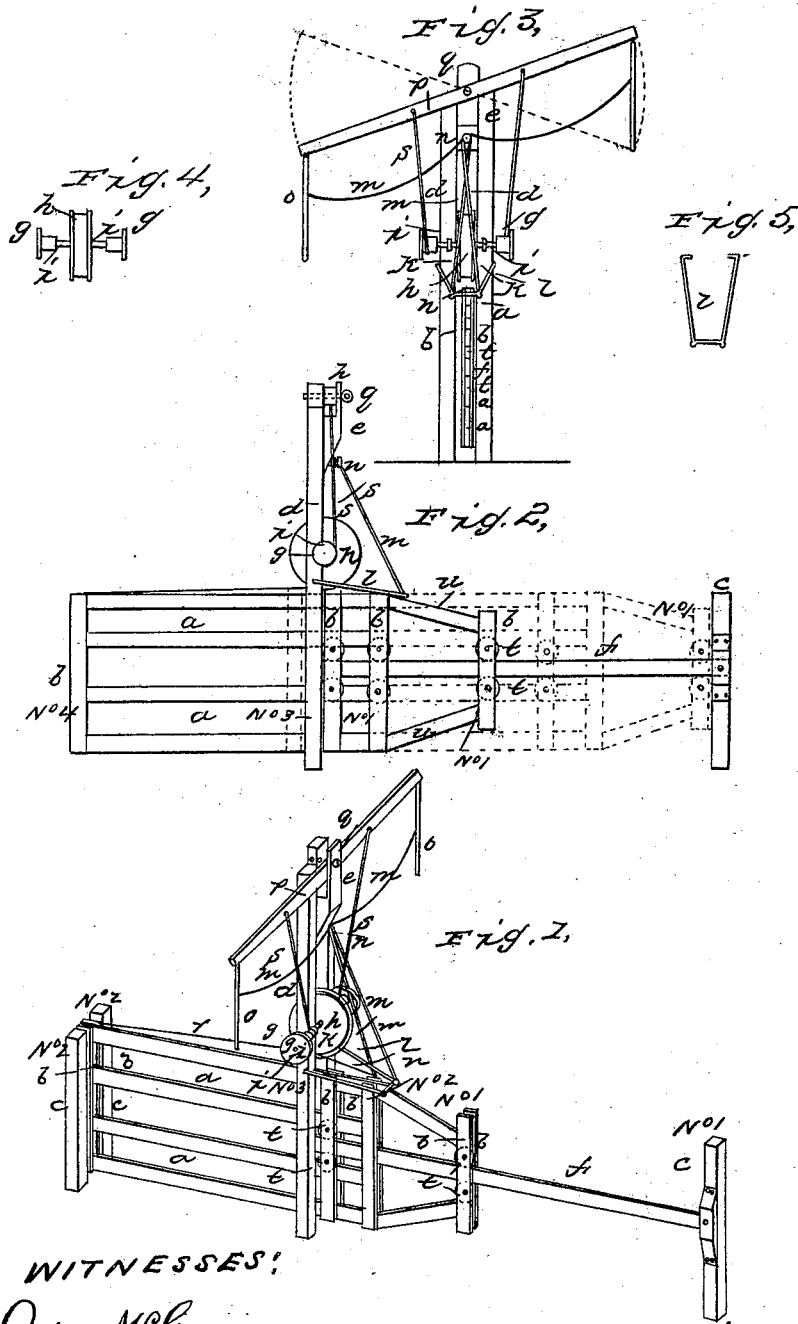


F. MILLER.

Farm Gate.

No. 53,084.

Patented March 6, 1866.



WITNESSES:

Ozias McGarvey
James Ducker.

INVENTOR

Frank Miller.

UNITED STATES PATENT OFFICE.

FRANZ MÜLLER, OF MOKENA, ILLINOIS, ASSIGNOR TO LYMAN S. PAINE, OF SAME PLACE.

IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. 53,084, dated March 6, 1866.

To all whom it may concern:

Be it known that I, FRANZ MÜLLER, of Mokena, in the county of Will and State of Illinois, have invented a new and improved farm-gate designed to close entrances to yards, fields, meadows, or other inclosures; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view, showing my improved mode of hanging a gate and also of opening and closing the same. Fig. 2 is a front view of Fig. 1, showing the gate in two positions and the bar *f*, on which it hangs. Fig. 3 is a front view of the pulleys and lever, showing the lever in two positions. Fig. 4 is a section, showing pulleys *h* and *g g* and shaft *i*. Fig. 5 is a section, showing front view of latch *b*.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a new, useful, and peculiar means employed to open and close a gate, guiding and controlling the same; also, a new and novel mode of hanging it, and, when closed, of fastening it to prevent it from being accidentally opened, and is designed to enable a person on horseback or in a wagon to open and close it.

The objects which I desire to obtain by my invention are, first, to enable a person to open a gate, pass through the gateway, and then close the gate without alighting from a wagon or vehicle; second, to hold the gate closed against accidental opening in such manner as that the fastening may be readily removed by a person in a wagon; third, by my improved means of hanging a gate to prevent its sagging and holding it in position to slide easily either forward or backward horizontally, as will be hereinafter described.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In the accompanying drawings, *a a a a* are horizontal bars or slats of the gate. *b* No. 1, *b* No. 2, *b* No. 3, and *b* No. 4 are upright bars or slats, on opposite side of which are bars or slats to correspond between the upright bars or

slats *b* No. 1, *b* No. 2, *b* No. 3, *b* No. 4, and upright bars or slats, on opposite sides, are fastened the horizontal bars or slats *a a a a*. *b* No 1 and *b* No. 2 are provided with rollers *t t t t* to facilitate the movement of the gate, said rollers *t t t t* being placed between two upright bars or slats.

d d are upright posts, between which the gate slides or rolls when forced to move on bars or slats *f*, and are provided with head-block *e*, to which the lever *p* is fastened by means of fulcrum-pin *q*. *i* is a shaft passing through pulleys *g g* and *h*.

k k are boxes fastened to upright posts *d d*, in which shaft *i* runs. *r r* are ropes or their equivalent, fastened one at each end of the gate and passing in opposite directions around pulley *h*, and serve to draw the gate forward and backward on bar or slat *f*.

s s are ropes, or their equivalent, passing around pulleys *g g* in opposite directions, running from thence to the arms of lever *p*, to which they are attached. *p* is a lever fastened to head-piece *e* by fulcrum-pin *q*, and serves to force the gate backward or forward by drawing on the ropes *s s*, which pass around the pulleys *g g* in opposite directions. The pulley *h*, being fastened to same shaft *i* as are the pulleys *g g*, conveys, by means of ropes *r r*, which pass around it in opposite directions, the power or force given by lever *p* to the gate to which ends of rope *r r* are fastened.

l is a latch hanging to posts *d d* and dropping on the gate-fastening back of posts or upright bars or slats *b* No. 3 when the gate is closed to secure it against accidental opening.

h is a pulley on shaft *i*, situated between upright posts *d d*, and serves to transmit the power of lever *p* through the ropes *r r*, the gate having received said power through the agency of ropes *s s* and pulleys *g g*, as in manner before described.

m m are ropes, their equivalent passing from latch *l*, through ring *n*, to the lever-handle *o o*, and with them are used to lift the latch *l* from its fastening. *n* is a ring fastened to head-block *e*, and serves to hold the ropes *m m* in position required. *e* is a head-block placed between and at top of upright posts *d d*, and serves to hold lever *p* in its various positions. *o o* are handles attached to the arms of levers

p, and also serve in connection with ropes *m* to lift latch *l* by an outward movement, instead of the upward or downward movement required to move lever *p*.

t t t t are rollers to facilitate the movement of the gate, and are placed between upright bar or slat *b* No. 1 and its opposite bar or slat and upright bar or slat *b* No. 3, and its opposite slat or bar, two above and two below the horizontal stationary bar or slat *f*. *f* is a stationary horizontal bar or slat, fastened at one end to fence-post *c* No. 1, at the other end, midway between upright posts *d d*, and serves as a rail for gate to roll or slide on, guiding and supporting it. *u u* are slats on rear of gate, making a part thereof, and serve to brace it.

c No. 1 is a fence-post, which also serves to hold the rear end of the stationary horizontal bar *f*. *C* No. 2 and *C* No. 3 are two fence-posts situated at the front end of the gate, standing just far enough apart to permit the gate to enter between them and serve to pre-

vent the gate when it is closed swinging side-wise.

q is a fulcrum-pin, and serves to hang lever *p* to head-block *e*. *g g* are pulleys fastened to the ends of shaft *i*, and serve to transmit the power of lever *p* to pulley *h*.

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

Attaching a rear extension to a gate to serve as a brace and support when used in connection with stationary bar or slat *f*, on which to slide longitudinally, as and for the purposes set forth.

Witness my hand in matter of my application for a patent for improvement in farm-gates.

FRANZ MÜLLER.

Witnesses:

O. MCGOVNEY,
JAMES DUCKER.