R. E. PORTER.

FARM GATE.

APPLICATION FILED OCT. 31, 1910. RENEWED APR. 25, 1913.

1,078,375. Patented Nov. 11, 1913.

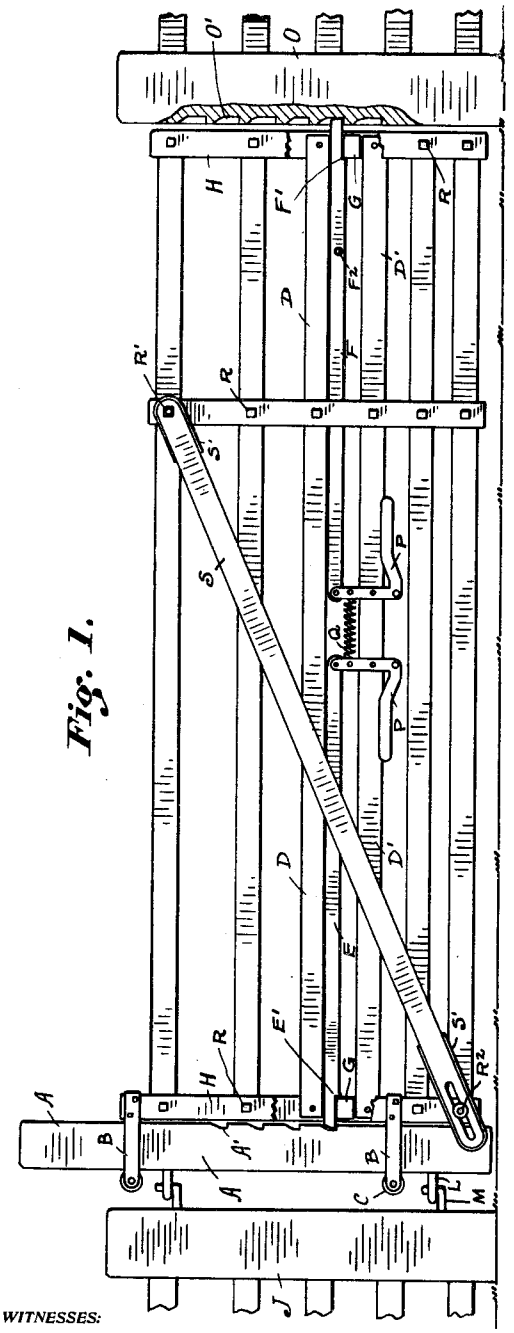


Fig. 1.

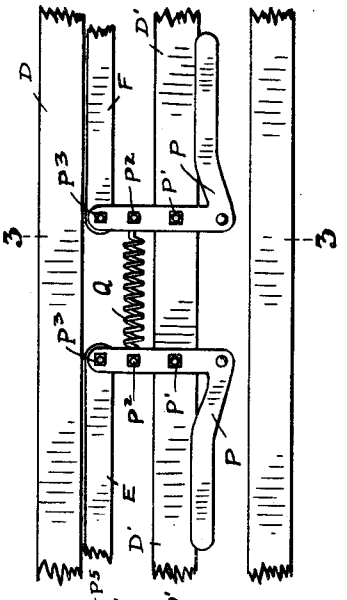


Fig. 2.

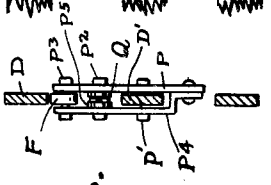


Fig. 3.

WITNESSES:

Charles Beckett

Nicholas Jensma

INVENTOR

RALPH E. PORTER

BY Thomas L. Ryan

ATTORNEY

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RALPH E. PORTER, OF PARKER, INDIANA.

FARM-GATE.

1,078,375. Specification of Letters Patent. Patented Nov. 11, 1913.

Application filed October 31, 1910, Serial No. 589,833. Renewed April 25, 1913. Serial No. 763,692.

To all whom it may concern:

Be it known that I, RALPH E. PORTER, a citizen of the United States, residing at Parker city, in the county of Randolph and State of Indiana, have invented certain new and useful Improvements in Farm-Gates, of which the following is a specification.

This invention relates to improvements in farm gates of that class which are capable of being moved to and supported at different heights so that while they will turn the larger stock, they will at the same time permit the passing of small stock such as hogs and sheep.

I am aware that gates of this general character have been heretofore constructed, and the object of my invention is to provide improvements whereby the gate-frame may be raised or lowered with facility, and which may be readily secured and effectively supported. Also my purpose is to provide a gate which will be simple in construction, durable, and not liable to get out of repair or adjustment.

In the drawings Figure 1 is a side view of gate containing my improvements. Fig. 2 is an enlarged side view of the holding and locking means. Fig. 3 is a transverse sectional view taken on the line 3—3 in Fig. 2.

The several parts of my improved gate are designated by similar characters of reference throughout the several views.

A gate of this general character has heretofore been devised wherein a sub-post A having notches A^1, serves as a support upon which the gate frame is fastened by straps B provided with rollers C. The gate frame is thus capable of being raised or lowered on the sub-post, and a member that is carried by the gate frame when moved into engagement with one of the notches A^1 will support the gate-frame at the desired height. A gate built up on this principle is not of practicable service unless some facility is afforded whereby such gate may be easily locked into and unlocked from the different heights at which it may be placed, and which gate at the same time is supported by both rather than merely one of the fence-posts.

The desired objects above indicated are accomplished by this invention which consists of the new construction, combination and arrangement of parts illustrated in the accompanying drawings and defined in the appended claims.

Arranged slidingly underneath the rail D of the gate frame, is a check-bar E and a lock-bar F. These bars are preferably made of hard wood and are supported at their outer ends by blocks G carried between the uprights H. The offsets E^1 and F^1 in the said check bar and the lock bar, respectively, serve to prevent the said bars from being pushed outwardly beyond the positions shown. The preferable form of hinge connection between the sub post A and the fence main-post J consists of eye bolts L which are engaged by the support-studs M. In the fence end-post O are located a series of recesses O^1 which are spaced to correspond with the spacing of the notches A^1. When in closed position the gate is supported as shown; the end of the check-bar engaging a notch A^1 and the end of the lock-bar engaging a recess O^1. Now the thing desired is, that the gate frame may be easily raised to the desired height and secured there, without the manipulation of the check-bar and the lock-bar. This desirable result is accomplished by combining with the foregoing members the parts or elements now to be described.

P and P designate lift levers. These lift-levers are made of metal bars formed and arranged as shown in the drawing, and by suitable pins or bolts P^1 are pivotally supported on the rail D^1 underneath the check bar and lock bar. The upright legs of these lift levers are connected loosely by bolts P^3 to the ends of the check bar and lock bar. The spring Q has its ends secured to the pins P^2 carried by the upright legs. The function of this spring Q is to press the check bar and the lock bar outwardly so as to keep them normally at the extended position shown, the end of the check bar being in a notch A^1 and the end of the lock bar being in a recess O^1 in the post O. The arms of the lift levers are of a shape and form to occupy a position slightly below and sub-

stantially parallel with the bottom edge of the rail D^1; and are of such length that their end portions are a distance apart proper to be engaged by the hands of the person operating the gate.

F^2 designates a knob provided on the lock bar near the front end of the gate frame.

From the foregoing description, the functions and utility of my improved gate, and the mode of operating same will be readily apparent. The rails being connected to the uprights by bolts R, the gate frame is capable of being raised or lowered at its front end so as to accord to unevenness of the ground; the gate frame will be braced by the diagonal brace S consisting of a pair of members having their upper ends connected by a bolt R^1 to the top of the intermediate upright and their lower and slotted ends connected by a bolt R^2 to the upright that is adjacent to the sub post. To reinforce the ends of these members I use the metallic bands S^1 suitably secured in place by bolts or screws.

The gate in the normal closed position, is shown in Fig. 1, the lock bar being in engagement with one of the recesses O^1, and the check bar being in engagement with the lowermost recess A^1. Thus supported the gate frame is so sustained that its weight is carried by the fence posts equably rather than by hanging merely on the fence main-post. By the action of the spring Q the check bar and lock bar will be kept at extended positions and from which positions they may not be accidentally moved or dislodged. To unlock the gate frame for swinging same on its hinges, the lock bar is retracted by the operator either using the knob F^2, or by his lifting up on the handle of the lift lever that has connection with the said lock bar.

When the gate is to be opened vertically, the operator places his hands underneath the handles of the lift levers; in lifting same and the gate, the check bar and lock bar are both retracted and the gate frame thus freed from actual connection with the sub post and the fence end-post. The gate frame having been lifted to the height to give the desired clearance under same, the operator slips his hands from the handles and to the underside of the rail D^1 whence the lift levers having been released, the spring Q will operate to shoot the check bar and lock bar outwardly into position to engage the higher notch A^1 and recess O^1, and the gate frame will thus be secured at the raised position. The operation of lowering the gate frame is simply the repetition of the foregoing.

What I claim as my invention and desire to secure by Letters Patent, is:

1. A fence closure including a fence main-post, a fence end-post having successively arranged recesses therein, a sub-post hingedly connected to the fence main-post and having successively arranged notches therein, a gate-frame having its end connected to and capable of being raised and lowered on said sub-post, a check bar, a lock bar, yieldable means to hold the check bar and lock bar normally to extended position to engage the said notches and recesses respectively, a device having connection with said means that when actuated to raise the gate may retract the check bar and lock bar.

2. A fence closure including a fence main-post, a fence end-post having successively arranged recesses therein, a sub-post hingedly connected to the main fence-post and having successively arranged notches therein, a gate-frame having its end connected to and capable of being raised and lowered on said sub-post, a check bar and a lock bar carried movably underneath one of the rails of the gate frame, an offset in the ends of the check bar and the lock bar to engage the end uprights of the gate frame, a spring to press the check bar and lock bar outwardly, lift levers having their ends connected with the inner ends of the check bar and lock bar and having their handles arranged to occupy a position slightly below one of the rails of the gate frame.

3. A farm gate, comprising a sub post having a series of notches therein, a gate frame connected to and adapted to be raised and lowered on said sub post, a check bar carried loosely on the gate frame to engage the notches, a lock bar carried loosely on said gate frame and having its end to project beyond the forward end of the gate frame, an offset in the check bar and lock bar to engage the end uprights of the gate frame, a spring to urge the check bar and the lock bar apart from each other, means that when actuated to raise the gate may retract the check bar and lock bar.

4. A farm gate comprising spaced longitudinal rails, uprights, two bars slidingly disposed underneath one of the rails, and having their ends to project beyond the ends of the gate, an offset near the outer end of each bar to engage the end upright and prevent movement outwardly of the bar, a spring to urge said bars to the extended position, lift levers fulcrumed on the rail underneath said bars and having their ends loosely connected to the inner ends of the said bars and their handles to occupy a position adjacent to the lower edge of the said rail.

5. A farm gate, comprising a sub-post having successively arranged notches therein, a gate frame having its end connected to and capable of being raised and lowered on

said sub post, a bar carried movably underneath one of the rails of the gate frame, an offset in the end of the bar to engage the end upright of the gate frame, a spring to press the bar outwardly, a lift lever having connection with said bar and fulcrumed so that when operated the bar will be extended, and provided with a handle disposed at position adjacent the lower edge of one of the rails substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

RALPH E. PORTER.

Witnesses:

NICHOLAS JENSMA,

THOMAS L. RYAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."