J. U. FIESTER.

Gate.

No. 198,369. Patented Dec. 18, 1877.

Fig 1

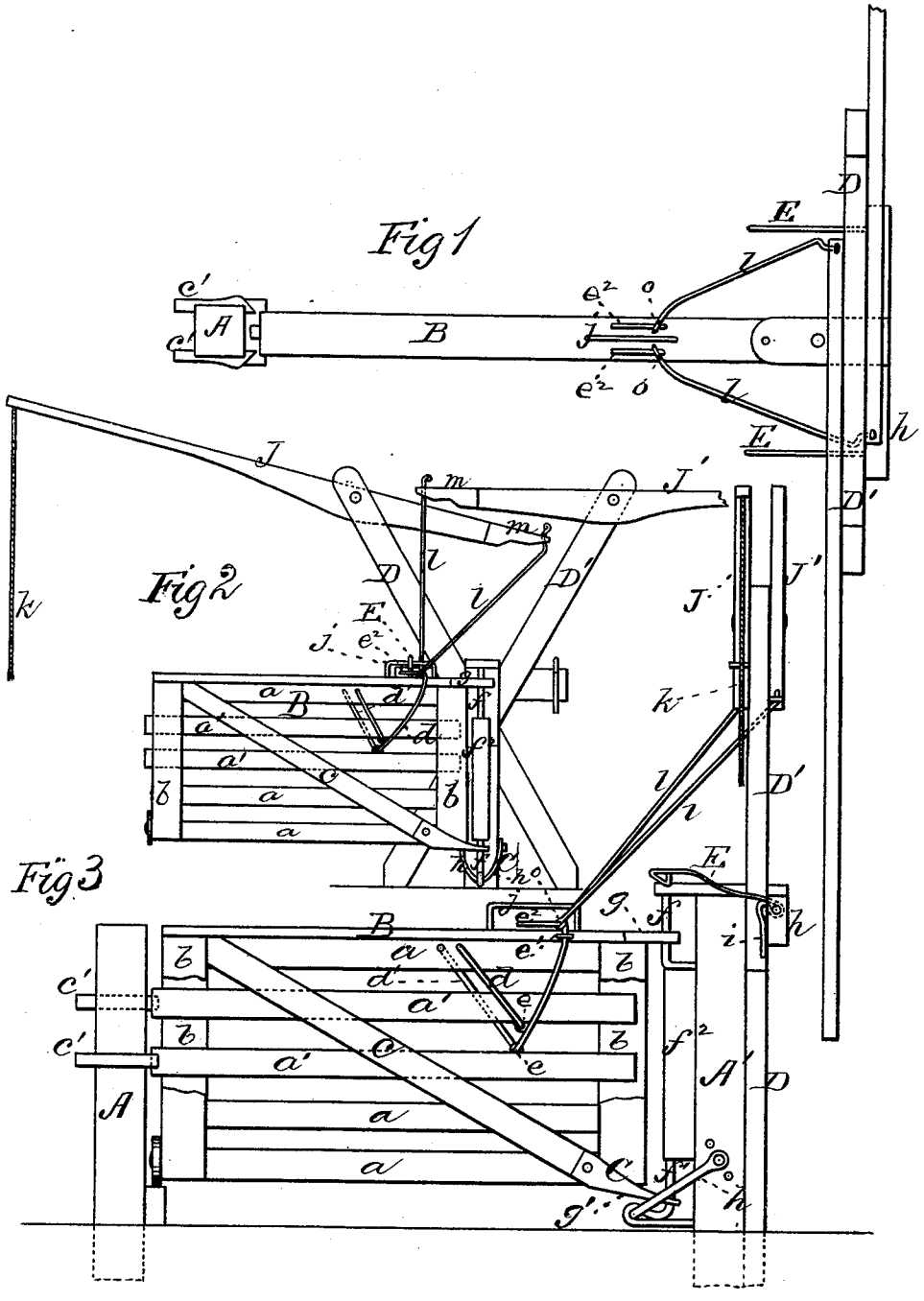


Fig 2



Fig 3



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN U. FIESTER, OF WINCHESTER, OHIO.

## IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **198,369**, dated December 18, 1877; application filed November 10, 1877.

*To all whom it may concern:*

Be it known that I, JOHN U. FIESTER, of Winchester, in the county of Guernsey and State of Ohio, have invented a new and valuable Improvement in Gates; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of rererence marked thereon.

Figure 1 of the drawings is a representation of top view of my improved gate. Fig. 2 is a view thereof in an open position, and Fig. 3 is a side view thereof.

This invention has relation to improvements in gates.

The object of the invention is to devise a gate which may be opened and closed by a driver or horseman without dismounting, and which will remain open while he is passing through the gap.

The nature of the invention consists in the combination and arrangement of certain parts, as hereinafter more fully described.

In the annexed drawings, the letters A A′ designate the gate-posts, arranged at a suitable distance apart, and B the gate closing the gap between said posts.

The gate is composed of a number of spaced slats, *a*, rigidly secured between two end rails, *b*, braced by a diagonal strut, *c*, upon each side, and of two loose slats, *a′*, arranged the one above the other, and supported at a suitable distance apart by pins extending through the end rails *b* aforesaid. The slats *a′* each engage an independent catch, *c′*, secured to post A upon opposite sides, the one above the other, and the same distance apart as the said latch-rails *a′*.

*d d′* designate metallic hanger-rods, pivoted to the top rail of the gate, extending downward respectively to the upper and lower rails *a′*. They are then bent at right angles and carried through staples *e* upon the edges of rails *a′*, thence upward through staples $e^1$ at the top of the gate, and their free ends bent down, as shown at $e^2$, forming a stop, which prevents the said hangers from escaping from the said staples $e^1$, and serves as a means of attachment for the mechanism that disengages the latch-rail from the catches in the act of opening the gate.

The gate is hinged to the post A′, so as to swing either way, and be capable of vertical movement by means of two spaced angular metallic pintles, *f* $f^1$, supported by an interposed wooden block, $f^2$, rigidly secured to the post A′ and metallic eye-plates *g g′*, respectively secured to the top and bottom of the gate, and engaged respectively with the pintles *f* $f^1$.

The eye-plate *g′* extends beyond the gate in angular form, and is received between the branches *h* of a strong U-shaped metallic guard, C, the ends of which are secured to post A′, and which is arranged in an inclined position at the bottom of said post.

When the gate is pushed open from either side, the eye-plate *g′*, the edges of which are beveled or rounded, comes in contact with the guard C, and ascends the incline, thereby raising the gate automatically, so that when the said gate is released it will gravitate naturally to the closed position in descending the incline.

Post A′ has at its upper end a cross-piece, *h*, projecting equally on both sides of the fence, and provided at each end with a vertically-vibrating angular latch, E, that is maintained in a position for engaging a staple-catch, *j*, upon the top of the gate, between the stops $e^2$, by means of its vertical arm *i*, that rests against the vertical face of the cross-piece *h*.

When the gate is opened the latches E engage the staple-catch *j*, and hold it open until the vehicle has passed through, when it may be disengaged by the following mechanism:

Two fulcrum-posts, D D′, are erected next to the gate-post A′ in a preferably crossed position, carrying at or near their upper ends, respectively, the operating-levers J J′, of which the power ends are provided with a pendent rope, *k*, and the weight ends with a rod, *l*. These rods are secured to the levers in such manner that they rotate freely in their bearings therein, metallic ferrules *m* being applied thereon to afford such bearings, and their lower ends are provided with eyes *o*, that en-

gage the horizontal portion $e^2$ of the hangers, hereinbefore mentioned, as stops, and which extend beyond and under the latches.

The levers J J′ extend out at each side beyond the radius of the gate. When an equestrian or driver draws down upon one of the ropes *k*, the hanger *d*, connected by the rod *l* with the lever J, from which the said rope depends, is vibrated upward, thereby disengaging the latch-rail *a′* from its appropriate catch on post A, and by continuing this movement the gate is swung away from the operator, being at the same time raised until it is at right angles to its former position, when the vibrating latch becomes engaged with the latch-staple aforesaid, and the gate is kept open. The vehicle having passed through the gap, the driver seizes upon the rope *k* depending from the other lever, and, by drawing down upon it, raises the other hanger, thereby disengaging the latch aforesaid from the staple, and allows the gate to gravitate into the closed position.

The effects above set forth are obtained from either side of the gate.

The connecting-rods, having free rotary movement in the ends or ferrules of the operating-levers, neither bind nor twist, so that the swinging of the gate is nowise impeded.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the swinging gate B, having loose longitudinal rails *a′*, and the post A, having catches $c^1$, of the vibrating hangers *d d′*, the connecting-rods *l*, and the vibrating levers J J′, substantially as specified.

2. The combination, with a swinging gate, B, having latch-rails *a′*, the post A, having catches *c′*, and the vibrating hangers *d d′*, having horizontal arms $e^2$, of the staple-catch *j* between said arms, the cross-piece *h*, having latches E, the levers J J′, and the connecting-rods *l*, substantially as specified.

3. In combination with the rising gate and its shoe C, the pintles *f* and $f^1$ and the U-shaped guard *h*, secured to the gate-post A′, and to the lower pintle $f^1$, whereby the gate is elevated when opened, so as to engage and be held by the spring-catch E, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN U. FIESTER.

Witnesses:
J. G. LINN,
H. S. HINSON.