





No. 622,735.

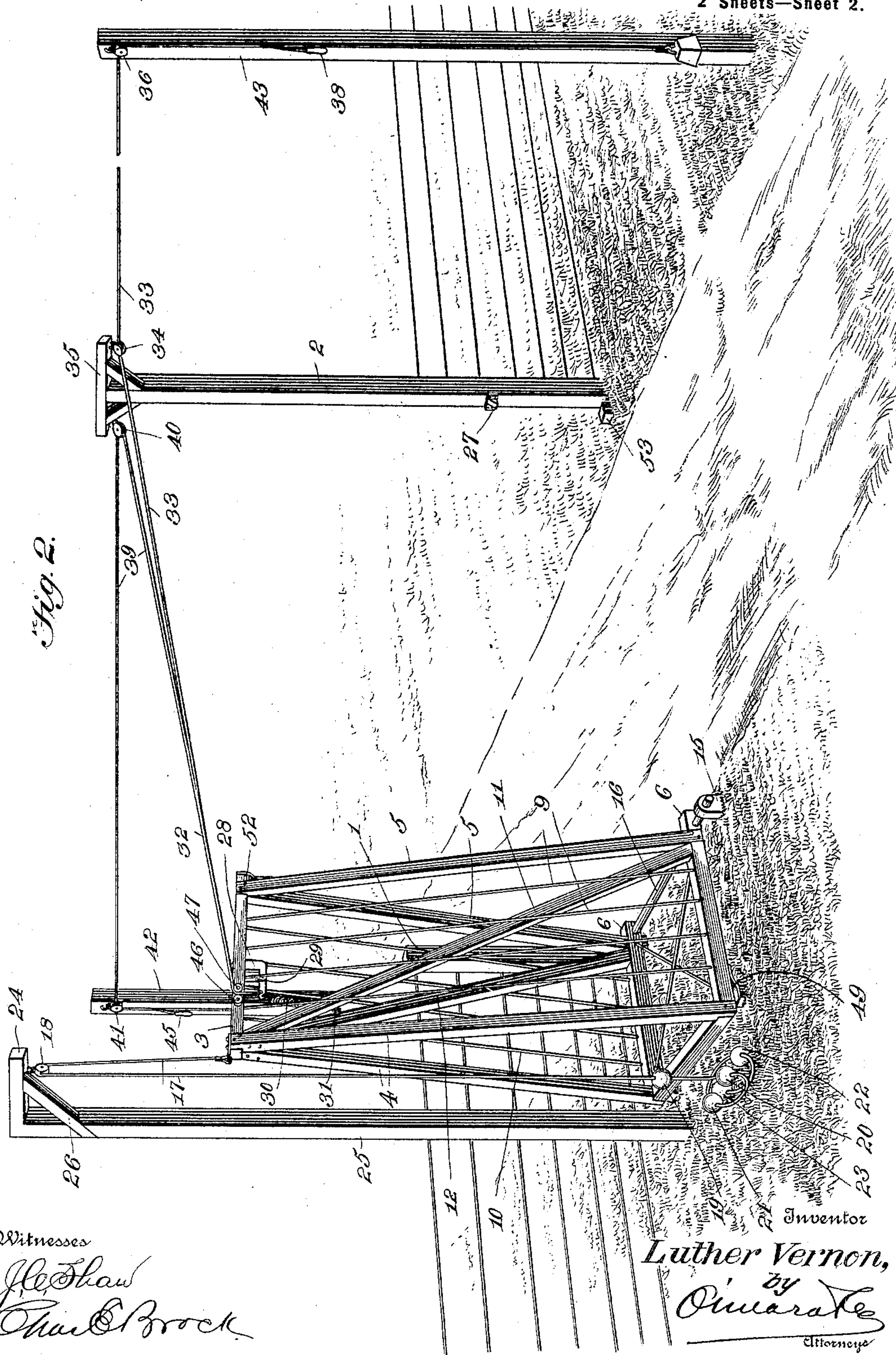
Patented Apr. 11, 1899.

L. VERNON.  
FARM GATE.

(Application filed Sept. 3, 1898.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

*J. H. Shaw*  
*Chas. Brock*

Inventor

*Luther Vernon,*  
*by*  
*O. W. R. A. T. E.*  
Attorneys



# UNITED STATES PATENT OFFICE.

LUTHER VERNON, OF BROOKSBURG, INDIANA.

## FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 622,735, dated April 11, 1899.

Application filed September 3, 1898. Serial No. 690,207. (No model.)

*To all whom it may concern:*

Be it known that I, LUTHER VERNON, a citizen of the United States, residing at Brooksburg, in the county of Jefferson and State of Indiana, have invented a new and useful Farm-Gate, of which the following is a specification.

My invention relates to farm-gates, and more especially to certain improvements in that class of farm-gates which are provided with means whereby they may be opened or closed by equestrians or persons in vehicles without dismounting or leaving the vehicle.

The object of my invention is to simplify and improve the construction of such gates, while rendering their operation easy and increasing their effectiveness and durability.

With this object in view my invention consists in an improved tilting gate and means for operating it, the construction, arrangement, and combination of the various parts thereof being hereinafter fully described and the particular points of novelty being specifically set forth in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying drawings, forming part hereof, in which—

Figure 1 is a perspective view illustrating a gate and opening and closing mechanism constructed in accordance with my invention, the gate being closed. Fig. 2 is a similar view showing the gate open.

Like numerals of reference mark the same parts in both figures of the drawings.

Referring to the drawings by numerals, 1 and 2 indicate the fence-posts at each side of the gate-opening. Both of these would usually be the gate-posts; but in this instance only one of them, that marked 2, is utilized for that purpose, it being the latch-post.

My improved gate consists of two frames, such as are usually used in gates, secured to a gate-stile 3. These frames diverge laterally from the gate-stile, each frame consisting of top bars 4 and bottom bars 5, the top and bottom bars of each frame being united at their rear or hinge ends by stiles 6 and 7, said stiles being united at the top by a cross-bar

8, the whole structure forming a top and bottom frame of the shape of an isosceles triangle, the object in spreading the gate into this form being to provide, first, for an extended base upon which the gate will safely stand when open, and a lengthened pintle upon which the gate is hinged to prevent wobbling and maintain the gate against lateral play.

The particular means for bracing the various parts of the gate and for wiring or planking it may be varied at will, they forming no part of my invention. In the present instance I have illustrated wires 9, connecting the rear stile 7 with the front stile 3, wires 10, connecting the rear stile 6 with the front stile 3, and braces 11 and 12, extending from the junction of the lower rails of the gate with the rear stiles to the junction of the front stile 3 to the upper edge of the gate, the rear stiles being braced by wires 12<sup>a</sup> and 13.

14 and 15 indicate short posts driven or otherwise secured in the ground outside of the lower ends of the rear stiles 6 and 7. A pintle 16 extends through these short posts and through the lower ends of the rear stiles 6 and 7, by means of which the gate is hinged at its rear lower corner.

17 indicates a rope or cable secured to the top of the front stile of the gate and passed upward and rearward in line with the center of the gate over a pulley 18, from whence it hangs down and is provided with weights 19, 20, 21, 22, and 23 of any desired number, secured at suitable distances apart. Pulley 18 depends from a horizontal arm 24, secured upon the upper end of a post 25 and stiffened by a brace 26.

27 indicates a catch secured upon the inner face of the post 2, said catch being constructed with its inclined face upward to cooperate with a latch 28 in the form of an elbow-lever, pivoted to a bar 29, secured to the front stile 3 of the gate, the horizontal arm of which projects through a slot in the stile, so as to cooperate with the catch 27. A spring 30 is secured at its forward end to the upper end of the vertical arm of the latch 28 and at its rear end to a rod 31, secured in the braces 11 and 12, the normal tendency of this spring being to throw the lower end of the latch outward into position to engage with the catch



27. A rope or cable 32 is secured to the upper end of the latch 28 of the gate, and passing upward it is divided into two branches, one of which, marked 33, passes over a pulley 34, secured to a cross-bar 35, mounted on top of the post 2, and thence horizontally to and over a pulley 36, and thence downward, it being of a sufficient length to permit a weight 37 on its extreme end to rest upon the ground when the gate is closed, as shown in Fig. 1. A handle 38 is secured to this rope at a proper height to be easily available by persons riding or driving who may desire to open or close the gate. The other branch 39 of the rope or cable 32 passes over pulleys 40 and 41, the former being secured under the cross-bar 35 and the latter to a post 42, planted alongside of the road at the same distance from the gate in one direction as the post 43, which supports the pulley 36, is in the opposite direction. This branch rope 39 is provided with a weight 44 and handle 45, located similarly to the weight 37 and handle 38 of the branch rope 33 and for the same purpose. The rope 32 passes between two pulleys 46 and 47, journaled on one side of the front stile 3 of the gate, which pulleys come alternately into use during the opening or the closing operation of the gate, as will be hereinafter described.

The construction of my invention will be readily understood from the foregoing, and its operation may be described as follows: When a person approaching the gate desires to open it, either of the handles—say 38—is grasped and quickly pulled downward. The first effect of this pull will be to release the latch and the further effect will be to tilt the gate upon its pivot 16, the operation being assisted by the weights 19, 20, 21, 22, and 23. The greatest weight to be raised is at the beginning of the opening movement. At this time all of the weights on the rope or cable 17 are raised above the ground and all act to assist in raising the gate. As the gate tilts backward and gradually approaches the point of equilibrium, the weights are gradually deposited upon the ground until when the gate reaches its open position, as in Fig. 2, only one of them will be above the ground, which will be sufficient to keep the rope or cable 17 taut. The gate in the meantime, after passing the point of equilibrium, has dropped of its own weight to the open position shown in Fig. 2, resting upon its extended base, and the weights 37 and 44 have been raised off the ground, so that their weight will assist in the operation of closing the gate. Having passed through the gate, the person grasps the handle 45 and draws it quickly downward. This will be sufficient to tilt the gate upon its pivot to a point beyond that of equilibrium, when the gate will fall into its closed position by gravity, the latch springing into engagement with the catch 27 and the

weights 19 to 23 being again raised to the position shown in Fig. 1, ready to assist in the next operation of opening the gate.

Spring-buffers 48 and 49 are provided on the rear sides of the rear stiles 6 and 7, which buffers when the gate falls into its open position engage blocks 50 and 51, planted in the ground, upon which they support the gate in its vertical position, as shown in Fig. 2. A similar buffer 52 strikes and rests upon a block 53, planted in the ground in front of the post 2, when the gate drops to its closed position.

The advantages attending the use of my invention are numerous and will be obvious from the foregoing description of its construction and operation. The gate itself is in the form of a cage braced in every direction, mounted upon a long pivot or pintle, so that its motion will be true in a plane passing through the center of its pivot and through the latch and there will be no danger whatever of the gate wobbling or sagging. When open, the gate rests upon an extended base, so that there is no danger whatever of its being blown over or accidentally thrown into the way of persons or animals passing through it.

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

1. A gate composed of triangular top and bottom frames the apices of which are outward and the bases inward, a front stile connecting the apices of the triangular frames, and rear stiles connecting the ends of the bases of said frames, substantially as described.

2. A gate composed of triangular top and bottom frames the apices of which are outward and the bases inward, a front stile connecting the apices of the triangular frames, rear stiles connecting the ends of the bases of said frame, in combination with short posts secured in the ground outside of the rear stile, and in line therewith, and an extended pivot or pintle passing through and journaled in said short posts and stiles, substantially as described.

3. The combination with the gate triangular-shaped horizontally, and pivoted at its rear lower corner, two blocks secured in the ground in the rear of the gate, two spring-buffers secured on the rear sides of the rear stiles of the gate adapted to engage said blocks when the gate is open, a gate-post, a block planted in the ground in front of said gate-post, and a spring-buffer secured to the under side of the gate and adapted to engage said block when the gate is closed, substantially as described.

LUTHER VERNON.

Witnesses:

SILAS D. MONROE,  
EMILIE B. CRAIG.