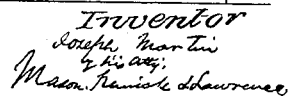


Farm Gate.

Patented March 21, 1865.



UNITED STATES PATENT OFFICE.

JOSEPH MARTIN, OF NEW OXFORD, PENNSYLVANIA.

IMPROVED FARM-GATE.

Specification forming part of Letters Patent No. 46,920, dated March 21, 1865.

To all whom it may concern:

Be it known that I, JOSEPH MARTIN, of New Oxford, county of Adams, and State of Pennsylvania, have invented a new and Improved Farm-Gate; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of the gate arranged for use. Fig. 2 is a front elevation of the gate and pulley-post. Fig. 3 shows the gate thrown open and latched.

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

This invention relates to that class of gates which can be opened or closed by a person while riding in a vehicle or on horseback, as well as by a person on foot.

The object of my invention is to so construct such gates that they will be latched when opened to their fullest extent and again latched when closed, so that there will be no liability of the gate closing and frightening a horse in passing through the opening, as will be hereinafter fully set forth.

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

In the accompanying drawings, A A' represent two gate-posts, and B represents an ordinary gate, which may be swung in such manner that it will swing back of itself when opened and released. I prefer to use a spring, *a*, for closing the gate. The latch *b* of the gate may be made of wood or metal and pivoted at its rear end to one of the gate-rails, as shown in the drawings; and to such a latch I suspend a weight, *b'*, which should be sufficiently heavy to cause the latch to fall into its catch with certainty when the gate is closed. To the gate-latch *b* two ropes, *c c'*, are attached, which are passed between the gate-rails and carried over the top rail, thence to a pulley-box, C', which is secured to a post, C, that is located on one side of the road a short distance from and on the same side as the post A', to which the gate is hinged. This box being arranged at a suitable height, it is provided with two vertical rollers and two horizontal rollers, (lettered *d*, respectively.) Through this box C' one of the ropes, *c*, is

passed and carried off several feet and passed over a suspended pulley, *e*, which is attached in a suitable position to the overhanging arm of a vertical post, D, shown in Figs. 1 and 3. The extremity of the rope *c* may have a weight attached to it. The other rope, *c'*, enters box C, thence around one of the pulleys *d*, and thence back again over the top rail of the gate-posts to a suspended pulley, *e'*, which is applied to the overhanging arm of a vertical post, D', as shown in Fig. 1. The posts D D' may be located some distance from the gate B, and the pendent ends of the ropes *c c'* may be located a little on one side of the center of the road, so that a person approaching the gate from either side may conveniently extend his arm from his carriage and open the gate. It will be seen that both ropes *c c'* act upon the latch of the gate to lift it out of its catch; then by further pulling on the same rope by which the latch was raised it will act directly upon the gate to open it. I desire also to call attention to the fact that my gate is intended to open only in one direction, and hence the peculiar arrangement of the pulley-ropes.

The post C is located at such a distance from the post A' that when the gate is thrown open and is at right angles to the position which it occupies when shut it is brought in contact with said post C, upon which I have pivoted a hook, *g*, shown clearly in each one of the figures of the accompanying drawings. To the swinging end of this hook *g*, I attach ropes *h h'*, one of which is carried up and passed through a staple, *i*, and thence passed over a pulley, *j*, from which it extends to the overhanging arm of the post D, where its end is passed through a pulley located near the rope-pulley *e*, as shown in Figs. 1 and 2. The rope *h'* is passed through the staple *i* and carried over the top rail of the gate-posts, and passed through a staple or pulley on the overhanging arm of post D', as shown in Fig. 1.

The object of the ropes *h h'* is to enable a person, after he has opened the gate and passed through, to close it again, which is done by simply pulling one of the cords *h h'*, and thus lifting the latch or hook *g*. This hook is provided with a pendent weight, *g'*, which keeps its free or hooked end down in position to receive one of the rails of the gate and hold the gate open.

To operate the gate, a person approaching it from either side pulls on one of the ropes *c* *c'* and throws the gate open, when it is caught by hook *g*. Upon leaving the gate the person pulls slightly on one of the ropes *h* *h'*, which will raise the hook *g* and allow the gate-spring to close it again.

It will be seen from the above description that I avoid complicity in the construction of my gate, and that almost every farmer has at his command the materials for constructing and putting in operation such a gate.

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

The automatic-closing gate, which opens only in one direction, constructed with the several parts, as described, so that it can be opened by a person approaching it from either side, and also latched open and unlatched, all substantially as set forth and described.

Witness my hand in the matter of my application for a patent on a farm-gate this 20th day of December, 1864.

JOSEPH MARTIN.

Witnesses:

R. T. CAMPBELL,
E. SCHAFER.