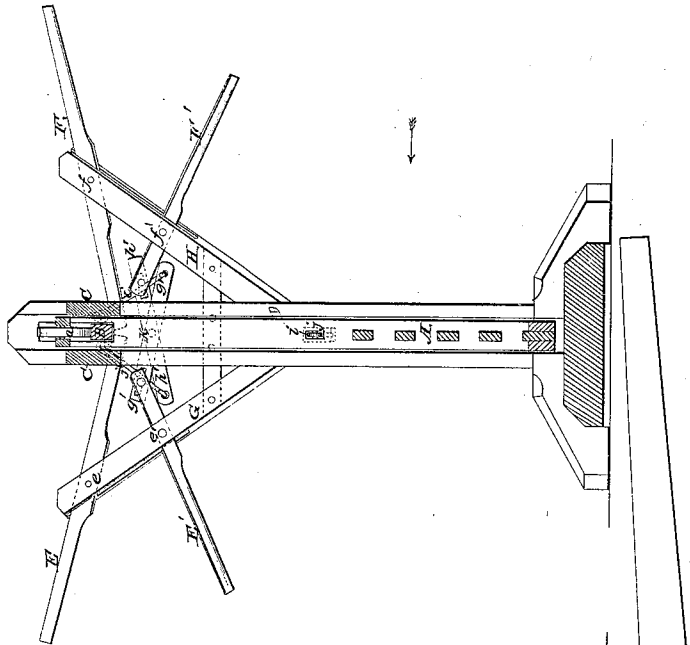


*D. R. Warfield,  
Automatic Gate,*

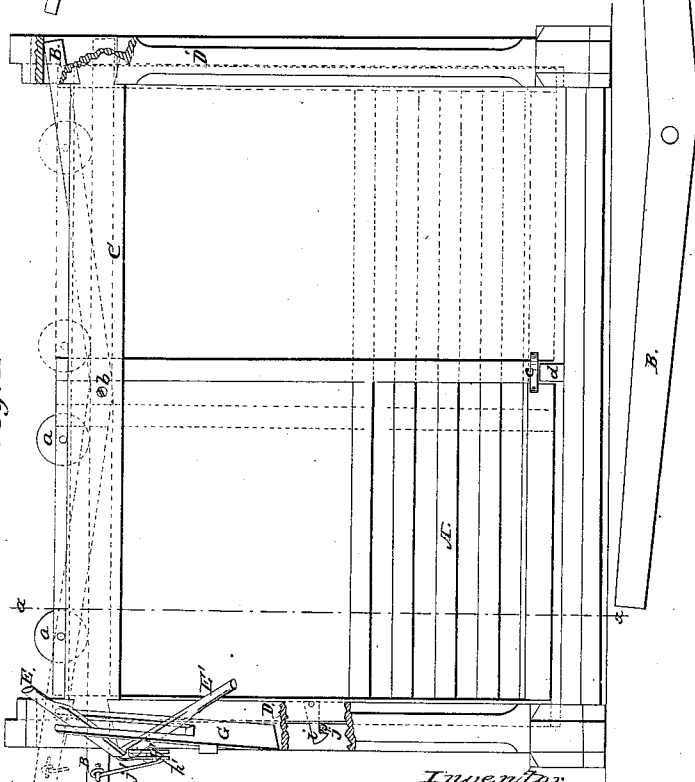
*N<sup>o</sup> 37,536-*

*Patented Jan. 27, 1863.*

*Fig. 2.*



*Fig. 1.*



*Witnesses:*

*J. W. Coombs.  
C. W. Reed.*

*Inventor.*

*D. R. Warfield  
per *Wm. C. attorneys**

# UNITED STATES PATENT OFFICE.

D. R. WARFIELD, OF MUSCATINE, IOWA.

## IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. 37,536, dated January 27, 1863.

*To all whom it may concern:*

Be it known that I, D. R. WARFIELD, of Muscatine, in the county of Muscatine and State of Iowa, have invented a new and Improved Farm-Gate; 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 represents a face view of my invention, the gate being shown closed in black and open in red outline. Fig. 2 is a transverse vertical section of the same, the plane of section being indicated by the line *x x*, Fig. 1.

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

This invention relates to an improvement in that class of gates which are constructed and arranged with a view to admit of being opened and closed by a person in a vehicle or by a rider on horseback.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it with reference to the drawings.

A represents a gate, which is suspended from an angular rail, B, by means of wheels or rollers *a*. The rail B has its fulcrum on a pivot, *b*, which passes through the same at the middle of its length, and which is firmly inserted into the upper cross-bars, C, between which the gate slides. These cross-bars are supported by uprights D D', and they are of such a length and the uprights are at such a distance from each other that the gate has room to slide far enough to one side to clear the gateway. Rollers *c*, which are attached to short posts *d*, rising from the sill, serve to steady the gate and to guide its lower end in moving backward and forward. The rail B is bent in the middle at an angle of about one hundred and seventy degrees, so that if one arm of the same is brought in a horizontal position the other forms an inclined plane, and vice versa, as clearly shown in Fig. 1 of the drawings. If the rail is raised to the position shown in red outlines in Fig. 1, the gate rolls down over the inclined plane to the position shown in red outlines in Fig. 1; or the gate opens, and if now the rail B is brought back to the position shown in black outline, the gate closes. The position of the rail B is governed by hand-levers E E' F F', which are secured by means of pivots *e e' f f'* between forked standards G H on opposite sides of the upright D, and in such a position that the same extend inwardly

toward the middle of the gateway, and that they can be conveniently reached by persons approaching the gate from either side on horseback or in a vehicle. The levers E and F serve to raise the end *l* of the rail B, which extends through the upright D, and they bear directly under said end, no connection being required to fasten them to the rail, where the levers E' F' are connected to said end of the rail by means of oscillating bars *g' h'* and links *i' j'*. The oscillating bars *g' h'* are attached to the upright D by a pivot, *k*, and those ends of the same which connect with the levers E' F' are provided with slots to allow the pivots which form the connections to slide in and out as said levers swing up and down. These levers serve for closing the gate after it has been opened by the action of the levers E or F, and when the gate is closed a latch, *i*, which is hinged to the gate, catches over a pin, *j*, inserted in the upright D, and locks the gate. By raising the end *l* of the rail B, said latch is raised clear of the pin *j*, and the gate is free to roll down over the inclined plane of the rail B. On approaching the gate in the direction of the arrow marked near it in Fig. 2, the lever F is depressed and the gate opens, and at the same time the levers E' F' are thrown in such a position that by depressing either of said levers the gate closes. After the gate has been passed, therefore, it can be closed by depressing the lever E', and on approaching the gate in the opposite direction the operation is precisely the same—by depressing the lever E the gate is opened and by depressing the lever F' it is closed.

The gate is intended to be protected by a suitable roof, so that it is not exposed to the influence of the weather, and the rail B will be covered with a strip of iron, and the wheels or rollers *a* will be grooved, so that the gate moves as steady and as easy as possible.

I do not claim, broadly, the hanging of gates upon tilting rails; but

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

The employment of the centrally-pivoted double-angle rail B, in combination with the gate A, wheels *a*, and levers E F, in the manner herein shown and described.

D. R. WARFIELD.

Witnesses:

G. W. HUNT,

A. J. LEFFINGWELL.