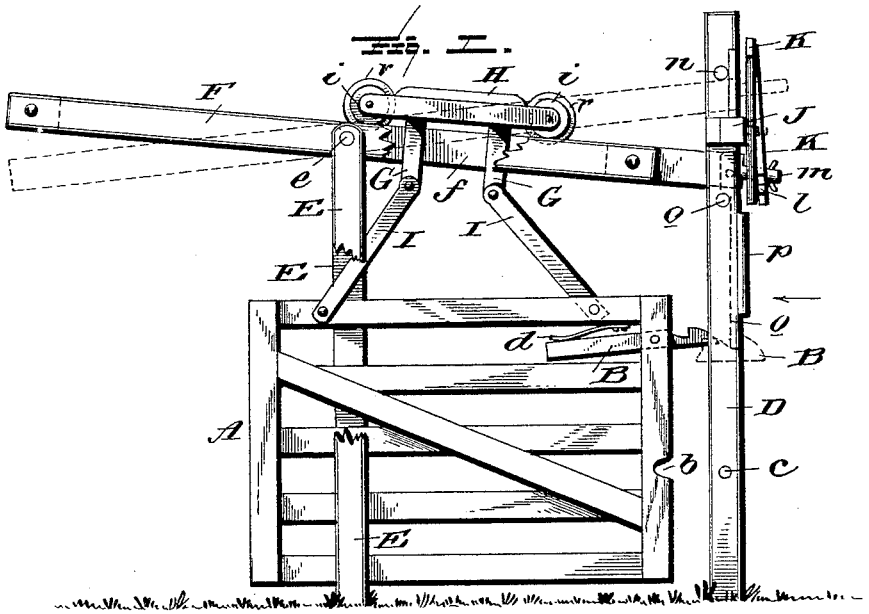
(No Model.)

M. B. ROBESON.

AUTOMATIC GATE.

No. 453,662. Patented June 9, 1891.



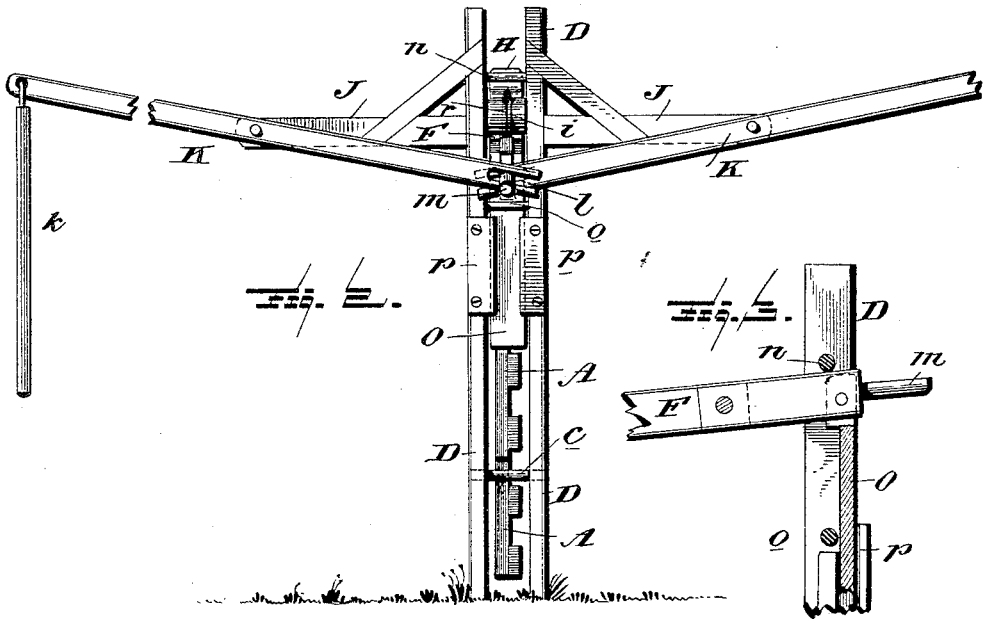


Fig. 2.

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

MILTON B. ROBESON, OF LAVINIA, TENNESSEE.

AUTOMATIC GATE.

SPECIFICATION forming part of Letters Patent No. 453,662, dated June 9, 1891.

Application filed February 9, 1891. Serial No. 380,779. (No model.)

To all whom it may concern:

Be it known that I, MILTON B. ROBESON, a citizen of the United States, residing at Lavinia, in the county of Carroll and State of Tennessee, have invented certain new and useful Improvements in Automatic Gates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in farm-gates; and the novelty resides in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side view with parts broken away showing my improved gate. Fig. 2 is an end view looking in the direction of the arrow in Fig. 1. Fig. 3 is a detail, partly in section and part in side elevation, showing the connection of the beam with the latch-holder.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the gate, which may be of any known or preferred construction, being provided with a horizontally-pivoted latch B, which extends beyond the vertical post of the gate, as seen in Fig. 1, and in the said vertical post or stile is formed a notch *b*, which is designed to receive the stop-pin *c* on the latch-post D. The latch B is provided with a spring *d*, which is confined between the top of the latch and the under side of the next higher rail of the gate, as seen in Fig. 1, and serves to keep the outer end of the latch elevated, as shown by full lines in Fig. 1.

D are the posts at the latch end of the gate. They are arranged a sufficient distance apart to allow the gate to pass freely between them, as seen in Fig. 2, and between them is arranged the stop-pin *c*, above referred to, and which enters the notch *b* of the gate as the latter comes against it and serves to stop the movement of the gate in that direction.

E are the posts at the other end, separated, as shown, so as to allow the gate to pass between them. On a suitable pivot *e*, held in these posts, is pivoted the beam F, which is slotted longitudinally with a vertical slot *f*, and on the upper face of this beam is designed to travel the block H, which is provided with a roller or rollers *i* at each end, traveling on the upper face of the beam, and from the under face of this block depend the rigid arms G G, to the lower ends of which are pivotally connected the hangers I, the other ends of which are pivotally connected with the top rail of the gate, the said hangers being connected with the gate upon opposite sides thereof, as shown in Fig. 1. These hangers serve to keep the gate at all times horizontal, and by being arranged upon opposite sides of the gate they keep the gate from turning from a right path.

To the posts D are secured the horizontal arms J, suitably braced, as seen in Fig. 2, and to the outer ends of these arms are pivotally secured the levers K, to the outer ends of which are suitably connected the handles *k*, as seen in Fig. 2. The other ends of these levers are slotted or bifurcated, as shown at *l* in Fig. 2, and engage a pin *m*, which is on the portion of the beam F which extends through between the posts D, as seen in all the views. This beam works between suitable stops *n* and *o* on the posts D, which limit the upward and downward movement of the beam, as will be seen from Figs. 1 and 3. To the front end of this beam is pivotally suspended a latch-holding plate O, which works in suitable guides *p* on the posts D, as seen in all of the views, and this plate is designed to engage and hold the latch B when the gate is closed.

The operation is apparent and will be readily understood from the foregoing description, when taken in connection with the annexed drawings. When the gate is closed, the plate O is down and engages the latch and locks the gate in its closed position. When the forward end of the beam is raised, the plate O is raised with it and releases the latch, and at the same time the beam is tilted in the op-

posite direction, as shown by dotted lines in Fig. 1, and the block, with the gate, travels downhill. When the beam is tilted in the direction shown by full lines, the block and the gate travel toward the posts D, and the same is automatically locked, the spring of the latch allowing it to ride under the plate O, as will be readily understood. It should be noticed that the rollers *i* have annular guide-flanges *r* disposed centrally thereon and adapted to enter the longitudinal slot *f* between the sides of the beam F, thereby serving to retain the block H in a true line with relation to the beam F and prevent the possibility of any lateral displacement.

What I claim as new is—

1. The combination, with the tilting beam, of the block arranged to travel thereon, and the gate suspended from the block by links which are connected with opposite sides of the said gate, substantially as specified.

2. The combination, with the slotted tilting beam, of the gate, the block arranged to travel on the upper face of the beam, the depending arms rigidly secured to the block and passed through the slot of the beam, and the links pivotally connected to the said arms and to the gate upon opposite sides thereof, as set forth.

3. The combination, with the tilting beam and the gate pivotally suspended therefrom and provided with a latch, of the vertically-disposed plate O, pivotally connected with the forward end of the beam, substantially as and for the purpose specified.

4. The combination, with the slotted tilting beam, of the block provided with rollers having guide-flanges to engage with the slot in the beam, and rigid arms and pivoted hangers connecting the block with the gate, and operating substantially as and for the purpose set forth.

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

MILTON B. ROBESON.

Witnesses:
R. L. McNEIL,
HOWELL ADAMS.