R. A. HORNING.

Automatic-Gate.

No. 164,373. Patented June 15, 1875.

Fig. I.

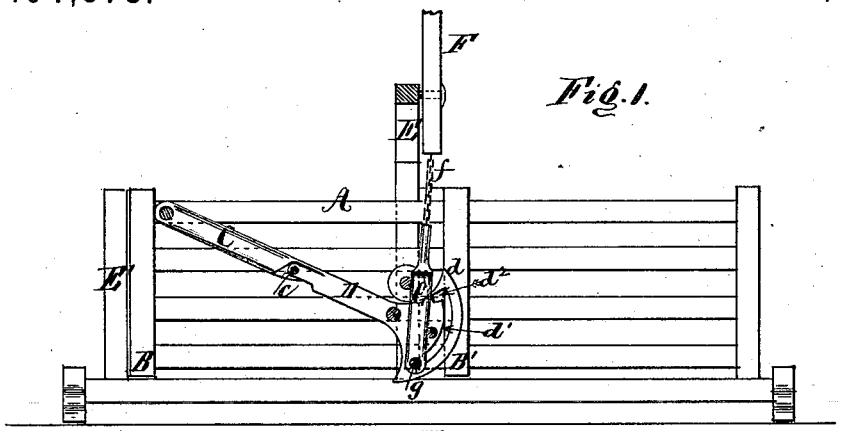


Fig. II.

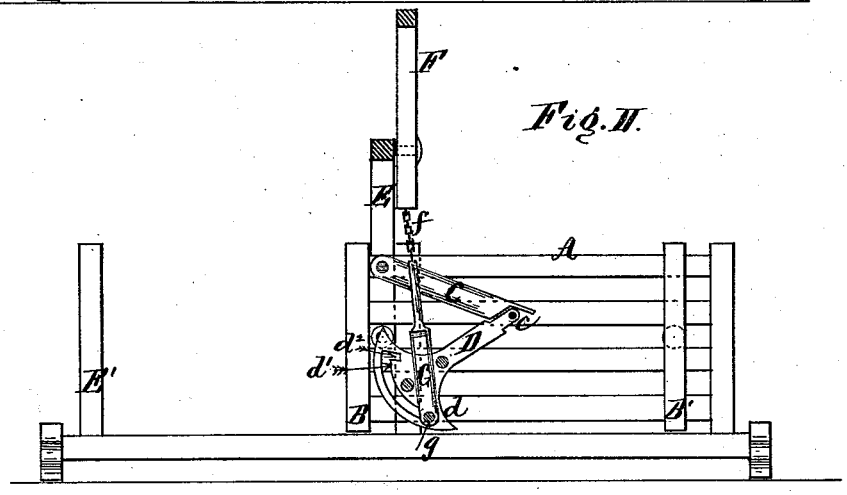
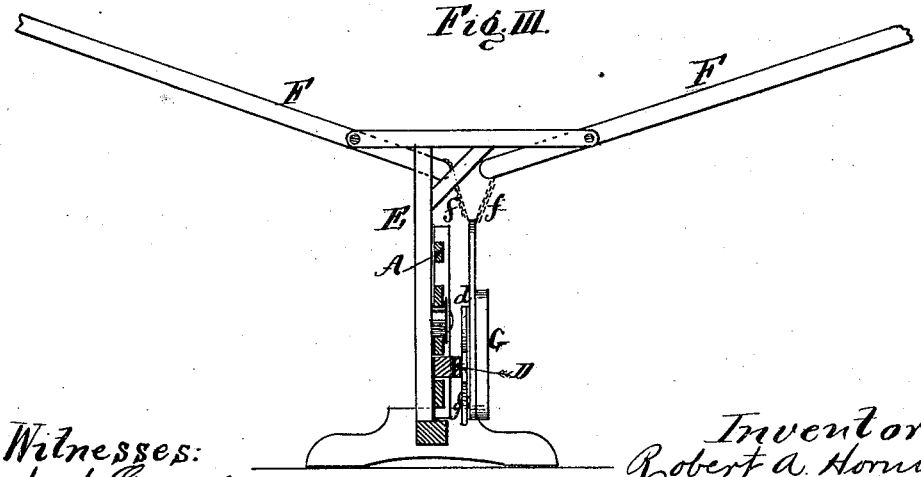


Fig. III.



Witnesses:
Richard Gerner.
Franklin Bassett.

Inventor:
Robert A. Horning.
Per,
Henry Gerner,
Atty

UNITED STATES PATENT OFFICE.

ROBERT A. HORNING, OF STERLING, ILLINOIS.

IMPROVEMENT IN AUTOMATIC GATES.

Specification forming part of Letters Patent No. **164,373**, dated June 15, 1875; application filed December 26, 1874.

To all whom it may concern:

Be it known that I, ROBERT A. HORNING, of Sterling, Whitesides county, State of Illinois, have invented an Improved Automatic Locking-Gate, of which the following is a specification:

This invention relates to an improved gate, to which is attached a lever on either side of it, so arranged as to be easily accessible to a person on horseback or in a vehicle, and by which the gate may be opened or closed without the necessity of dismounting to do it, and an automatic locking device, hereinafter more fully described, which securely locks the gate when closed.

The invention will be fully understood by reference to the accompanying drawings, of which—

Figure I is a side elevation of the gate closed, and with one panel of fence adjoining it. Fig. II is a side elevation of the gate and one panel of fence, with the gate open. Fig. III is a transverse sectional elevation of the same.

The gate A may be constructed, in any desirable form, of boards, pickets, &c., and will in all cases be provided with two straight ways, *a*, arranged horizontally, for the sheave B to travel upon as the gate is thrown open or closed. The weight of the gate is thrown upon the sheaves B and B′, and the gate, in opening and closing, moves in a line parallel with the fence, being, when open, placed side by side with one of the adjoining panels of the fence. A diagonal swinging arm-piece, C, is pivoted to the top front corner of the gate, and extends thence in a direct line toward the lower rear corner of the same, and reaches only about half of the distance between these two points, and at its lower extremity there is a pivot-pin, *c*, to which is attached a swinging lever, D, the said arm having on its lower or free end an enlarged head-piece, *d*, in which there is a segmental groove, d^1, in the end of which groove is a notch, d^2, extending into the head-piece *d* in a radial direction from the aforesaid groove. The gate-post E extends a few feet higher than the top of the fence, and to the top end of this post is pivoted two levers, F, which are connected to the link-connection G at their adjacent ends, while their free ends extend out in opposite directions perpendicular to the axis of the gate, and in such elevated positions and at such a distance from the fence as to permit a person on horseback or in a carriage to easily grasp their free ends and open or close the gate without dismounting by simply depressing the end of the lever. To the inner ends of the lever F is attached the weighted lever G by means of the chains or cords *f*, the link-connection G being weighted to counterbalance the weight of levers F. A stud, *g*, in the lower end of lever G fits into and moves in the segmental groove *d*′, and as the said link-connection G is thrown up or down by the operation of the levers F, the said stud *g* carries the head-piece *d* with it in its motions, and this motion throws the swinging lever D forward or backward, and this motion of lever D is communicated, through its pivot-pin *c* and the arm C, to the gate, which is thereby rolled into either its closed or open position by the action of the levers, as aforesaid.

When the gate is either opened or closed the stud *g* drops into one of the notches d^2, and thereby securely locks the gate, except when it is moved by the action of the levers before described.

Suitable notches or mortises should be provided in the gate-post E′, for the reception of the gate when closed, so as to hold it firmly in position.

Having thus described my invention, I desire to claim—

The link-connection G, with the stud *g* and head-piece *d*, which is provided with a segmental groove, d^1, and locking-notches d^2, in combination with the swinging arm C and lever D, levers F and G, and gate A, substantially as described.

ROBERT ALLEN HORNING.

Witnesses:

SAML. C. HARVEY,

PETER S. GABRIO.