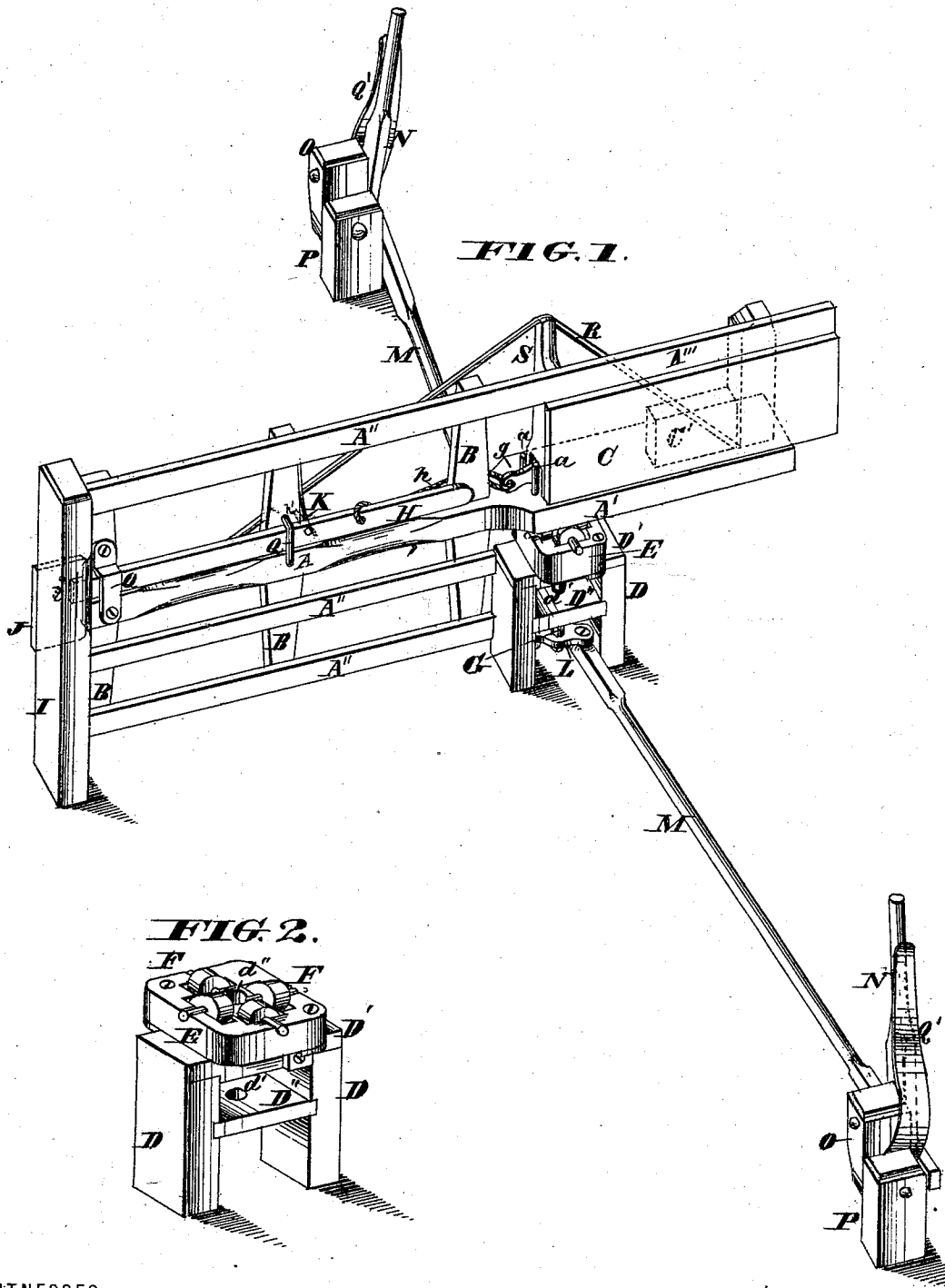


S. ERNST.

GATE.

No. 178,237.

Patented June 6, 1876.



WITNESSES

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SAMUEL ERNST, OF SHAUCKS, OHIO.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **178,237**, dated June 6, 1876; application filed January 31, 1876.

To all whom it may concern:

Be it known that I, SAMUEL ERNST, of Shaucks, in the county of Morrow and State of Ohio, have invented an Improvement in Mounting Counterbalanced Gates, of which the following is a specification:

My invention consists, first, in the combination of a counterbalanced gate, constructed with a wind-wing or equalizer, a shaft, and a supporting-frame, of a bearing-block provided with travelers or rollers located between the support and gate-frame, as hereinafter set forth.

My invention consists, secondly, in combining, with a counterbalanced gate, a shaft having an arm, a sliding catch, and a retracting-spring, said catch being attached to said arm by means of a chain or cord, so that as the shaft is turned the arm will draw the catch, as hereinafter set forth.

My invention consists, thirdly, in combining, with a lever which operates to open the gate, and is pivoted to a turning-block on a post, a guard to prevent stock from rubbing against the lever, and thereby opening the gate.

In the accompanying drawings, Figure 1 is a perspective view of the improved gate and counterbalanced wind-wing. Fig. 2 is a perspective view of my improved bearing-block.

A represents a beam, the forward end of which carries vertical bars B and horizontal bars A'', the uppermost bar, A'', extending rearwardly, as at A''', over the rear portion of the beam A. Between the rear portion of the beam A and the extended portion A''' of the uppermost bar A'', I furnish a counterbalanced wind-wing, C, having a surface equal in area to the surface of the solid part of the gate-frame, and designed to form an equalizer, thus preventing the wind from bearing with uneven pressure on any part of the gate.

D represents a supporting-frame, consisting of two posts and cross-beams, D' D'', having orifices d' d'' for the vertical shaft. G is

the shaft by which the gate structure is hinged to the frame D.

E is a block, interposed between the beam A and support D, and is rigidly secured to the latter. This block is furnished with any suitable number of travelers or rollers, F, for the beam to turn upon. Over the center of said block, and rigidly secured to the beam, is a standard, S, which is grooved at top for the support of a brace-rod, R, extending from end to end of the gate structure. C' is a counterbalanced weight on the rear of the beam.

The top of the shaft G is provided with an arm, g, for the attachment of a suitable latch-bar, H, by means of a chain or cord, h. The lower part of the standard S is excavated on one side sufficiently to permit the arm g to have limited movement, the pins a a on the beam limiting said movement of the arm.

I is a post, opposite the support D, provided with suitable excavation i, for the insertion of the latch-bar H. The plate J projects on one side of the post I, and limits the movement of the gate.

K is a spring on the center vertical bar, whose free end engages with a pintle, k', projecting horizontally from the latch-bar H, for retaining it in its normal position. The latch-bar H slides on the front end of beam A, in suitable guides Q.

To the lower end of the shaft G is applied a cross-arm, L, to the respective ends of which are attached connecting-rods M M, hinged to levers N N. The levers N N are pivoted to blocks O O, which swing on short posts P P, in line with the supporting-frame D. Q' Q' are guards attached to the blocks O O, to prevent stock from rubbing against the levers and opening the gate.

As the blocks O O swing laterally on the posts P P, the operating-levers N can be drawn toward the carriage, or set back, to suit the convenience of the driver.

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

1. The combination, with the counterbalanced gate constructed with wind-wings C, shaft G, and support D, of the bearing-block E, provided with travelers or rollers F, as and for the purpose set forth.

2. The combination of the counterbalanced gate having shaft G, provided with arm *g*, sliding latch H, retracting-spring K, and connecting cord or chain *h*, as and for the purpose set forth.

3. The combination, with the lever N, pivoted to block O, turning on the post P, of the guard Q, as and for the purpose set forth.

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Witnesses:

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