M. S. G. Wilde.

Swinging Gate.

No. 93,027. Patented Jul. 27, 1869.

Fig. 1.

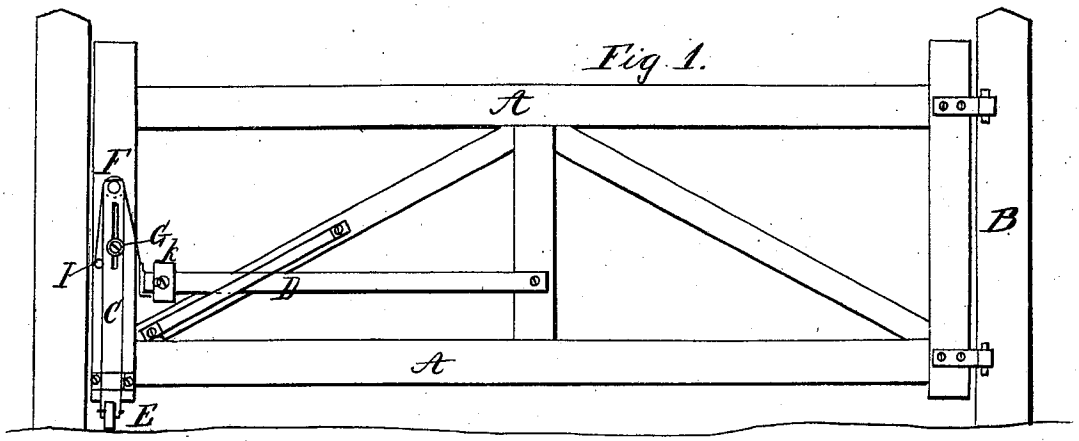


Fig. 2.

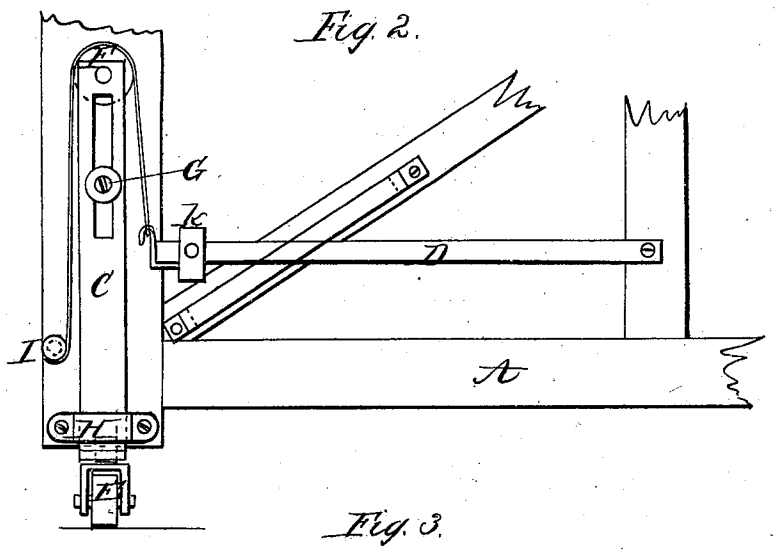
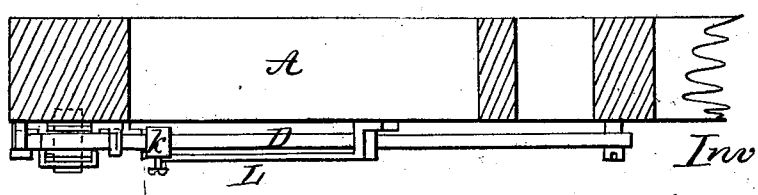


Fig. 3.



Witnesses,

Edw. Edmunds

Thos. Dickinson

Inventor,

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United States Patent Office.

MAXIMILIAN S. G. WILDE, OF SOMERVILLE, ASSIGNOR TO HIMSELF AND JAMES H. NOBLE, OF PITTSFIELD, MASSACHUSETTS.

Letters Patent No. 93,027, *dated July* 27, 1869; *antedated July* 15, 1869.

IMPROVEMENT IN GATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MAXIMILIAN S. G. WILDE, of Somerville, in the county of Middlesex, and State of Massachusetts, have invented a new and improved Gate, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents an elevation of a gate embodying my invention;

Figure 2 is an enlarged detailed elevation of a part of the gate; and

Figure 3, an enlarged detailed plan of the same.

Like letters indicate like parts in the several figures.

The object of my invention is to produce a swing-gate, on which the end farthest from the hinges is supported independently from the latter, thus making the construction of very long gates, as at railroad-crossings, practicable without the use of heavy structures, massive hinges, braces, or strong posts, and combining economy, lightness, neatness of appearance, and better protection than the ordinary beam-gate; and

My invention consists in balancing the free end of the gate by a weight and on a sliding bar, which latter forms the fulcrum; further, in having the action of this balancing-weight constant, irrespective of the nature of the ground.

Referring to the drawings—

A A is the frame of a swing-gate, hinged to a post, B.

To the vertical frame, at the free end, is secured, in a suitable manner, the sliding bar C, provided at its upper portion with the roller F.

Over this roller passes a strap of leather or other suitable material, or a steel band, one end of which is firmly attached to the pin I of the frame A, the other end to a lever, D.

The latter is attached with one end to any convenient part of the gate, so as to give it full swing in a vertical plane, and is provided at the other end with a movable weight, K.

The position of the weight K is more or less near the free end of lever D, so as to balance the weight of the gate at the frame to which the bar C is attached.

The lower portion of the sliding bar C is provided with the roller E, for the purpose of facilitating the moving of the sliding bar over the ground.

When opening the gate, and suppose the ground to be sloping, the sliding bar will always be pressed downward with the united weight of half the gate and the balancing-weight, and when closing the gate, the bar will rise with the ground, and thus present an equal resistance to the gate, and supporting it independently from the hinges.

For iron gates of great length, a number of sliding bars and weights may be applied at different portions of the gate, and thus adjust and relieve the strain on the hinges, in proportion to the distances from the same.

I do not confine myself to a weighted lever for balancing the gate, but a suspended weight or a regulated spring may accomplish the same purpose.

For convenience and security, the sliding bar and strap may be encased by a metallic shell or a wooden box.

Having thus fully described my invention,

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

1. The sliding bar C, in combination with a swing-gate or door, for the purpose as above specified.

2. The combination of the sliding bar C with a strap and weight, K, in the manner and for the purpose substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

MAXIMILIAN S. G. WILDE.

Witnesses:

CHAS. O. WILDE,

JULIUS A. WILDE.