A. J. CURTIS.

Mechanism for Opening and Closing Farm Gates.

No. 25,812. Patented Oct. 18, 1859.

Fig. 1

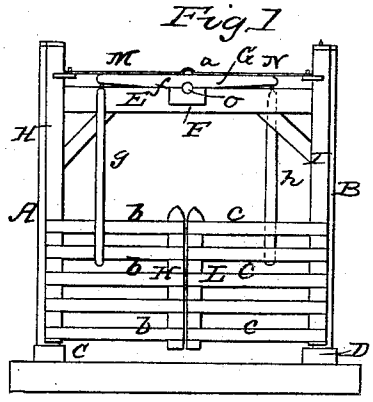


Fig. 2

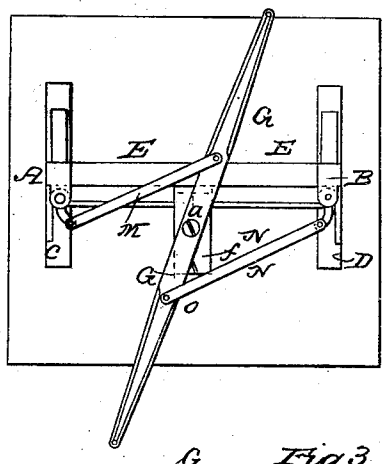
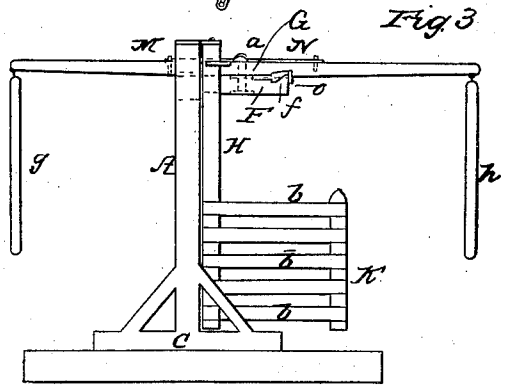


Fig. 3



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ANDREW J. CURTIS, OF FRANKFORT, MAINE.

OPERATING FIELD-GATES.

Specification of Letters Patent No. 25,812, dated October 18, 1859.

To all whom it may concern:

Be it known that I, ANDREW J. CURTIS, of Frankfort, in the county of Waldo and State of Maine, have invented an Improvement in Mechanism for Opening and Closing Farm or other Gates; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, denotes a front elevation of a gate frame and gate, with my invention applied thereto. Fig. 2, a top view. Fig. 3, a side elevation showing the gate as opened.

The nature of my invention consists in a peculiar arrangement of mechanism for opening and closing a gate, the same consisting of a two armed lever and two connecting rods, applied to the said lever and the outer vertical parts of the gate in manner as will be hereinafter specified.

It also consists in combining therewith a peculiar locking contrivance, whereby the two parts of the gate are firmly maintained either open or closed as circumstances may require.

In the drawings, A, and B, denote two vertical standards or posts, as supported respectively by two foundation timbers or supports C, D, the said posts being united together near their upper ends by a cross bar E, such constituting what is usually termed a "gallows frame." To the front face of the bar E, a projection or bar F, extends, the same being jointed to the bar E, as seen in the drawings. To the top part of the extension F, the two armed lever G, is secured by means of a screw or bolt *a*, the said screw serving as a fulcrum on which the said lever can be rotated horizontally.

H, I, respectively represent the longer vertical posts of each half of the gate, each being pivoted or stepped at its lower end in one of the foundation timbers C, or D, while the upper end of each of the said posts is hinged to the top of the standard A, or B, or with that, with which it is in juxtaposition, as seen in the drawings.

K, L, respectively represent the inner posts of each part of the gate, the same being intended to abut against each other when closed, in manner as shown in Fig. 1, the length of the horizontal rails *b b b b b*, *c*, *c*, *c*, *c*, *c*, (connecting each outer and inner post) being such as to allow the said outer and inner posts when brought together to stand nearly in the same vertical plane.

To the top surface of the lever G, two connecting rods M, N, are attached the same being jointed on opposite sides of the fulcrum *a*, in positions as shown in Fig. 2. The other ends of the said rods are respectively hinged to the vertical posts H, I, as seen in said figure.

For the purpose of maintaining the gate either open or closed, as circumstances may require, I form or place on the top surface of the extension F, in manner as shown in Fig. 2, a block *f*, triangular in horizontal section, the same having its vertical faces so arranged that one shall stand in or about in the same vertical plane with one vertical face of the lever G when the gate may be closed; and when the gate may be open the other vertical face of the block *f* shall be in or nearly in the same vertical plane with the other side of the said lever—and moreover on the outer end of the said block *f*, I place a friction wheel O, for the purpose of enabling the lever G, when raised upward, to easily move over the block *f*, so as to permit the gate to be either opened or shut, as circumstances may require.

For the purpose of enabling a person to unlatch the gate, and either open or close the same, I attach, to the outer ends of the lever G, pendants *g*, *h*, the same being arranged as shown in the drawings and intended when the gate is either open or shut, to hang just outside of the pathway, so as not to interfere with a carriage approaching the same.

Having described the construction of my improved gate I will now describe its mode of operation: If we suppose the gate to be closed and fastened, as shown in Fig. 2, and a horse and carriage to approach the front side thereof, the driver, desiring to pass through the gate drives the horse and carriage into such position that he can easily seize the pendant in his hand, which having done, he raises the lever G, above the block *f*, and causes it to move horizontally, over the top thereof and drop upon the other side of the said block; by such movement he not only opens the gate but firmly maintains it open. After driving the team through the gateway, he seizes the pendant on the other side of the gate, raises the lever G, and moving it horizontally to the left, over the block *f*, shuts the gate, and the lever G, or the arm *b*, thereof being longer than the arm *a*, the action of gravity will cause it, when it has passed over the said block or fastening

device, to fall by the side thereof, and thus lock the gate again.

A gate constructed in the above described improved manner is very simple in construction, very efficient in operation and little liable to get out of order.

What I claim is—

1. The improved arrangement of mechanism hereinbefore described, for opening or closing a gate, the same consisting of the lever G, and the connecting rods M, N, applied to the said lever and the gate posts H, I, substantially in manner and for the purpose set forth.

2. And in combination therewith, I claim the peculiar arrangement of the block *f*, the same operating in connection with the lever G in manner and for the purpose specified.

ANDREW J. CURTIS.

Witnesses:

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