

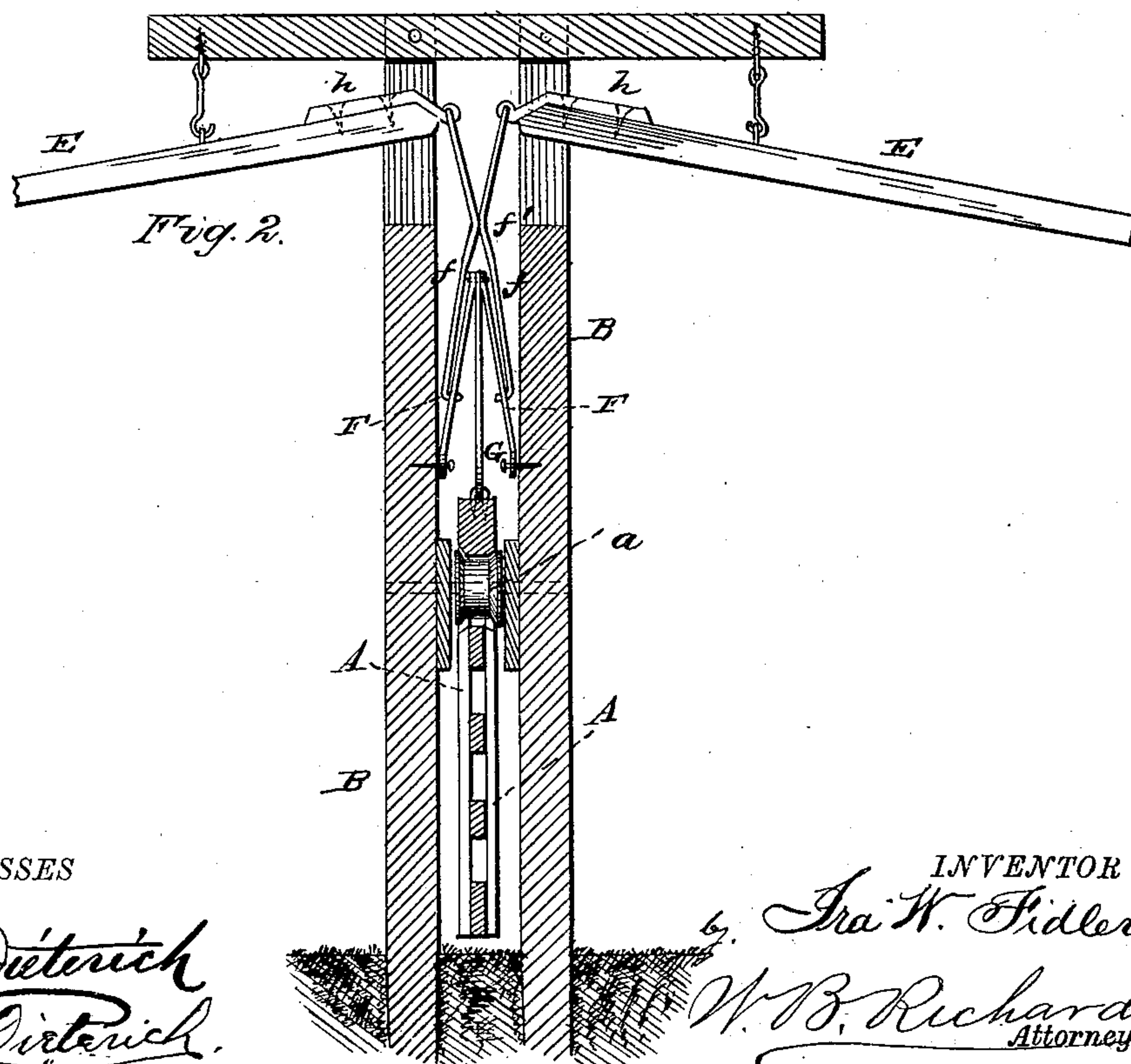
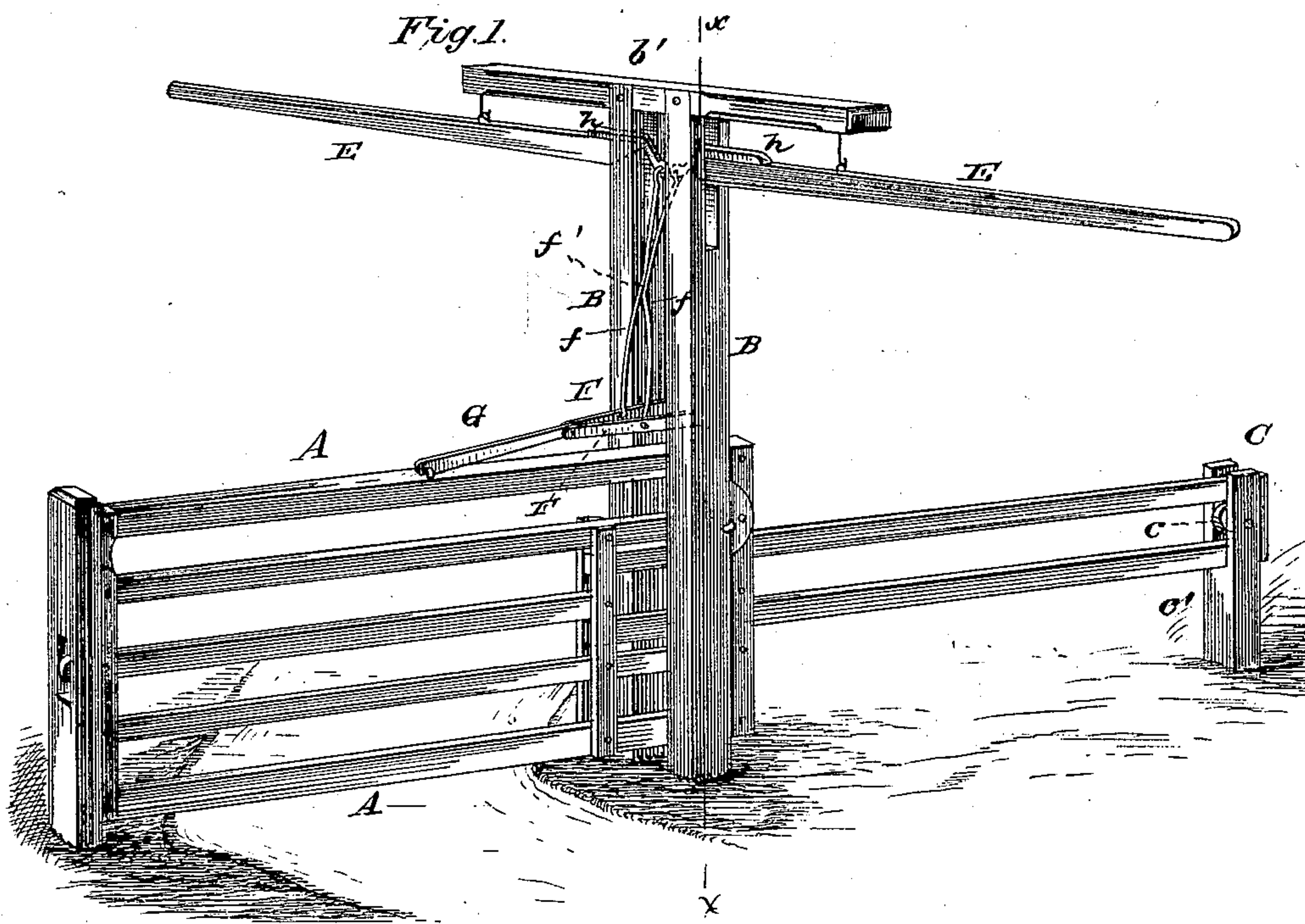
(No Model.)

I. W. FIDLER.

FARM GATE.

No. 251,202.

Patented Dec. 20, 1881.



WITNESSES

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FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 251,202, dated December 20, 1881.

Application filed September 19, 1881. (No model.)

To all whom it may concern:

Be it known that I, IRA W. FIDLER, a citizen of the United States, residing at Mount Pleasant, in the county of Henry and State of Iowa, have invented certain new and useful Improvements in Farm-Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in the class of longitudinally-sliding gates mounted or suspended on rollers and operated through the medium of levers and intermediate toggle-lever connections, by which, when the gate is thrown forward or backward of its point of suspension or center of gravity, its momentum will carry it farther forward or backward, so as to completely close or open the gate; and to this end the invention consists in novel features of construction and combination and arrangement of parts, all as will be hereinafter fully described, and designated in the claims.

Referring to the accompanying drawings, Figure 1 is a perspective of my improved gate. Fig. 2 is a section through the line *xx* of Fig. 1.

A in the drawings represents the gate, suspended in the usual manner upon a roller, *a*, journaled to or mounted in bearings secured to the uprights B B, between which the gate is adapted to be reciprocated longitudinally in opening or closing it.

The gate is provided at its rear end with a horizontally-projecting slotted guide-bar, C, which plays on a roller, *c*, journaled in a slotted standard or post, *c'*, arranged a suitable distance in rear of the uprights B, which should correspond substantially with the distance between the said uprights and the usual latch post arranged in front of the uprights, which distance corresponds with the length of the gate, and all of which is of the ordinary construction in the above-described class of gates. The uprights B are slotted at their upper ends, through which pass the inner ends

of the operating-levers E E, which are fulcrumed a short distance from their inner ends to the projecting ends of the cross bar *b'*, connecting said uprights B together at or near the top ends thereof.

To the upper rail of the gate, near its longitudinal central point, is pivotally connected one end of a rod, G, having its other end pivotally connected to and between the ends of diverging bars F F, which are pivotally connected at their other ends to the inner sides of the uprights B B a short distance above the pivotal connection of the rod G to the gate.

ff represent two arms connected together at or near the point *f'*, and then curved or bent outward and inward above and below said point *f'*, and pivotally connected at their lower ends to the diverging bars F F and at their upper ends to the inner ends of the levers E E, or the weights *h h*, arranged on top and projecting beyond the inner ends of said levers. By having the arms *ff* curved or bent outward below their connection *f'*, the bars F F and rod G, forming the toggle-lever, will pass readily between said arms as the gate is moved forward or backward of its center of gravity. By employing the two diverging bars F F the gate will at all times be held in proper position, whether arranged on the side of a hill or on level ground.

The operation of my improved gate is as follows: When the gate is closed, as shown at Fig. 1, it may be opened by a person, approaching it from either side, taking hold of one of the levers E and drawing downwardly upon its outer end, thereby raising the toggle-levers and drawing the gate backward until the toggle-levers assume a vertical position, when the momentum of the gate will carry it onward by releasing the lever to permit such movement of the gate.

In gates of this class the momentum is not sufficient to carry the gate to an entirely opened or closed position, and to remedy this defect I have placed the weights *h h* on the inner ends of the levers E, which weights, when the center of the gate has passed the supporting-uprights, will press downwardly on the toggle-levers and force the gate to a full opened or

closed position, and at the same time bring the levers into proper position for another operation on the gate.

It will be seen that the gate can be opened
5 and closed by the same operation.

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

10 1. The combination, with a sliding gate, A, uprights B B, and operating-levers E E, of the toggle-lever composed of the pivoted rod G and pivoted diverging bars F F, and the arms *ff*, connected together and curved or bent as shown, and pivotally connected to said diverg-

ing bars and operating-levers, substantially in 15 the manner as and for the purpose described.

2. The combination, with a sliding gate, A, uprights B B, and toggle-lever connecting said gate and uprights, of operating-levers E E, weighted at their inner ends and suitably con- 20 nected to said toggle-lever, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

IRA W. FIDLER.

Witnesses:

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