(No Model.)

G. W. E. HART.

SLIDING GATE.

No. 306,247. Patented Oct. 7, 1884.

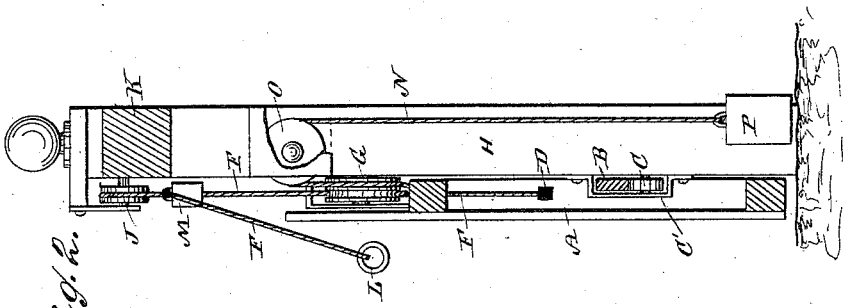

Fig. 2.

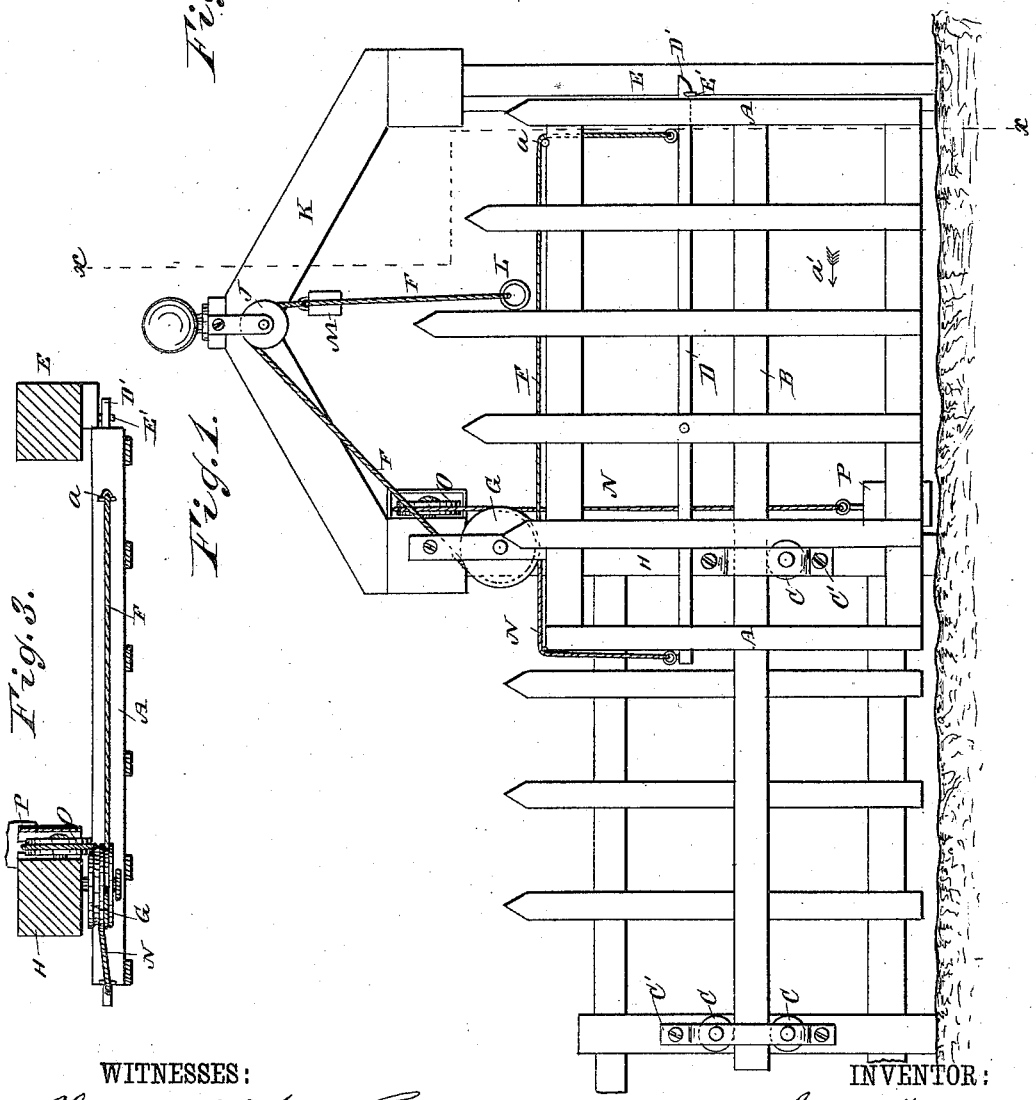

Fig. 1.

Fig. 3.

WITNESSES:

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GEORGE W. E. HART, OF MODESTO, ASSIGNOR OF ONE-HALF TO ALBERT F. BROWN AND HERMAN L. BROWN, BOTH OF WAVERLY, ILLINOIS.

SLIDING GATE.

SPECIFICATION forming part of Letters Patent No. 306,247, dated October 7, 1884.

Application filed March 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. E. HART, of Modesto, Macoupin county, Illinois, have invented a new and Improved Sliding Gate, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved sliding self-closing gate which can be opened readily and which works easily.

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improved sliding gate. Fig. 2 is a cross-sectional elevation of the same on the line *x x*, Fig. 1. Fig. 3 is a sectional plan view of the same.

On the gate-frame A a horizontal bar, B, is fastened, which is held between rollers C, pivoted in casings C′, secured to the outer surface of the gate-post and the adjoining fence-post, so that the bar B will rest on the lower rollers, C, and can slide on the same. A latch-lever, D, is pivoted at or near its middle to the gate, and is provided at one end with a hook, D′, adapted to engage with a catch or projection, E′, on the gate-post E. A cord, wire, cable, or chain, F, secured to the hook end of the lever D passes over a pulley, *a*, in the top bar of the gate-frame, then over a pulley, G, journaled on the post H, and then over a pulley, J, journaled at the middle of the top or cross-piece K, uniting the tops of the gate-posts H E.

To the free end of the cord F a ring, L, or other handle is fastened, and a weight, M, is also secured to the rope or cord F at or near the free end for keeping the rope taut. A cord, cable, rope, or wire, N, is secured to that end of the latch-lever D opposite to the one on which the hook D′ is formed, passes over a pulley on the gate under the pulley G, and then over a pulley, O, on the side of the post H, and to its free end a weight, P, is secured. The weights can be made of metal, or can consist of stones, buckets filled with stones, &c.

Cords, wires, chains, or ropes can be used for operating the gate.

The operation is as follows: If the gate is closed, as shown in Fig. 1, and it is to be opened, the cord F is pulled, whereby the hooked end of the lever D is raised and disengaged from the catch or projection E′, and by further pulling on the cord F the gate is moved in the direction of the arrow *a′*, and thus is opened. If the gate is moved in the direction of the arrow *a′*, the fixed end of the cord N is drawn in the same direction, and thereby the weight P is raised. As soon as the cord F is released the weight P descends, and by pulling the cord N downward moves the gate in the inverse direction of the arrow *a′*, thus closing it. When the gate closes, the hook D′ snaps over the catch or projection E′. The weight P pulls upward on the inner end of the lever D, thereby pressing the hooked end D′ on the projection E′, and thus keeping the gate latched. If the weight P is not sufficiently heavy to hold the hook end of the latch-lever D down, a weight can be secured to the latch-lever D near the hook end.

The gate is intended, mainly, for a yard-gate, and is to be constructed of palings, wire, or iron. It can be made large or small, and as a single gate, or as a double gate closing at the middle.

My improved gate is simple in construction, well balanced, works very easily, and is not apt to get out of order.

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

1. The combination, with a sliding gate, of the pivoted latch-lever D, the rope, cord, or wire F, secured to the same, the pulleys G and J, journaled on the gate-frame, and over which the cord F passes, the pulley O, the cord N, connected with the gate, and passing round the pulleys G and O, and of the weight P, secured to the free end of the cord N, substantially as herein shown and described.

2. The combination, with a sliding gate, of the pivoted latch-lever D, the cords F and N,

secured to opposite ends of the same, the double pulley G, the pulleys J and O, to which the cords F and N respectively pass from the pulley G, the weight P on the free end of the cord N, and the weight M, and handle L on the cord F, substantially as herein shown and described.

3. The combination, with a sliding gate, of the pivoted lever D, the cord F, secured to the same, the pulleys G and J, journaled to the gate-post H, and cross-piece K, over which pulleys the cord F passes, and of a rope or cord passing over suitable pulleys, and a weight secured to the free end of the said rope or cord, substantially as herein shown and described.

GEORGE W. E. HART.

Witnesses:
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