(No Model.)

A. J. BROWN & J. K. DRAKE.

FARM GATE.

No. 590,449. Patented Sept. 21, 1897.

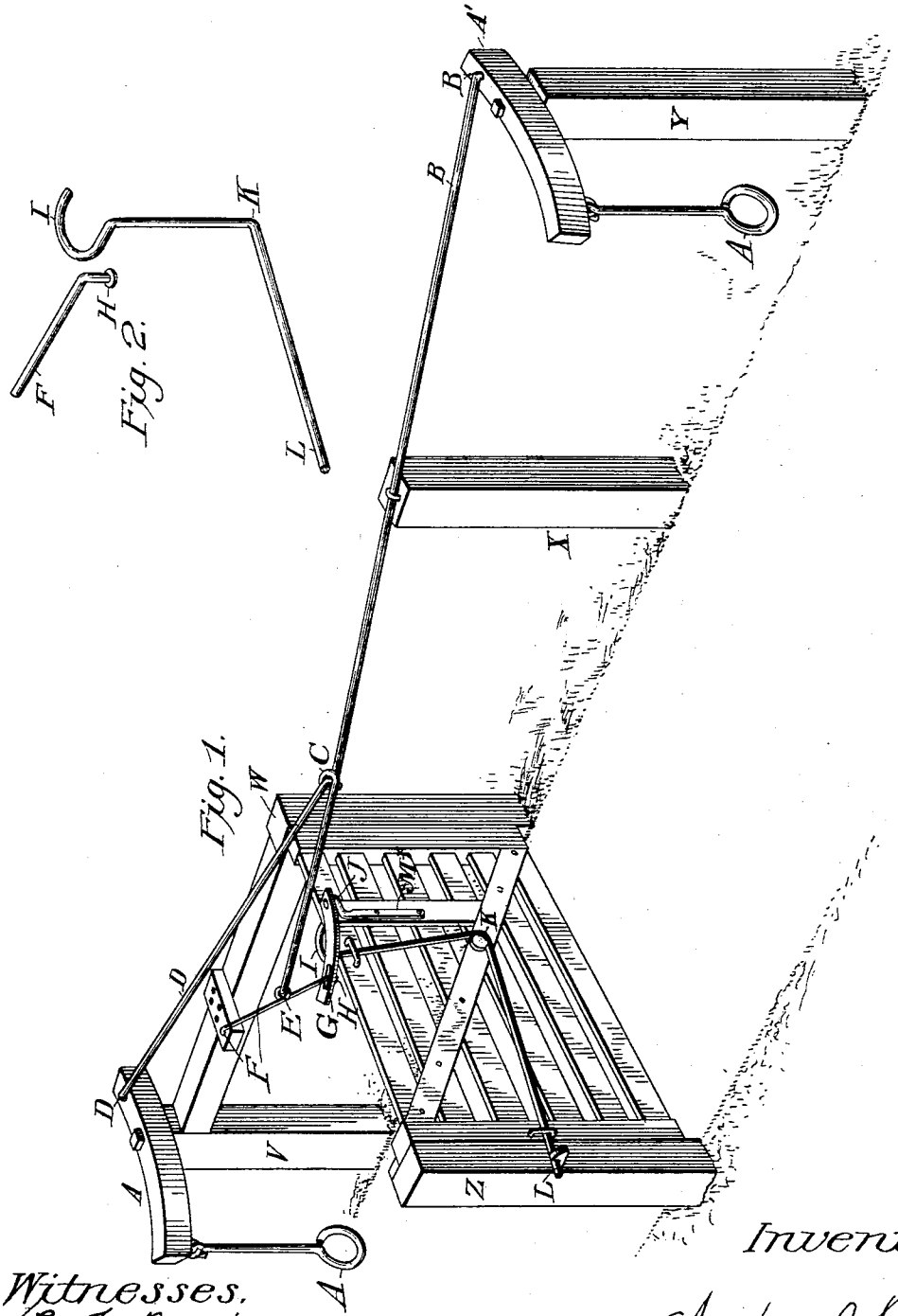

Fig. 2.

Fig. 1.

Witnesses.
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UNITED STATES PATENT OFFICE.

ANDREW J. BROWN AND JOHN K. DRAKE, OF FRANKLIN, INDIANA; SAID BROWN ASSIGNOR TO SAID DRAKE.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 590,449, dated September 21, 1897.

Application filed January 16, 1896. Serial No. 575,792. (No model.)

To all whom it may concern:

Be it known that we, ANDREW J. BROWN and JOHN K. DRAKE, citizens of the United States, residing at Franklin, in the county of Johnson and State of Indiana, have invented a new and useful Improvement in Gates, of which the following is a specification.

Our invention relates to the improvement of what is known as "automatic" gates, and has particular relation to farm-gates.

The improvements we claim are illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of the gate with all the attachments thereto, and Fig. 2 is a perspective view of the gate-latch complete.

Similar letters refer to similar parts in both views.

The posts required are five in number, respectively, V, W, X, Y, and Z, V, W, X, and Y being, respectively, V, road lever-post; W, post to which gate is hung; X, post midway between gate-post W and lever-post Y, which is the extreme post from gate; Z, a post to which gate is latched by latch L when gate is closed.

The levers on top of posts V and Y are respectively curved alike. On the gate, about one-third the distance from post W to post Z, is bolted a projecting bar M, to which is pivoted a curved lever G. The free end of the curved lever is slotted to receive a pivot on the end of rod F.

H is the nut on the end of the pivot of rod F. The other end of rod F is pivoted to a support between posts V and W.

At E in rod F is a slot in which one end of rod B is pivoted, the other end of rod B being pivoted in one end of lever A' on top of post Y.

At C rod B is slotted and receives the pivot on the end of rod D, the other end of rod D being pivoted in the end of lever A on top of post V.

Latch L is angular in shape, one arm thereof being about twice the length of the other. The upper end of the vertical arm of said latch makes a turn toward the gate, forming a right angle just above a level with the gate, then extends out over the opposite side of the gate, and then gradually curves toward the right, forming almost a semicircle, the whole curve so formed being horizontal. Said latch is fastened to the gate by means of a bolt at the vertex of the angle about one-third the distance from post W to post Z.

On approaching the gate on the side of post Y a pressure upon lever A in the direction of the gate causes rod B to pull upon rod F at point E, causing pivot on the end of rod F in slot G to press upon the semicircular latch-trip, raising the latch from catch on post Z. Further pressure upon lever A causes rod F and the curved lever G to change their positions to each other, so as to form approximately a straight line, thus increasing the distance between projecting bar M, to which the curved lever G is pivoted, and the point on the support between posts V and W, to which rod F is pivoted. Increasing the distance between projecting bar M and the point on the support to which rod F is attached forces the gate in the direction of post Y to post X. Pressure upon lever A at post V in the direction of the gate causes rod D to pull upon rod B at point C, which in turn pushes upon rod F at point E, thereby forcing rod F and curved lever attached to projecting bar M to their original positions and thereby closing the gate. Pulling upon lever A at post V causes rod D to push upon rod B at point C, causing rod B to pull upon rod F at point E, causing rod F to move in slot G in curved lever toward post W, pressing against the semicircular trip-latch, thereby raising the latch. Further pulling upon lever A at post V causes rod F and curved lever to assume an approximately straight line, increasing the distance between projecting bar M and the point at which rod F is attached to the support between posts V and W and thereby forcing the gate to post X. Pulling upon lever A at post Y in the direction of the gate reverses the operation and closes the gate, the latch rising upon the curved catch on post Z and dropping into the square-shouldered notch.

Having fully described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination with a gate provided with

an angular latch-rod L, K terminating above the gate in curve I and carrying also a curved lever G pivoted to a projecting bar M, of the connecting-rod F pivoted at one end in a slot near the free end of curved lever N and at the other upon a support between posts V and W, operating-levers A, A, and rods B, D, all arranged and coöperating substantially as shown above.

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