

(No Model.)

A. DAVISON.
GATE.

2 Sheets—Sheet 1.

No. 572,475.

Patented Dec. 1, 1896.

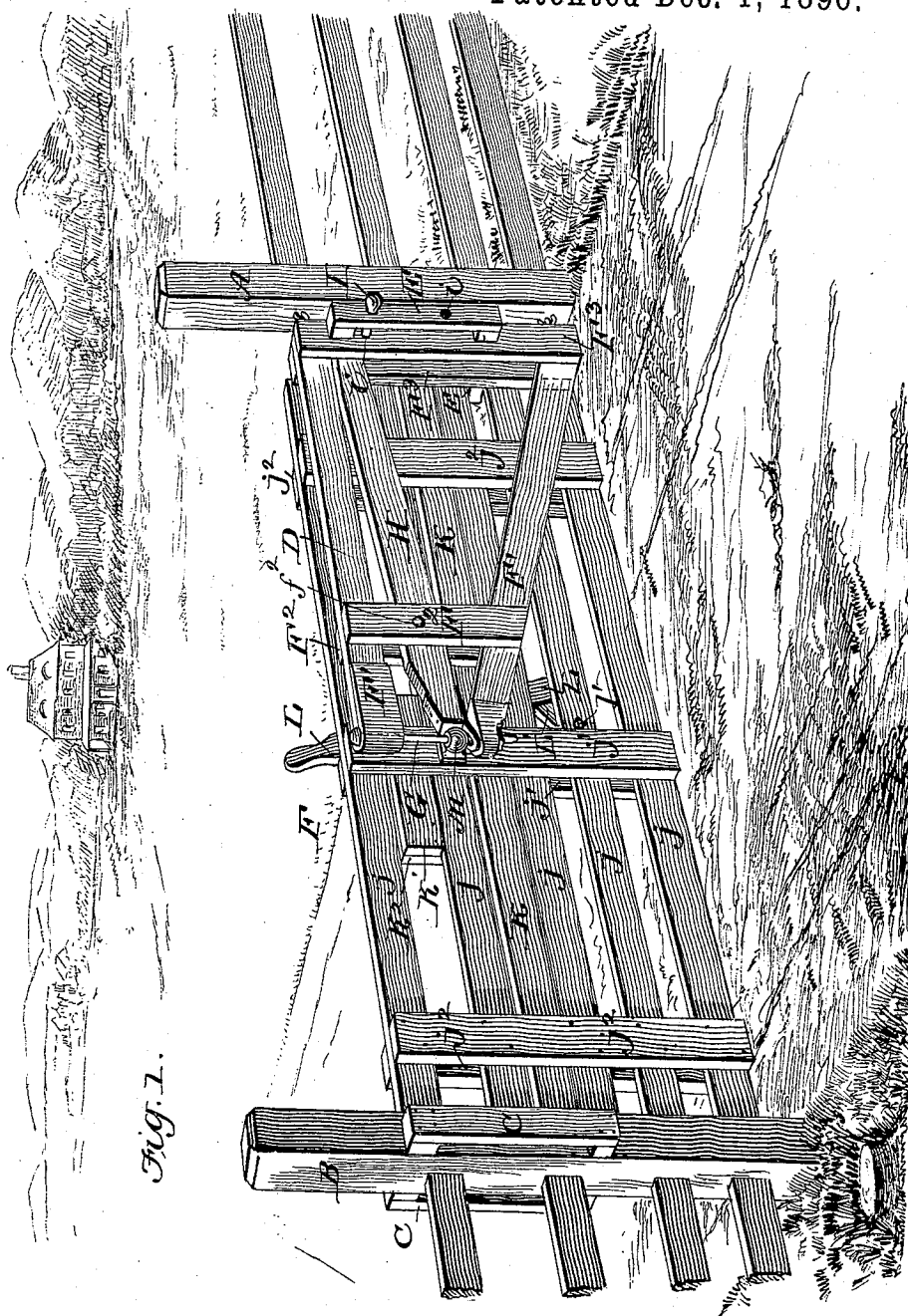


Fig. 1.

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ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

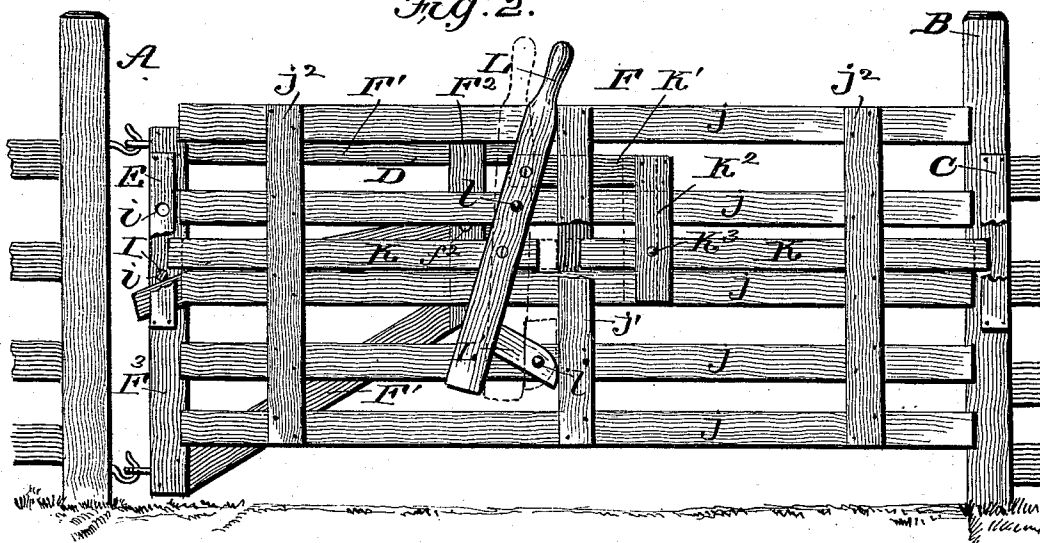
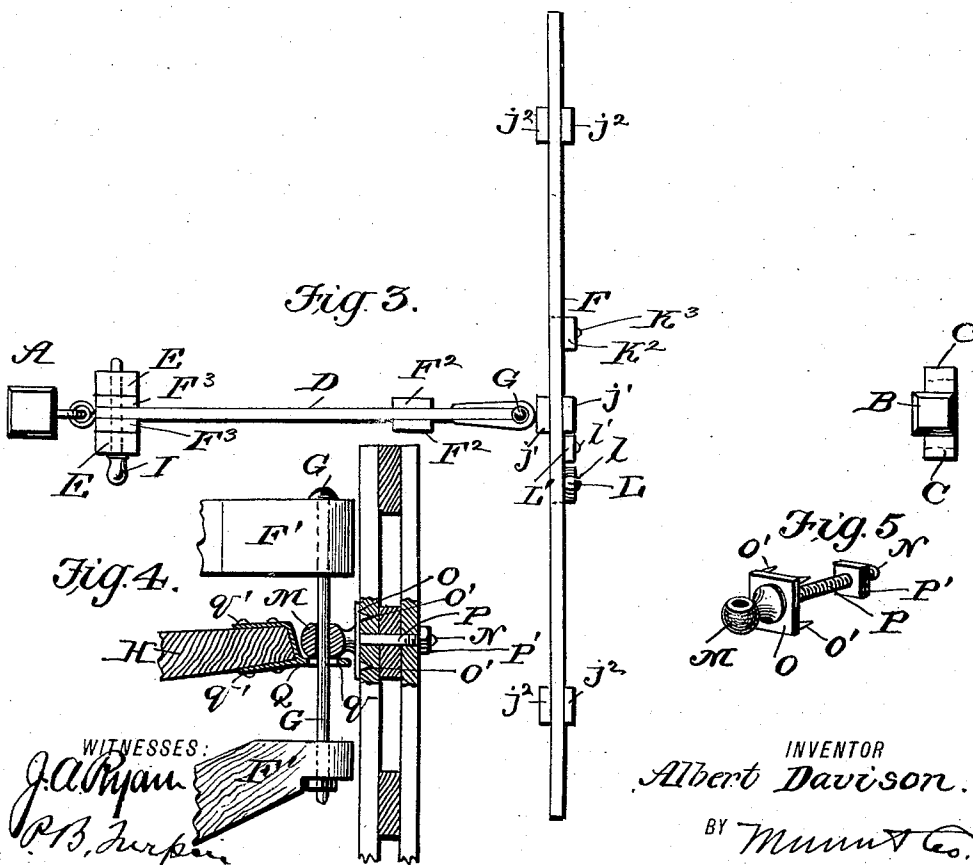


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALBERT DAVISON, OF BELVIDERE, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 572,475, dated December 1, 1896.

Application filed March 17, 1896. Serial No. 583,540. (No model.)

To all whom it may concern:

Be it known that I, ALBERT DAVISON, of Belvidere, in the county of Boone and State of Illinois, have invented a new and useful Improvement in Gates, of which the following is a specification.

This invention is an improvement in gates; and it consists in certain novel constructions and combinations of parts, as will be herein-
after described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my gate as in use closed and with the gate proper lowered. Fig. 2 is a face view of the gate from the side opposite that shown in Fig. 1 with the gate proper raised. Fig. 3 is a top plan view of the gate with the gate proper swung open, and Figs. 4 and 5 are detail views.

The hinge-post A and the latch-post B may in themselves be of ordinary construction. The post B is provided on opposite sides with the bolt-seats C C, which are adapted to receive the bolt on the gate and are elongated vertically in order to permit the vertical adjustment of the gate when the bolt is seated and also to permit the seating and unseating of the bolt when the gate is at different heights.

The crane D is hinged at one end to the hinge-post A and is provided at such end with opposite bolt-seats E E, which are elongated similarly to the seats C, so they may receive the bolt on the gate in any vertical adjustment of such gate.

The gate F is hinged at its middle to the outer end of the crane and is adjustable vertically upon said crane, and operating means are provided by which forcibly to adjust said gate upward. The hinging is effected and the power mechanism applied in the manner which I will now describe. At the swinging end of the crane I provide an upright guide-rod G, connecting the upper and lower beams F' F', and these beams are connected and braced by the opposite battens F² F², arranged, preferably, near the rod G, and by the opposite battens F³ F³, arranged at the rear hinged end of the crane and supporting the bolt-seats E. These battens F² F² F³ F³ form supports and guides for the lever H, which is pivoted at f² to and between the battens F², is arranged at one end to operate the gate,

and moves at its rear end between the battens F³, a pin I, passed through openings i, serving as a detent by which to secure the lever and hold the gate in any desired adjustment.

The gate F has the bars j, the central battens j', and the outer battens j² and is provided with the reversely-operating bolts K K, movable longitudinally in the gate and connected with the centrally-pivoted lever L, one above and the other below the pivot l of said lever, so that the rocking thereof will throw the bolts in opposite direction, one into the seat of the crane and the other into the seat upon the latch-post.

The gate is provided centrally with an eye M, sliding and turning on the guide-rod G, so that the gate may swing or be adjusted vertically on the crane. This eye is preferably part of the eyebolt N, having adjacent to said eye a face-plate O, having pins or spurs O' and a projecting threaded shank P passed through the gate and receiving the securing-nut P'. The pins or spurs O' prevent any turning of the gate and avoid the necessity of using separate screws or nails. This eyebolt can be cast at small expense and readily applied. The lever bears at its point under the eye M and slides upon the rod G, such lever-point being preferably in the form of a casting Q, having a projecting lug q, perforated to receive the bolt K, and rearwardly-projecting lugs q', which lap above and below the end of the lever-beam and are bolted or otherwise suitably secured thereto.

The operation will be readily understood. The lever L may be operated to seat or unseat the bolts K, and this latching or unlatching of the gates does not necessitate any lifting of the gate, but may be effected when the gate is in any of its positions up or down without changing such position of the gate. Again, the gate always remains horizontal and vertical, if necessary, and need not be tilted in latching or unlatching the same. Both the bolts are operated by one lever and slide freely in the different positions to which the gate is set up or down. The gate may be readily lifted to set it above the snow or to let small animals pass through, and such adjustment of the gate may be effected without

detaching any of the operating parts, but with the greatest ease, by the operation of the lever II.

It should be understood that the construction of the bolt-seats permitting the latching and unlatching of the gate in its different vertical adjustments and without necessitating the lifting of the gate is an important feature of my invention.

The several parts for raising and letting down the gate are arranged to operate without opening or shutting the gate, which is an important feature and advantage gained by my improvements.

The parts connected with the rocking lever being placed under the top rail prevents it being broken, and the bolts placed or arranged to work on the third rail makes the bolting more central and firmer than if bolted either at top or bottom.

The lifting of the gate and the means for doing so are items not to be overlooked, as farmers, &c., think it very essential, as it saves them considerable trouble in separating the large stock from the small or allowing the small stock to roam at will.

In Figs. 1 and 2 I show a button L', pivoted at l' and arranged for adjustment to lock the lever L in position to hold the latches K in their seats.

As shown most clearly in Fig. 2, the upper arm of the rocking lever L is connected with the bolt operated thereby by means of an L-shape connection whose horizontal arm K' is connected with and extends from the lever L between the upper bar j and the next lower bar, while its arm K² extends from the said arm K' downward and connects at K³ with the latch it operates.

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

1. The combination of the crane having a vertically-elongated bolt-seat, the gate movable vertically upon the crane and the bolt movable longitudinally along the gate and into and out of the vertically-elongated bolt-seat of the crane substantially as set forth.

2. The combination of the crane having the vertically-elongated bolt-seats on opposite sides the latch-post having the opposite vertically-elongated bolt-seats, the gate hinged to and movable vertically upon the crane, the oppositely-movable bolts seating in the bolt-seats of the hinge-post and crane the lever for operating the bolts and the lever by which to lift the gate substantially as set forth.

3. The combination of the crane, a vertically-elongated bolt-seat closed at both ends at or near the hinged end of said crane, the gate jointed to the swinging end of said crane and the bolt movable longitudinally along the gate and into and out of the bolt-seat upon the crane substantially as shown and described.

4. The combination of the crane having upper and lower beams, the gate having a bearing sliding vertically between said beams and the lever arranged between said upper and lower beams of the crane and engaging the bearing of the gate substantially as set forth.

5. The combination of the crane having upper and lower beams, a guide-rod connecting said beams near their swinging ends, the opposite battens connecting said beams near their swinging ends, the gate having an eye sliding on said guide-rod and the lever pivoted to and between said battens and between the upper and lower beams and engaged with the eye on the gate all substantially as shown and described.

6. The combination of the latch-post and crane having latch-seats, the gate jointed to said crane and having reversely-operating longitudinally-movable latches movable into and out of the latch-seats of the crane and latch-post the lever by which to throw said latches into and out of latched position and a button by which the said lever may be locked in position to hold the latches in their seats substantially as shown and described.

ALBERT DAVISON.

Witnesses:

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