J. K. Weber,

Automatic Gate,

No. 13,673. Patented Oct. 9. 1855.

Fig. 2.

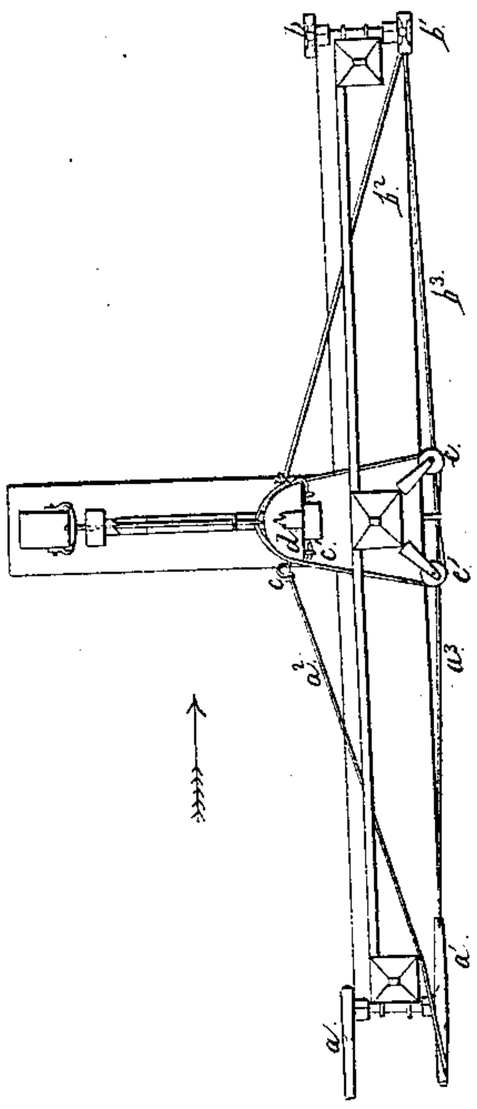
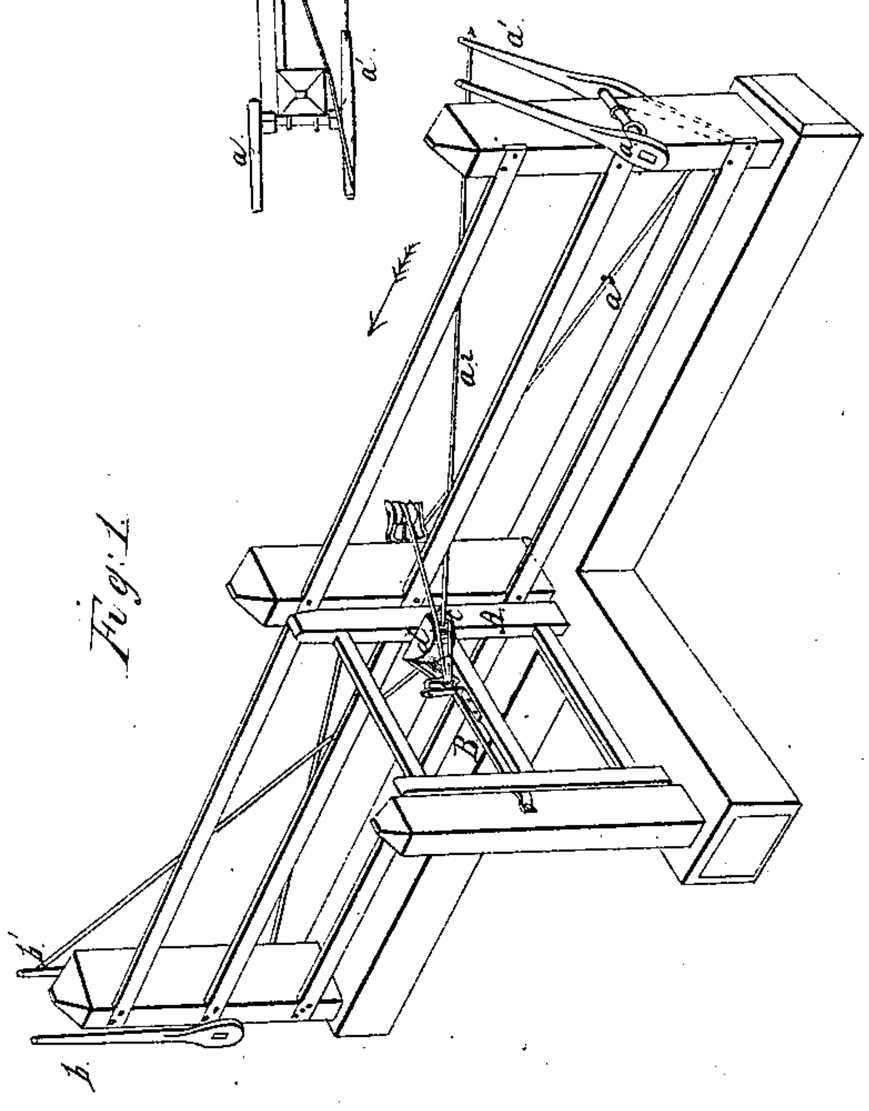


Fig. 1.



UNITED STATES PATENT OFFICE.

JNO. K. WEBER, OF SENECA FALLS, NEW YORK.

METHOD OF OPERATING FARM-GATES.

Specification of Letters Patent No. 13,673, dated October 9, 1855.

To all whom it may concern:

Be it known that I, JOHN K. WEBER, of Seneca Falls, in the county of Seneca and State of New York, have invented an Improvement in Opening and Closing Gates, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the annexed drawings, of which—

Figure 1, represents a perspective; Fig. 2, a top view or plan of the gate and fence.

My invention consists in a mode of opening and closing gates which are so hung as to be opened and shut both ways, so that a person riding in a vehicle or on horseback can without dismounting open the gate and close it after he has passed through, described as follows:

The gate A is hung upon pivot or swivel hinges so as to swing freely both ways and is fastened by the spring bolt B. On either side of the gate there is a set of levers and cords so arranged and connected with the gate and spring bolt as to open the gate in a direction from and in front of the person passing through. The two sets are alike in arrangement and operation and a description of one will answer for both. The lever a' is worked by the hand lever a as shown in Fig. 1. The cord a^2 is attached by one end to the top of lever a' and by the other end at c Fig. 2 to the semicylindrical segment d which is firmly fixed to the gate. The cord a^3 is attached by one end to the lower part of lever a' and after passing over guide pulley e Fig. 2 and around the periphery of the segment is attached by its other end to the segment at c' Fig. 2. It will now be seen that if the lever a is pushed forward by a person riding in the direction of the arrow, the upper end of a' is carried forward and its lower end backward and that the action of the cord a^3 will be to open the gate in the direction of the arrows, and that the reverse motion of the lever a would shut the gate by means of the cord a^2. The cords b^2 b^3 from the upper and lower ends of lever b' are arranged and operate similarly to cords a^2 a^3 except that they operate to open and shut the gate in a different direction. The cords a^3 b^3 pass through a loop m to keep them in place on the pulleys e e'. It will be readily seen that a gate of this description must be fastened when closed or it could be opened by the wind or by cattle in either direction and in order to fasten the gate and control the fastening by means of the levers a and b the cords a^3 and b^3 pass through a loop i on one end of the spring bolt B, and as these cords alternately slacken and are drawn tight by the alternating motions of the levers the spring bolt will be withdrawn and allowed to return to its place.

What I claim is—

The arrangement of the levers a, a', b, b', cords a^2, a^3, b^2, b^3, in combination with the spring bolt for opening and closing a gate which opens and shuts both ways, the whole operated and operating substantially in the manner set forth.

JOHN K. WEBER.

Witnesses:

HIRAM A. PALMER,
JOHN LANGE.