(No Model.) 2 Sheets—Sheet 1.

J. J. SIGAFOOS.

AUTOMATIC FARM GATE.

No. 420,364. Patented Jan. 28, 1890.

Fig. 1.

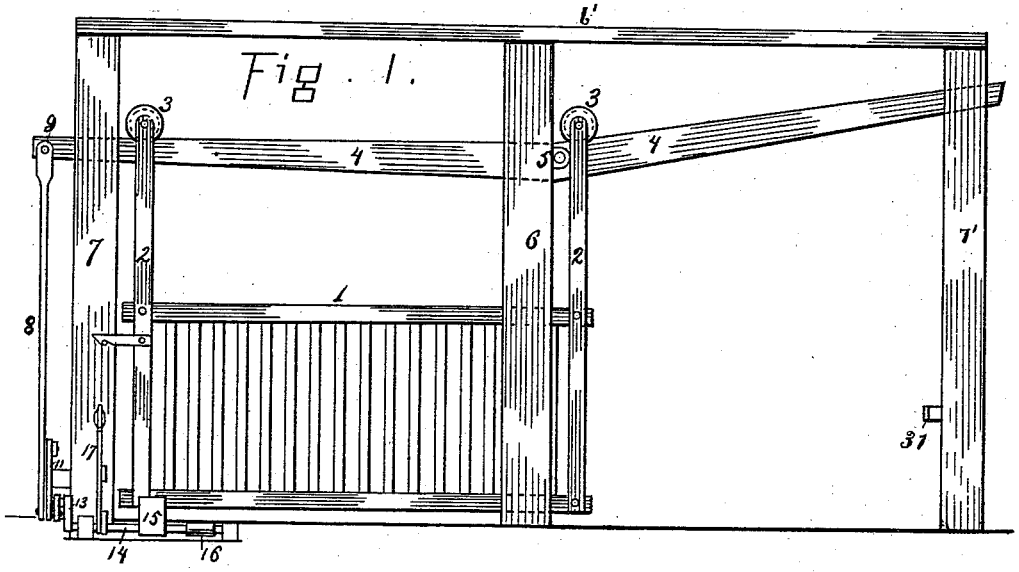
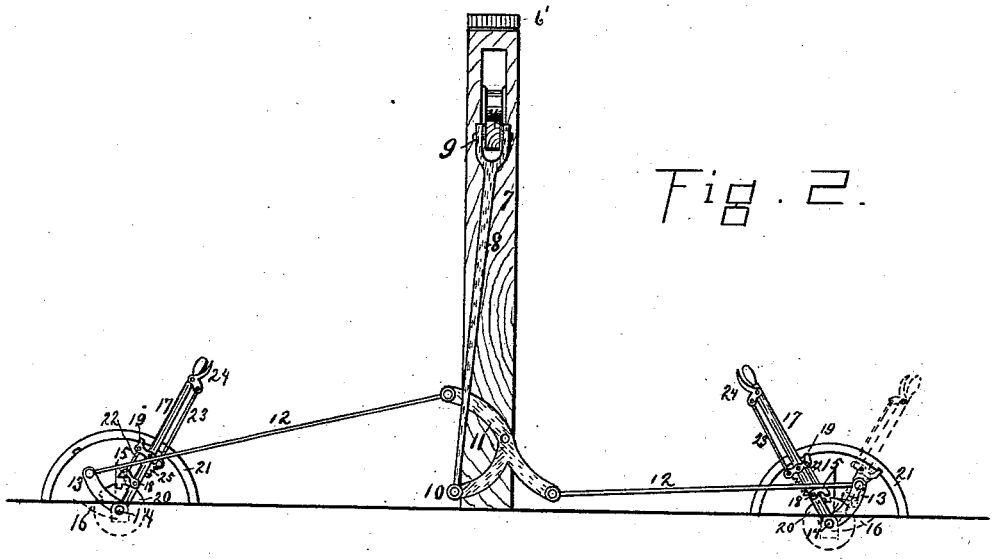


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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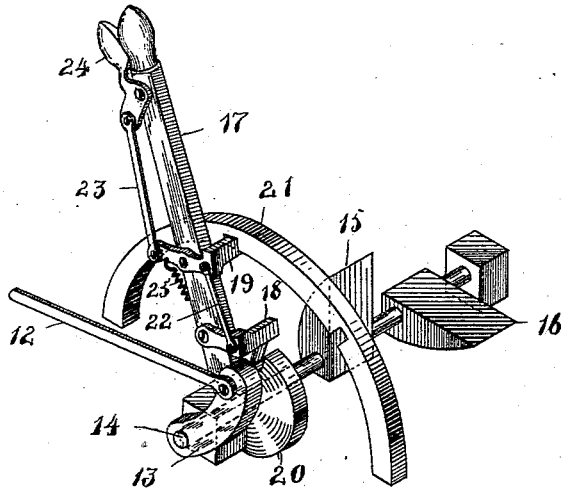
Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSIAH J. SIGAFOOS, OF UBET, MONTANA.

AUTOMATIC FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 420,364, dated January 28, 1890.

Application filed February 6, 1889. Serial No. 298,836. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH J. SIGAFOOS, of Ubet, county of Meagher, Territory of Montana, have invented certain new and useful Improvements in Automatic Farm-Gates, of which the following is a specification.

My invention consists in certain combinations of devices hereinafter claimed.

In the accompanying drawings, Figure 1 is a front view of the gate. Fig. 2 is an end view of the same. Fig. 3 is a perspective view of the combined pedal and lever mechanism.

The gate 1 is hung by suspenders 2 and rollers 3 from a tilting rail 4, pivoted at 5 to one of the gate-posts 6 and free to move up and down in slots in the other gate-posts 7 7′. A strider 6′ surmounts and is secured to the posts 6, 7, and 7′, for holding said posts together, thereby making the structure stronger and more durable. The two arms of the tilting rail meet at a slight angle, so that when one arm is horizontal the other will be slightly inclined. The tilting rail is operated by a connecting-rod 8, pivoted at 9 to the end of the tilting rail and at 10 to one arm of a three-armed crank 11, the two other arms of which are connected by rods 12 to crank-arms 13, fixed on rock-shafts 14, sunk in the ground a suitable distance from each side of the gate. The rock-shafts 14 have each two pedals 15 16, fixed rigidly thereto at right angles to each other, as shown, so that one will stand up vertically, while the other lies flush with the road. These pedals are adapted to be struck by the wheels of a vehicle in approaching and leaving the gate, the weight of the wheel or vehicle operating to force the vertical pedal down into a horizontal position, and in so doing to rock cranks 13 and 11 and raise or lower the connecting-rod 8, thereby causing the tilting of the rail 4, and the consequent opening or closing of the gate. The two pedals 15 16 being integral projections from the same rock-shaft 14, the act of depressing one pedal (say pedal 15) operates to rock the shaft 14, and by so doing tilt the bent rail 4 and close or open the gate, and at the same time elevate the other pedal preparatory to a reverse movement.

In order to facilitate the operation of the gate by hand, I also provide hand-levers 17, pivoted loosely on rock-shafts 14 and carrying pawls 18 and 19, adapted to lock into notched segments 20 and 21. The two pawls are pivoted to the lever, as shown, and are connected by link 22, so that when one is locked the other must be free. A spring 25 holds the pawls normally up. The pawls are connected by rod 23 to "squirrel-tail" 24, which, upon being clasped to the handle of the lever in the act of operating the same, causes the pawl 19 to disengage from stationary segment 21 and pawl 18 to engage with segment 20, and as the latter segment is fixed to the rock-shaft 14 it will be seen that any movement of the lever will be communicated to the gate-operating mechanism. While the gate may be thus operated by the hand-lever, the said lever interferes in no way with the automatic operation of the gate by a vehicle, the lever being normally locked to the stationary segment 21 and entirely independent of the other movable parts.

31 is a bumper secured to the post 7′.

Having thus described my invention, what I claim as new is—

The combination of the tilting rail, the gate supported thereon by rollers, operating mechanism connected with ground-pedals adapted to be struck by the wheels of a vehicle, and a hand-lever and rack-segments and pawls therefor, one rack-segment being stationary and the other fast to the pedal-shaft, and the pawls connected so as to simultaneously disconnect from one segment and connect with the other, substantially as and for the purposes set forth.

JOSIAH J. SIGAFOOS.

Witnesses:
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C. W. BAYLIES.