(No Model.)

A. L. GERICKE.

FARM GATE.

No. 458,248. Patented Aug. 25, 1891.

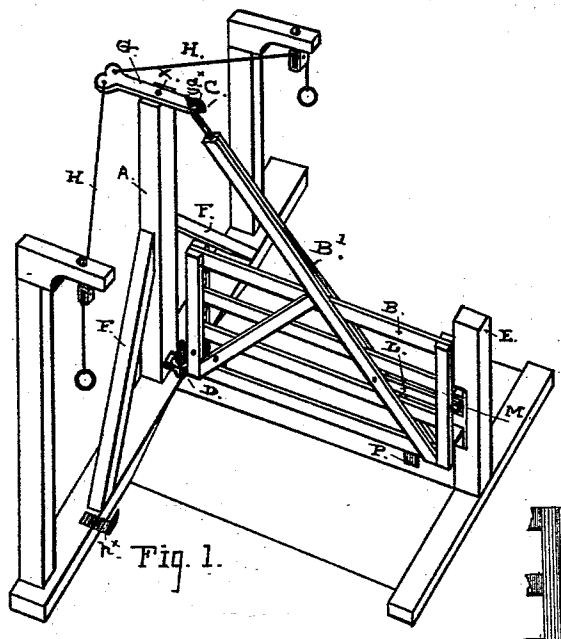


Fig. 1.

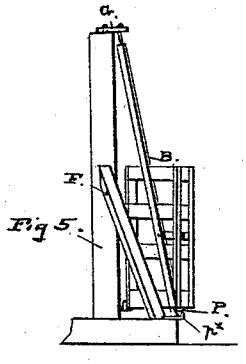


Fig 5.

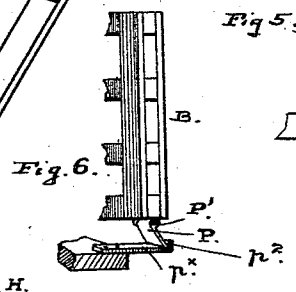


Fig. 6.

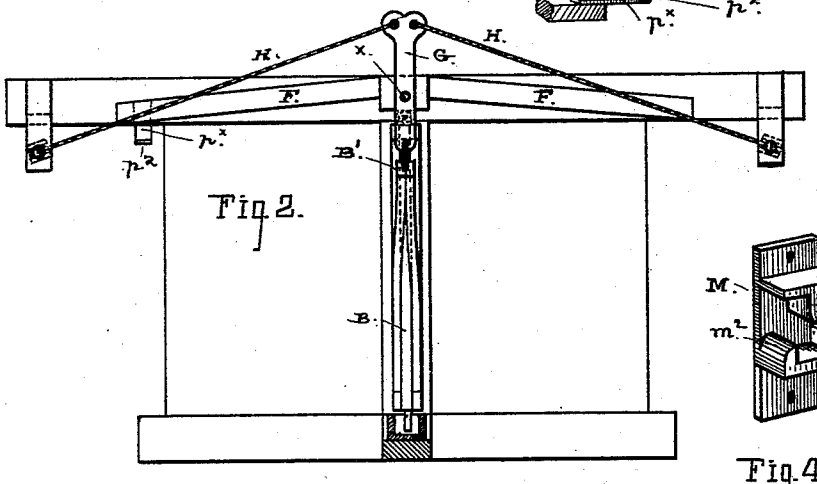


Fig. 2.

Fig. 4.

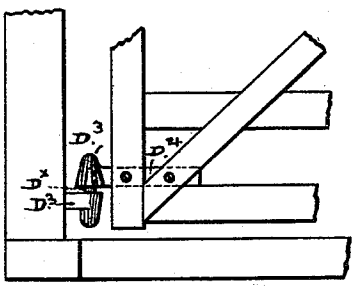


Fig. 3.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ADOLPH LOUIS GERICKE, OF SONOMA, CALIFORNIA.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 458,248, dated August 25, 1891.

Application filed January 28, 1891. Serial No. 379,433. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH LOUIS GERICKE, a citizen of the United States, residing at Sonoma, in the county of Sonoma and State of California, have invented certain new and useful Improvements in Farm-Gates, of which the following is a specification.

My invention relates to farm-gates that are operated mechanically and swing in both directions; and it consists in a certain novel construction and combination of parts, producing an improved double-swinging and self-locking gate, as hereinafter fully described, and pointed out in the claims.

The following description explains the nature of the improvements and the manner in which I have produced and applied the same, the accompanying drawings being referred to by letters.

Figure 1 is a perspective view of the gate constructed according to my invention. Fig. 2 is a plan or top view. Fig. 3 is a detail view of the hinge for the bottom of the gate. Fig. 4 is a perspective view of the lock. Figs. 5 and 6 are views in detail of the "holdback-catch."

A indicates the post on which the gate B is arranged to swing in both directions, so that it will open away from the team or passenger going through it from either direction of approach.

C D are two points of attachment at top and bottom on which the gate is hung, and E is the front post at the opposite side.

F F are inclined braces arranged to hold the post A in upright position. They are applied in such manner that they tend to counteract the weight of the gate and resist the tendency of that weight to throw the post out of true vertical position. The braces are set out of line with the post at the foot, so that they have a position diagonal with the line of the gate when it is closed and act to hold the post from yielding to the weight of the gate, besides acting as braces to keep the post upright. In addition to these functions the braces are designed to act as stops to limit the movement of the gate when thrown open, as it is necessary to hold the gate open at a slight angle, instead of allowing it to swing full back, in order to keep the centers of movement of the lever and the hinge C from getting on a dead-point. The lower hinge supports the foot of the gate, while the horizontally-swinging lever G carries the upper part and forms the means by which the gate is opened and closed. The lever is pivoted at x on the top of the post A, and its lower end is moved in a horizontal arc by the cords H, that are carried to points beyond the gate at opposite sides of the entrance to be reached and operated in approaching the gate from either direction. From the end of the lever G the gate is suspended by the diagonal bar B′, that extends from the front and bottom corner backward and upward to the lever, to which it is attached by a loose connection, such as the hook C on the end of the bar and an eye g^* in the lever near the end. This center of attachment forming the upper hinge describes an arc, of which the pivot x is the center, and the effect is to raise up the outer end of the gate as the lever is moved to one side or the other, and then cause the gate to swing by gravity as the point of attachment is thrown forward or beyond the lower pivot D of the gate. The movements of the gate are produced in this manner by throwing the upper pivot or hinge to one side or the other of the vertical line on which the lower hinge is located, the same as in farm-gates of like character or construction already in use. No special claim of novelty is therefore made by me to this manner of operating the gate—that is, by moving the upper hinge or point of attachment in an arc. The bottom hinge D is specially formed with a view to prevent it from being clogged or chocked with dust or solid matter or becoming stuck or rusted. The pintle D^* is fixed in a bracket D^2, that is fixed to the gate-post clear of the ground, and the other part D^3 of the hinge secured to the gate is an inverted-cup-shaped cap with a socket in the bottom to take the pintle and a conical top and flaring sides to cover the pintle. It is fixed to the gate by strap D^4 and is fitted to the lower part D to set closely down and cover the pin all around.

The parts of the lock to hold the gate closed are composed of a pivoted latch L on the gate and a plate or keeper M on the gate-post, the latter of novel construction and consisting of the keeper-plate m^* and the parts $m^3 m^4$, that guide the latch to place and prevent it from

being thrown out of the keeper. The part m^* has a flat-bottom surface with ledges m^2 at the ends, the outer faces of which are beveled for the latch to strike and ride over, and the plate m^3 is a guard to control the upward movement of the latch when the gate is closed, and also to limit the upward throw in the act of closing the gate. The third part m^4 depends from the top plate over the center of the keeper-plate and serves to check the lateral movement of the latch in the act of closing. Sufficient clearance between the lower edge of this stop and the flat bottom of the keeper is afforded for the latch to pass under. These parts are readily cast in one piece on a face-plate m^5, that is fixed on the gate-post by screws. As thus constructed and applied, they hold the gate securely closed against any attempt on the part of animals to raise the gate by crowding under the bottom rail.

The spring-catch holds the gate from being closed against a vehicle by a strong wind, and is formed of a swinging dog P, pivoted to the bottom rail of the gate at P′, and a fixed catch-plate p^*, with a turned-up end p^2. The plate is secured to a stationary block or timber in line with the path traversed by the swinging dog and in position to catch the end of the dog as the gate comes full open, so that the dog riding over the end of the plate drops behind the upright end, and being longer than the shortest distance between the bottom rail and the catch-plate the dog sits diagonally. In this position the dog will hold the gate open; but in the act of closing the gate is raised vertically, and so the dog slips off and clears the end of the catch-plate.

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

1. In a farm-gate, the combination of the gate-post A, having the pintle D* at the bottom, the double-swinging gate having the cup-shaped cap D^2 for riding upon the pintle and permitting the inclination of the gate to be changed, the brace B′, extending from the front lower corner of the gate upward and backward and provided with the hook C at its upper end, and a swinging lever G, pivoted on post A, the forward limb of said lever being engaged by the hook C, and means for operating the lever, as set forth.

2. In a farm-gate, the combination of the gate-post A, having a pintle at its lower end, the gate B, hinged on said pintle, with liberty for changings of inclination, the operating-lever on top of the post, a brace connecting it to the forward end of the gate, a swinging dog P, pivoted to the bottom of the gate at its forward end, and a catch-plate p^* on the base, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

ADOLPH LOUIS GERICKE. [L. S.]

Witnesses:
WILLIAM STONE,
GEORGE BREITENBACH.