S. C. SHOUP.

Farm-Gate.

No. 210,640. Patented Dec. 10, 1878.

Fig. 1.

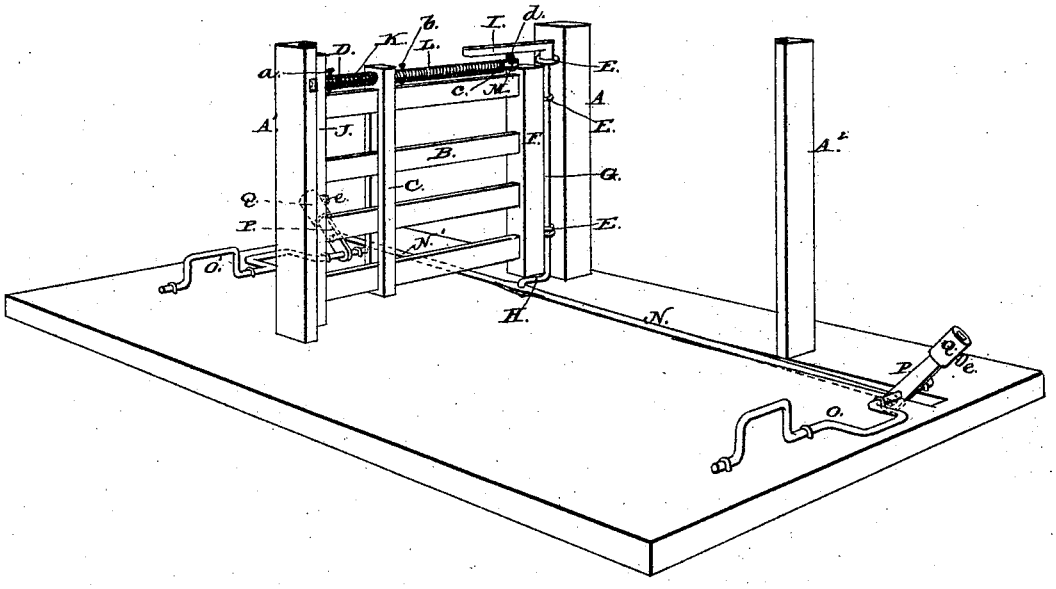
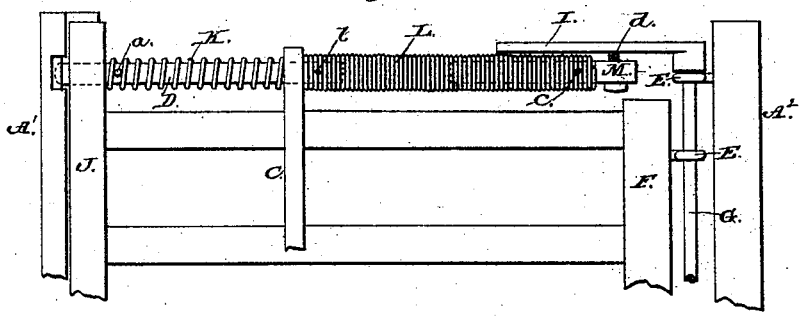


Fig. 2.



WITNESSES

John A. Dix

Geo. C. Poulton

INVENTOR

Baxton C. Shoup,

By Theodore Munger

ATTORNEY

UNITED STATES PATENT OFFICE.

SAXTON C. SHOUP, OF CAREY, OHIO.

IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. **210,640**, dated December 10, 1878; application filed November 16, 1878.

To all whom it may concern:

Be it known that I, SAXTON C. SHOUP, of Carey, in the county of Wyandot and State of Ohio, have invented certain new and useful Improvements in Farm or Road Gates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a view, in perspective, of a gate embodying the improvements in my invention; and Fig. 2 is a sectional front elevation of the same.

This invention has relation to road or farm gates; and it consists in the improvements in the construction of the same, hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawing similar letters of reference indicate corresponding parts in the several figures.

The gate-posts are three in number. A represents the hinge-post, and A^1 A^2 represent the latch-posts, the three being arranged to form an equilateral triangle, the length of the sides of the triangle being equal to the width of the gate B.

The gate B itself may be of any ordinary construction, a metallic clamping-bar, C, being preferably located near the front edge of the gate, to operate as a weight when the gate is swung to and fro, and to furnish one of the bearings for the helical springs and the latch-rod D. Eyebolts E are screwed into or otherwise secured to the hinge-post A and to the rear upright, F, of the gate B. A vertical shaft, G, passing through these eyebolts, hinges the gate to the hinge-post A, and is provided with a crank-arm, H, on its lower end, and a perforated arm, I, on its upper end. The latch rod or bolt D has its bearings in the front upright, J, and the clamping-bar C, and above the upper rail of the gate B.

The latch-bolt D is encircled by a helical spring, K, secured thereto by a pin, *a*, near the front upright, J, its rear bearing being against the front face of the clamping-bar C. The latch-bolt D passes through a perforation in the upper end of the clamping-bar C, and to this projecting end of the latch-rod D is secured another helical spring, L, by a pin, *b*. The rear end of the helical spring L encircles an eyebolt, M, and is secured thereto by a pin, *c*. This eyebolt M is secured to the perforated arm I, and is connected thereto by a set-screw, *d*, which may be adjusted to either of the perforations in the arm I, to regulate the tension of the helical spring L.

The helical springs K and L operate the latch-bolt D through the media of the perforated arm I and the vertical shaft G. The vertical shaft G is operated by connecting-rods N N′, secured to double crank-shafts O O′, having bearings in sills sunk in the ground at suitable distances from the gate B to permit the wheels of a vehicle to operate them.

The double cranks and connecting-rods for operating the gate are old, and I do not seek to cover them in this application. I have, however, improved said double cranks by providing them with arms P, having adjustable balance-weights Q, secured to said arms P by set-screws *e*, whereby the gate will be held in the position to which it may have been thrown by operating the double crank-shafts.

The operation of the invention, so far as opening it automatically by the vehicle is concerned, is obvious; but when a horseman or a traveler on foot desires to open the gate it is only necessary to grasp one of the helical springs K L and withdraw the latch-bolt from its keeper, when he may push the gate open, pass through, and it will again swing back and latch without operating the crank-rods, connecting-rods, or vertical shaft.

The adjustable balance-weights perform the function of preventing the hind wheels of the vehicle from forcing the double cranks backward, thus closing the gate before the vehicle has passed through.

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

1. In a farm-gate operated by connecting-rods secured to double cranks upon opposite sides of the gate, to be automatically opened and closed by passing vehicles, the arms secured to the double cranks and provided with adjustable balance-weights provided with set-

screws, constructed, combined, and operating as and for the purposes set forth.

2. In a farm-gate, the combination of the latch-bolt D, eyebolt M, and helical springs K and L with the vertical shaft G, provided with the perforated arm I, and secured by connecting-rods to the automatically-operating double cranks upon opposite sides of the gate, substantially as and for the purpose set forth.

In testimony that I claim the foregoing improvements, as above described, I have hereunto set my hand and seal this 2d day of November, 1878.

SAXTON C. SHOUP. [L. S.]

Witnesses:
W. MUNGEN,
SHELDON H. HILL.