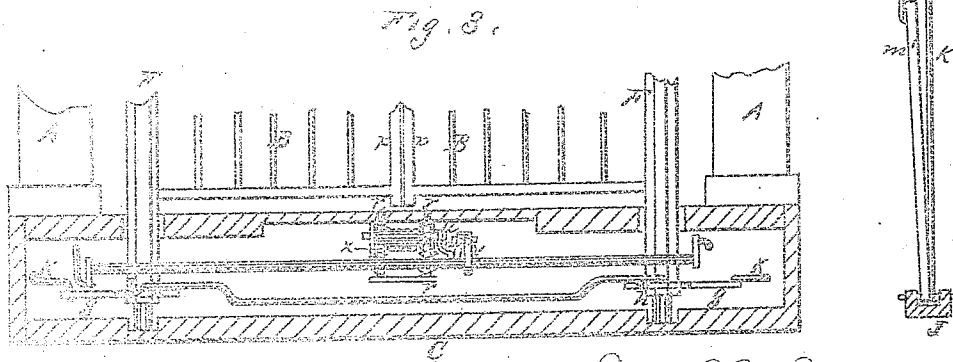
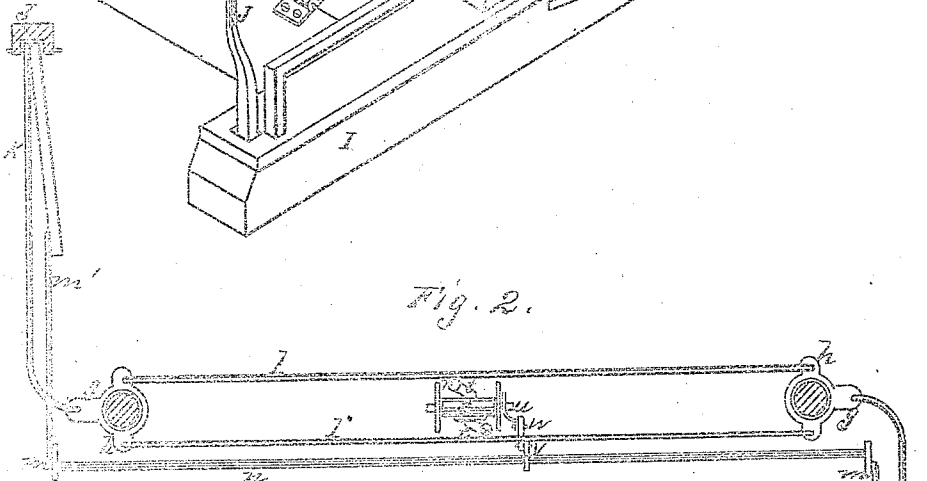
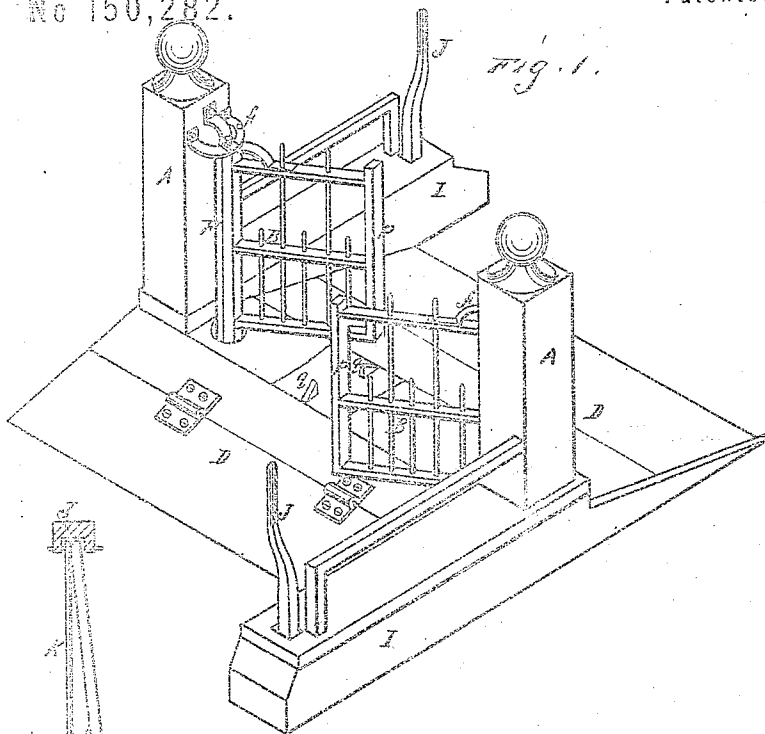


E. L. BROOKS.

Farm-Gates.

No 150,282.

Patented April 28, 1874.



Witnesses
John L. Boone
William Richardson

Ezra L. Brooks
by Dewey &
Atty

UNITED STATES PATENT OFFICE.

EZRA L. BROOKS, OF SMITH'S RANCH, CALIFORNIA.

IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. 150,282, dated April 23, 1874: application filed September 11, 1873.

To all whom it may concern:

Be it known that I, EZRA L. BROOKS, of Smith's Ranch, Sonoma county, State of California, have invented an Improved Farm-Gate; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to that class of farm-gates which are known as "approach-opening gates." My improvement consists of a novel arrangement of the operating mechanism, by which the gates are opened and closed by means of the levers; and also of a peculiar fastening device, by which the gates, when closed, are prevented from opening by other than the proper means.

In order to explain my improved farm-gate, reference is had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a top view of the operating mechanism. Fig. 3 is a transverse section.

A A are the posts, which stand at each side of the gateway, and to which the upper ends of the outer gate-posts are hung. My gate I construct in two parts, B B, one of which is hung from each of the posts A, so that the two gates will meet in the middle of the gateway when closed, and open outward in opposite directions when opened. I excavate the earth between the two posts A A, and place a timber, C, lengthwise, from post to post, in the bottom of the excavation. I then construct a bridge, D, high enough to bring its middle or horizontal portion slightly above the road-level, the end portions on each side of the gateway sloping downward in the direction of the roadway, thus leaving a space between the timber C and horizontal or middle portion of the bridge, in which the mechanism to operate the gate is placed. The outer post F of each gate B extends down through a hole in the bridge, near the posts A, and steps in the ground-timber C, while the upper end has a vertical pin, e, which extends upward from its center, and passes through a bracket, f, which is secured to the post A. Thus the gates are sus-

pended or hinged so that they will readily swing upon their fastening s. To the lower end of the post F of each gate, in the space between the timber C and bridge, I secure two arms, g h, at right angles to each other. These arms may be simply secured to the posts, or they may form part of a casting, which is secured to the post. From each post A a tube or underground-box, I, extends to the required distance along one side of the roadway, one upon each side of the gate. The interior of these tubes or boxes communicates with the space below the bridge. At the extremity of each of these boxes farthest from the gateway I secure the operating-lever J, which is pivoted near its middle, so that its lower end extends down into the box. To the lower end of each of these levers one end of a bar or rod, K, is secured, while the opposite end of the bar is attached to the arm g of the post E, so that, when the lever J is pushed away from the gate, the bar will force the lever-arm g in the opposite direction, and open the gate by turning the post F. To connect the movements of the two levers, another bar, l, is secured to each of the lever-arms h, which extend to and are connected with the crank-arm h' on the other post. These bars pass along under the bridge from the end of one tube to the end of the other, thus causing the movement of one lever to be communicated in a reverse direction to the other, and operating both gates simultaneously. In the middle of the gateway, and opposite the lower end of the meeting posts p of each gate, I secure to the bridge a permanent stop or projection, q, against which the gate-posts strike when the gates are fully closed. I also arrange a retractable stop, r, upon the opposite side of each post, so that when the gate is closed this stop r will project up through the bridge, and lock the gate by preventing it from opening until the stop is lowered. These retractable stops are secured in a frame underneath the bridge, and operated by a short shaft, s, and arms t t, the shaft s having a crank, u, at one end, which is connected with an arm, V, on the shaft u by a link or connecting-rod, W, so that the same movement which opens the gates first lowers the stops r, so as to let the gates swing open. A spiral spring, X, surrounds the stops r and

holds them up, so that when the gate is closed, if the stops happen to be raised so that the gate-post strikes its inclined side, it will be forced down so as to let the gate pass, after which the spring will force it up again. The shaft *u* is rotated by cranks *m*, with rods *m'* to the levers *J*.

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

1. The two gates *B B*, with their extended outer posts *F* stepping in the ground-timber *C*, while their upper ends are supported from the posts *A* by bracket *f* and pin *e*, said posts having the arms *g h*, in combination with the le-

ver *J*, connecting-rods *K l*, and shaft *u*, with its crank ends, all combined and arranged to open and close the gates in opposite directions, as set forth.

2. The cylinder *s*, with ears, as shown, in combination with the arm *t* and connecting-rods *u v*, to operate the spring-stops *r*, as described.

In witness whereof I hereunto set my hand and seal.

EZRA L. BROOKS. [L. S.]

Witnesses:

JOHN L. BOONE,
C. MILTON RICHARDSON.