W. W. NICKELL.

GATE.

APPLICATION FILED JULY 5, 1910.

980,326.

Patented Jan. 3, 1911.

2 SHEETS—SHEET 1.

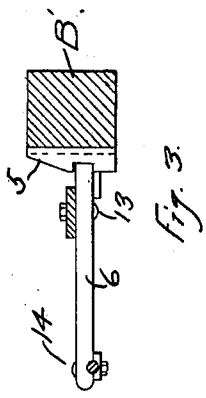

Fig. 3.

Fig. 1.

Witnesses
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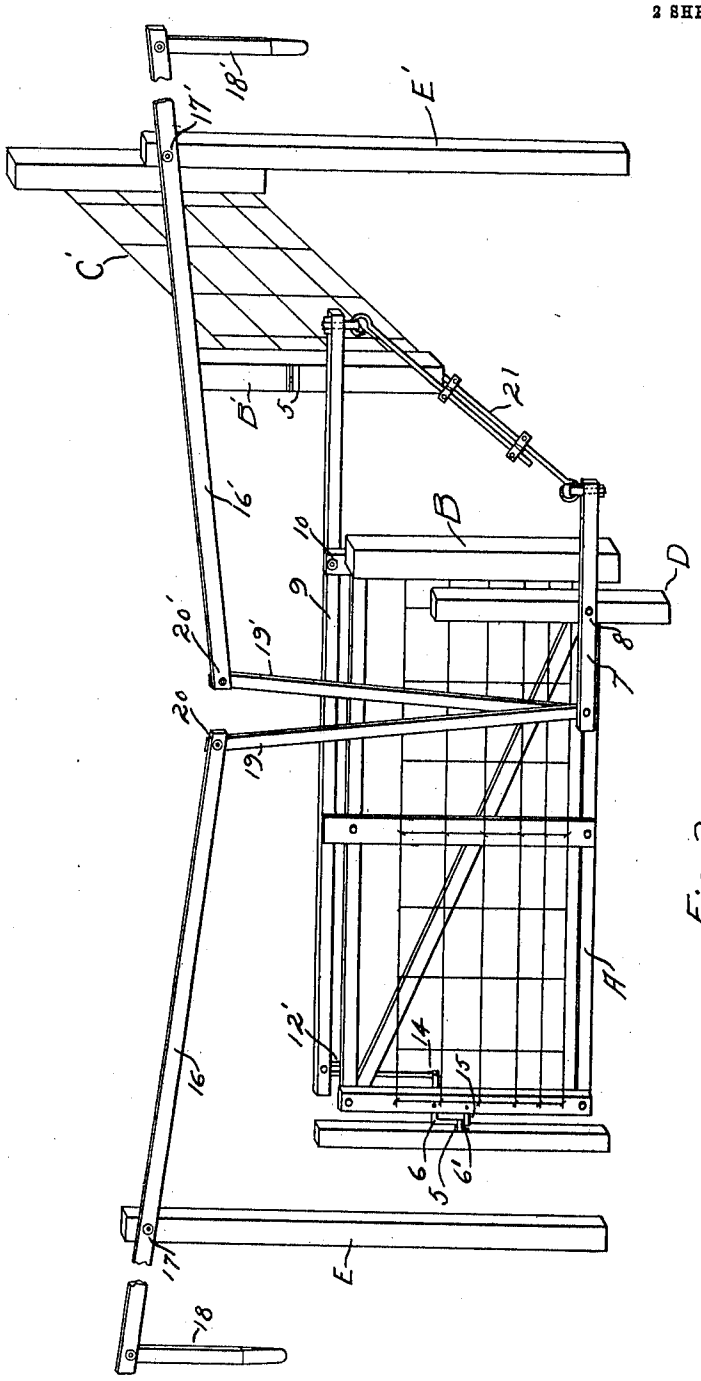

Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM W. NICKELL, OF McMINNVILLE, OREGON.

GATE.

980,326. Specification of Letters Patent. **Patented Jan. 3, 1911.**

Application filed July 5, 1910. Serial No. 570,471.

To all whom it may concern:

Be it known that I, WILLIAM W. NICKELL, a citizen of the United States, residing at McMinnville, in the county of Yamhill and State of Oregon, have invented a new and useful Improvement in Gates, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to the class of gates used upon farms provided with means to open and close them without grasping the gate itself.

The object of my invention is to provide a device in which there are long levers to operate the gate and handles from the said levers which are accessible to persons seated in vehicles which it is desired to pass through the gate. I attain these objects as well as other advantages, by the construction, combination and arrangement of parts illustrated in the accompanying drawings, which form a part hereof.

Figure 1 is a side view of the gate in closed position. Fig. 2 is a perspective view of the gate in open position. Fig. 3 is a plan view on the line A—A of Fig. 1, of parts showing the latch and catch on enlarged scale.

Like numerals and letters refer to like parts in all figures.

A is a gate which may be of any desirable form, size and material but is here shown in quadrilateral form.

B—B′ are two posts between which the gate is placed in horizontal position. It is hinged to the post B. The hinging is arranged by means of a vertical rod 3 which forms a pivot by passing through horizontal bearings 4 and 4′ on the gate A and post B respectively. The bearings 4—4′ are rigidly secured and the bearings 4 rotate upon the bearings 4′ about the pivot rod 3.

C—C′ are portions of a fence extending from the posts B—B′ respectively. Upon the post B′ is secured a slotted and beveled catch 5 with the beveled part toward the side of the fence on which the gate opens. The catch 5 is placed in a position where it can receive the gate latch 6 in locking engagement below a latch guide. To the rear of the post B in the line of the fence C is a second post D and on this post a bar 7 is pivoted in horizontal position upon a pivot 8. The bar extends outwardly each side of the fence.

At the rear end of the gate a lever arm 9 is pivoted at the top of the gate by a pivot 10. The arm 9 extends horizontally a suitable distance to the rear of the gate and also extends in alinement with and over it to its forward end, also being above the post B and fence C. At the forward end of the arm 9 a vertical rod 11 depends, being retained in position by a pin 12. The upper end of the rod 11 has a slot 12′ through which the pin extends allowing the rod to move vertically in sliding engagement with the pin. Upon the front end of the gate, opposite, but a little above the plane of the catch 5 on the post B′ there is a horizontal right angled latch 6 pivoted by a pivot 13. The rear end of the latch 6 is pivoted on the lower end of the rod 11 by the pivot 14. The forward end 6′ of the latch extends downwardly at a distance and in a position to move forward and backward into and out of engagement with the catch 5. On the gate below the pivot 13 of the latch and the plane of the catch 5, a hook guide 15 is rigidly secured in horizontal position so that it passes around the vertical part of the latch 6. The bill of the hook is on the side toward which the gate opens.

On each side of the fence C at a suitable distance therefrom are placed tall posts E—E′. Horizontal lever arms 16—16′ are respectively pivoted on said posts near the top thereof by pivots 17—17′. Dependent from the outer ends of said levers 16—16′ are the respective dependent rigid handles 18—18′. Depending from the opposite ends of the levers 16—16′ are the respective rods 19—19′ pivoted at their upper ends by pivots 20—20′. The lower ends of the rods 19—19′ are both pivoted to the end of the bar 7 which extends on the side of the fence toward which the gate opens. An adjustable rod 21 is secured by a hook at its lower end to the opposite end of the bar 7. The upper end of the rod 21 is secured by a hook to the rear end of the latch lever arm 9.

It will now be seen that when the gate is closed as shown in Fig. 1 a person sitting in an approaching vehicle from either side grasps either the handle 18 or 18′ as the case may be and draws it downward. Thereupon the outer end of the bar 7 is raised and the rear end of the lever arm 9 is depressed. The forward end of the lever arm 9 rises and in doing so draws the rear end of the latch 6 upward and this causes the lower end of its arm 6′ to move to the rear and releases

it from the engagement in the catch 5. The arm 6′ is kept in alinement with the catch 5 by means of the guide 15. The same application of power to release the locking mechanism also draws the gate outward and causes it to swing open. After the gate begins to swing it can be caused to pass a dead center if necessary, by a slight manipulation of the handles 18—18′ upward or downward which will raise or depress the end of the arm 7 and operate the mechanism just described accordingly. It is to be further understood that to shut the gate the handles 18—18′ are pulled downward which again raises the end of the arm 7 and causes the gate to swing to closed position where it is automatically caught and locked by the latching mechanism. It will also be seen that the rod 11 being movable in the slot 12′ the latch may be opened without the use of the handles 18—18′ by grasping the rod 11 and raising it which operates the latch mechanism only and the gate may then be swung open by hand.

I am aware that there are various different devices for gates of the class to which my invention belongs but believe there are none with the particular and simple parts and arrangement thereof as in mine.

The weight of the lever arms 16—16′ is sufficient to operate the mechanism to slowly close the gate without manipulation by hand. Also the latch guide 15 being below the catch 5 prevents lifting of the gate by animals seeking to pass under it when closed.

Having thus described my invention, I claim:

1. In a gate of the kind described having means to transmit power to gate opening and locking mechanism also locking mechanism, the combination of a gate and lock actuating lever bar 7 pivoted horizontally and transversely to the fence and to the rear of the gate hinge post, its end on the side toward which the gate opens being connected with the power transmitting means, an adjustable rod 21 having its lower end hooked upon the opposite end of said lever bar 7 and extending upwardly to connection with a latch actuating lever 9 at a suitable angle, and a horizontal latch actuating lever 9 pivoted on the rear end of the gate in alinement with and above it and the fence extending to the front of the gate and to the rear thereof, its rear end being secured to said adjustable rod 21, its forward end being secured to a latch actuating rod of the locking mechanism, substantially as described.

2. In a gate of the kind described, having a latch lever 9 pivoted on and extending beyond its rear end in alinement with the gate, a lock and gate actuating lever 7 pivoted horizontally in and transversely to the fence on a post alined with the fence and in the rear of the gate, said lever bar 7 being positioned and formed to receive a connection on its end extending on the side toward which the gate opens, with a power transmitting means, also provided with adjustable means to connect its opposite end at a suitable angle with the rear end of the latch lever 9, substantially as described.

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