



# UNITED STATES PATENT OFFICE.

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## GATE.

1,053,259.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that we, JOHN R. WHEELER, ARTHUR C. JOHNSON, and JAMES F. WHEELER, citizens of the United States, residing at Grand Valley, in the county of Garfield and State of Colorado, have invented certain new and useful Improvements in Gates; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to swinging gates which are adapted to be opened by hand by an operator on horse back or on a load, and the object of the same is to improve the construction of a gate operating mechanism of this kind.

To this end the invention consists in the details hereinafter more fully described and claimed, and as shown in the drawings wherein—

Figure 1 is a plan view of this improved gate shown in its closed position. Fig. 2 is an enlarged plan view of the inner end of the gate and its hinge post, with the gate-swinging mechanism shown in the position of parts assumed when the gate is being opened.

In the drawings, the letter G designates broadly the gate which is suitably hinged as at *h* to the hinge-post H standing at one side of a roadway, and is adapted to be swung closed across the same and latched to a suitable post L standing at the other side thereof. The detailed construction of the latch and the hinges has not been illustrated herein as they form no part of the present invention. Nor do we lay claim herein to the construction or use of any particular form of operating mechanism mounted on remote posts R alongside the roadway and to which are led the cords or ropes for opening this gate from a distance; in fact, we have shown in the drawings merely beams at O, carrying pulleys P for said ropes.

Coming now more particularly to the present invention, the numeral 1 designates an L-shaped plate secured over the upper inner corner of the gate, with a pin 2 rising from its body and a pair of ears 3 projecting laterally from its body between said pin and the inner end of the gate and upturned at their outer extremities as at 4;

and the numeral 5 designates a cross-shaped lever centrally pivoted on said pin 2 and with its outer arm moving over said plate and its ears 3 and swinging between the upturned ends of the latter. This arm carries an upright pin 6 on which is mounted a grooved roller 7, and 8 is a swinging lever pivoted at 9 on the upper end of the hinge post H and having a slot 10 in its body loosely embracing the groove in the roller. The outer end of this lever is pierced with an eye 11, to which are attached two ropes or cords 12 which, in the present illustration, lead outward over the pulleys P in the supports O and hang in position to be reached with ease by a person approaching on horse-back or on a vehicle. It is obvious that when either rope is drawn upon the lever H will be turned on its pivot and the slot will move the roller so as to swing the cross-shaped lever 5 on its pivot. From the lateral arms of the last-named lever two cords or ropes 14 converge toward each other and are led through an eye or guide 15 on the top of the gate to the latch 20 which is mounted at the free edge thereof; and it is obvious that the movement of the swinging lever 8 which turns the cross-lever 5 on its pivot will cause the lateral arms of the latter (or one of them) to draw inward on this cord or rope and trip the latch so that the gate may swing open, although when it swings closed again the latch is free to engage the catch 30 in a manner which will be clear.

We do not confine ourselves to the materials or proportions of parts; and, as above indicated, considerable latitude may be allowed the builder in the matter of the mechanism located at a distance and by means of which the gate is swung in either direction.

Obviously when a person approaches from either side and draws downward on one of the ropes, it pulls on the lever 8 which latter is swung on its pivot so that the cross lever 5 is turned on its pivot 2 and the latch cord 14 is drawn upon to trip the latch, and continued pull on the main rope causes the gate to swing open in a direction away from the operator who is opening it, thereafter he passes through with his team or horse, and by pulling on the rope at the other side of the gate he causes the latter to close after him. In the act of closing, the latch 20 automatically

engages the catch 30, and the gate is held in latched position.

What is claimed as new is:

1. The combination with a swinging gate  
 5 having a latch at its free end; of an L-shaped plate secured over the upper inner  
 corner of the gate and having a pin rising  
 from its body and two ears projecting laterally  
 therefrom between the pin and the  
 10 corner of the gate and upturned at their  
 outer extremities, a cross-shaped lever centrally  
 pivoted on said pin and having one  
 arm moving over the plate between the ex-  
 tremities of said ears, a pin rising from  
 15 this arm and carrying a grooved roller,  
 an operating lever pivoted on the hinge post  
 and having a slot loosely engaging the  
 groove in the roller, operating ropes con-  
 nected with the rear end of said lever and  
 20 leading to remote points along the road-  
 way, and cords connected with the lateral  
 arms of the cross-lever and leading to said  
 latch.

2. The combination with a swinging gate,  
 25 a hinge post therefor, and a latch; of a plate

secured over the upper inner corner of the  
 gate and having a pin rising from its body  
 and two ears projecting laterally there-  
 from between the pin and the corner of the  
 gate and upturned at their outer extremi- 30  
 ties, a lever pivoted on said pin and mov-  
 ing over the plate between the extremities  
 of said ears, a pin rising from the lever,  
 an operating lever pivoted on the hinge post  
 and having a slot loosely embracing said 35  
 pin, ropes connected with the rear end of  
 said operating lever and leading to remote  
 points along the roadway, and cords con-  
 nected with the other lever and leading to  
 the gate latch. 40

In testimony whereof we have hereunto  
 set our hands in presence of two subscrib-  
 ing witnesses.

JOHN R. WHEELER.  
 ARTHUR C. JOHNSON.  
 JAMES F. WHEELER.

Witnesses:

JESS. W. YEOMAN,  
 ELMER E. DE WITT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
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