(No Model.)

J. H. WILLIAMS.

ROAD GATE.

No. 498,596. Patented May 30, 1893.

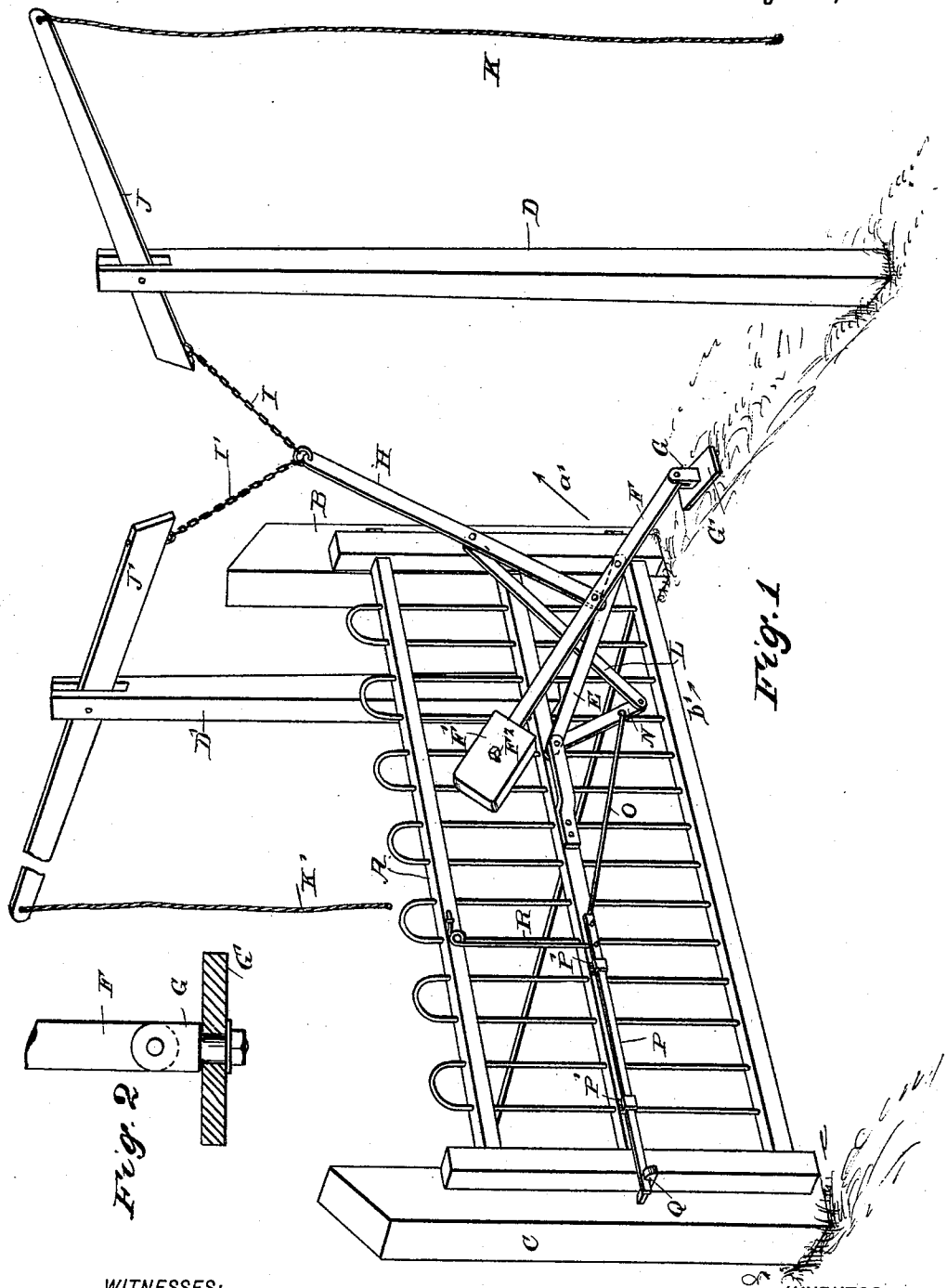

Fig. 1.

Fig. 2.

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ROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 498,596, dated May 30, 1893.

Application filed February 28, 1893. Serial No. 464,018. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WILLIAMS, of St. Vincent, in the county of Union and State of Kentucky, have invented a new and Improved Road-Gate, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved road gate, which is simple and durable in construction, and arranged for conveniently opening and closing the gate by persons on horseback or in vehicles, without alighting.

The invention consists of certain parts and details and combinations of the same, as will be hereinafter described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of the improvement; and Fig. 2 is an enlarged sectional side elevation of the pivot for the weighted lever.

The gate A is pivoted or hinged on a post B and adapted to rest, with its free end, against a post C at the time the gate is closed, as illustrated in Fig. 1. When the gate A swings open it is adapted to rest against a post D, erected on one side of the road-way, a suitable distance from the post B and in alignment with the latter.

The gate A is pivotally-connected near its fulcrum end by a link E with a weighted lever F fulcrumed on a pivot G mounted to turn in a plate G′, secured on the ground between the posts B and D. On the free end of the lever F is held adjustably a weight F′ adapted to be secured in place on the said lever by a set screw F^2. The weighted lever F is pivotally-connected by an arm H with two diverging chains or ropes I and I′, connected with the ends of beams J and J′ respectively, extending in opposite directions in line with the road-way, the beam J being fulcrumed on the post D previously mentioned, while the other beam J′ is pivoted on a post D′ arranged in alignment with the posts B and D, but on the other side of the post B, as shown in Fig. 1. From the outer ends of the beams J and J′, hang ropes or chains K, K′ respectively, adapted to be taken hold of by the operator on horseback or in a vehicle, or traveling on foot, so that when either of the ropes is pulled, the gate is opened or shut as hereinafter more fully described. The arm H previously mentioned is pivotally-connected by a link L with an arm N pivoted on the same pivot connecting the link E with the gate A, as plainly shown in Fig. 1. The arm N is connected by a link O with a bolt P mounted to slide in suitable bearings P′ attached on the gate A, the outer end of the bolt being adapted to engage or disengage a keeper Q held on the post C. A spring R held on the gate A is connected with the bolt P to assist in closing the same.

The operation is as follows: When the several parts are in the position illustrated in Fig. 1, then the gate A is shut and locked in place by the bolt P engaging the keeper Q. The lever F is then in an innermost position and is held therein by the weight F′ to prevent accidental opening of the gate. Now, in case a person traveling in either direction on the road-way desires to open the gate, he pulls on either of the ropes K or K′ so that a swinging motion is given to the corresponding beam J or J′ which by the chain I or I′ respectively, exerts an upward pull on the arm H so that an outward swinging motion in the direction of the arrow *a′*, is given to the lever F. At the same time, the arm H, by the link L, imparts a swinging motion to the arm N in the direction of the arrow *b′*, so that the link O connected with the said arm N exerts a pull on the bolt P, to withdraw the same from its keeper Q, thus unlocking the gate. The outward swinging motion of the lever F causes a pull on the gate A by the link E, as soon as the gate is unlocked so that the gate commences to swing open. As soon as the lever F has passed its central vertical position it swings outward caused by the weight F′, so that the gate is fully opened, the free end of the gate then resting against the side of the post D. The party can now pass through the open gate between the posts B and C, and when passing the rope K or K′, beyond the gate, he pulls on this rope, so that the lever F is caused to swing in the inverse direction of the arrow *a′*, whereby the link E pushes on the gate to close the same, it being understood that as soon as the lever F has

passed its vertical position when swinging in the inverse direction of the arrow a', its weight F′ causes the lever to swing down to finally shut the gate, the link L at the same time actuating the arm N, which, by the link O, shoots out the bolt P to engage the latter with the keeper Q, thus again locking the gate.

It is understood that when the gate is opened in the manner above described, the operator only pulls on the rope K or K′, sufficiently to cause the lever F to swing past its vertical position and then releases the pull on the rope, so that the lever in its farther outward movement caused by the weight F′, exerts a downward pull on the arm H, whereby the beams J and J′ are again caused to swing with their free ends upward to bring the ropes K and K′ back to their normal uppermost positions. In closing the gate, a like pull is exerted on the corresponding rope to bring the lever F past its vertical position, and then the rope is released to permit the weight of the lever to finish the inward swinging motion of the lever, to shut the gate and to lock the same, as above described.

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

1. The combination with a hinged gate, and a latch on the gate, of a pivoted weighted lever, a link pivoted to the gate and to the weighted lever, an arm pivoted to the weighted lever, beams extending along the roadway and connected to the said arm, a link pivoted to the said arm, and a connection between the said link and the latch, substantially as described.

2. The combination with a hinged gate, and a sliding and spring pressed latch on the gate, of a pivoted and weighted lever connected to the gate, an arm pivoted to the weighted lever, beams connected with the said arm, a link pivoted to the gate, and links connecting the link of the gate with the latch and arm, substantially as described.

3. The combination with a hinged gate, and a sliding and spring pressed latch, of a swiveled and weighted lever, a link connecting the lever with the gate, an arm pivoted to the weighted lever, beams arranged along the roadway and provided with ropes at their outer ends, ropes or chains connecting the beams with the arm, a link pivoted to the gate, and links connecting the link of the gate with the latch and arm, substantially as herein shown and described.

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Witnesses:
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