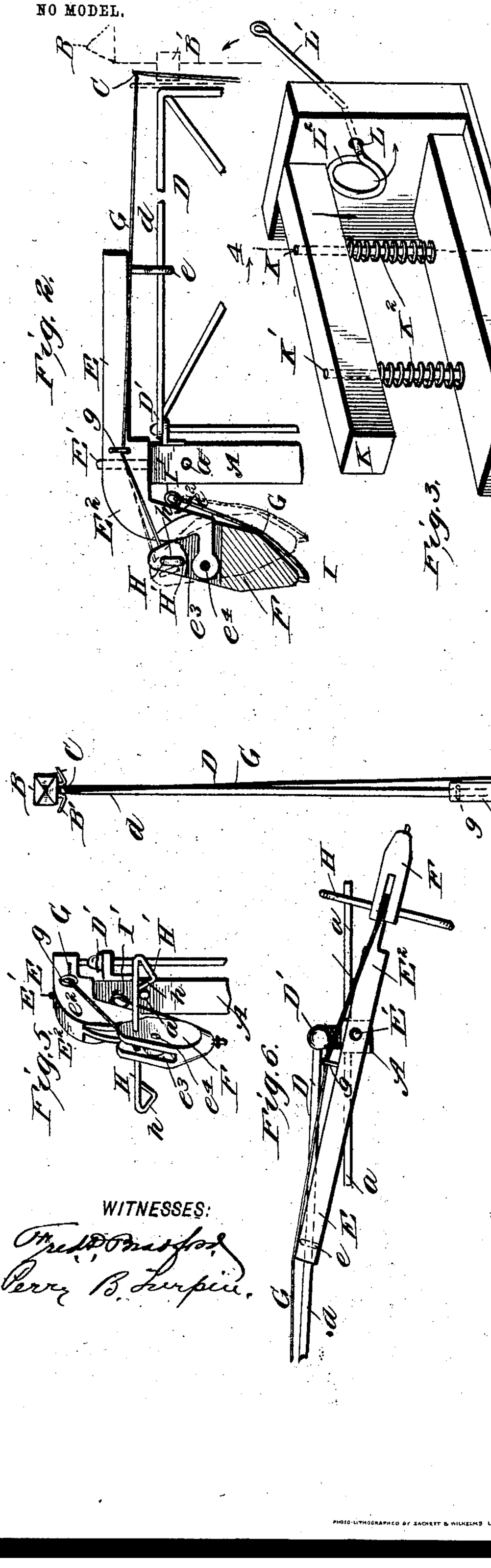
No. 773,385. PATENTED OCT. 25, 1904.

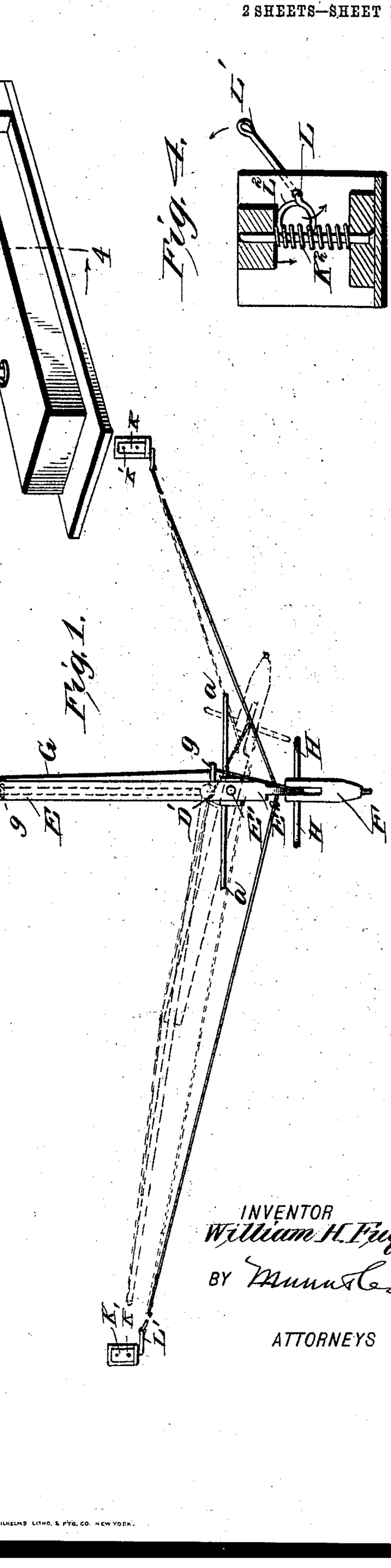
W. H. FUQUA.

GATE.

APPLICATION FILED MAR. 5, 1904.

NO MODEL. 2 SHEETS—SHEET 1.





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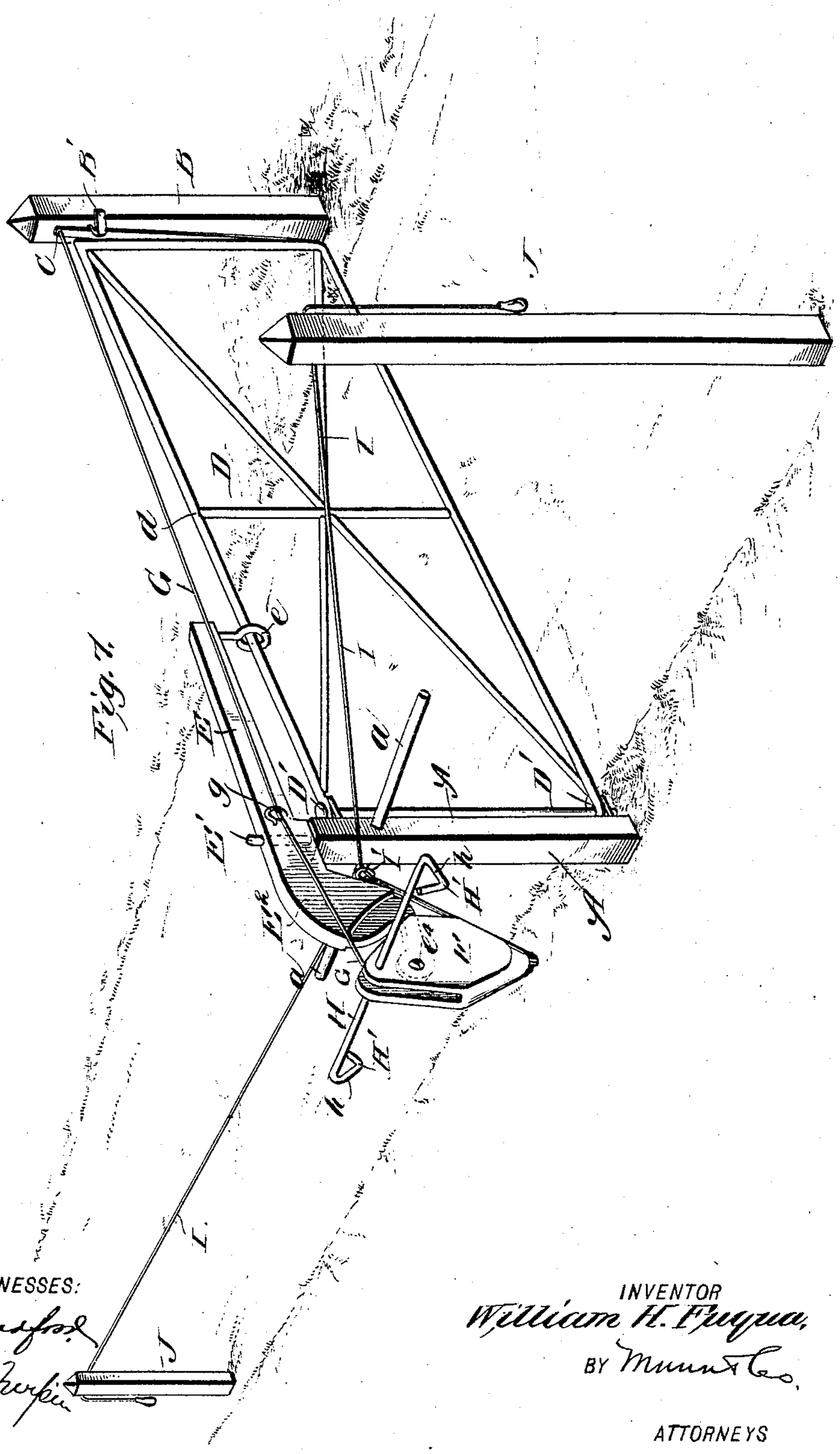

Fig. 1.

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No. 773,385. Patented October 25, 1904.

UNITED STATES PATENT OFFICE.

WILLIAM H. FUQUA, OF ROSWELL, TERRITORY OF NEW MEXICO.

GATE.

SPECIFICATION forming part of Letters Patent No. 773,385, dated October 25, 1904.

Application filed March 5, 1904. Serial No. 196,717. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. FUQUA, a citizen of the United States, and a resident of Roswell, in the county of Chaves and Territory of New Mexico, have made certain new and useful Improvements in Gates, of which the following is a specification.

My invention is an improvement in gates; and it consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of the gate with the automatic parts arranged for operation by the tripping devices presently described. Fig. 2 is a side elevation of the gate, parts being broken away and others shown in section. Fig. 3 is a detail perspective view illustrating the tripping devices for operation by the wheel of a vehicle. Fig. 4 is a detail cross-section on about line 4 4 of Fig. 3. Fig. 5 is a detail perspective view showing the hinge-post and the operating-lever and the latch devices for securing the gate open. Fig. 6 is a top plan view of the hinged end of the gate when open, and Fig. 7 is a perspective view of the gate arranged for operation by pull-cords.

The construction of the gate, its latching devices, and the devices immediately connected with the gate for operating the latter is the same throughout the several views, and the general construction of the operating devices is best shown in Fig. 7 of the drawings. The gate is supported between the hinge-post A and the latch-post B, the latter having a seat B′ for the latch C at the swinging end of the gate D, the latter being hinged at D′ to the hinge-post A, as shown in Figs. 2, 5, 6, and 7.

The post A is provided near its upper end with the rods *a*, extending on opposite sides of the post in the direction of the road and arranged for engagement by the latches supported in rear of the gate, as presently described.

The main or operating lever E is pivoted at E′ between its ends on the hinge-post A, so that the said lever may swing in a horizontal plane, and the front end of the lever extends over the gate D and is slidably connected therewith, preferably by providing the front end of the lever E with an eye *e*, which slides along the top *d* of the gate, as best shown in Figs. 2 and 7 of the drawings. By this construction it will be noticed that as the operating-lever E is rocked on its pivot E′ it will operate to swing the gate D in one direction or the other, according to the motion of the lever E. The rear arm E^2 of the lever E extends in rear of the pivot E′ and is depressed at E^2 in rear of the post A and has at the lower end of its depressed portion E^2 a rearwardly-projecting shank e^3, to which is pivoted, by a horizontal pivot e^4, the latch-operating lever F, as best shown in Figs. 2 and 7.

The latch-operating lever F is pivoted between its ends at e^4 to the rear end of the operating-lever E and is connected at its lower end with the pull devices presently described and at its upper end by a cord G with the latch C, said cord being guided at *g* alongside the operating-lever, as shown in Figs. 6 and 7, so that when the latch-operating lever F is swung from the position shown in full lines, Fig. 2, to the dotted-line position in said figure it will operate the cord to release the latch C from engagement with its seat B′, so that the gate may be swung from closed to open position by drawing upon the lower end of the latch-operating lever F, as will be understood from Figs. 2 and 7. To the latch-operating lever F, and preferably to the upper end thereof, as shown in Figs. 2, 5, and 7, I secure the latch-bar H, preferably of spring metal and provided at its outer ends with the latch projections H′, having inclined surfaces *h* to ride over the rods *a*, so that the latches H may engage with the rods *a* and hold the gate open, as will be understood from Figs. 5, 6, and 7 of the drawings.

In Fig. 1 I show the gate arranged for operation by the tripping devices, which are shown in detail in Fig. 3, while in Fig. 7 I show the pull-cords I, carried from the lower end of the lever F through an eye I′ on the lever E and thence to opposite sides of the gate and suitably carried on the posts J, so that the pull-cords can be readily grasped by the operator in order to operate the gate in one direction or the other. It will be noticed

the gate always opens away from the operator and can be readily opened as the operator approaches the gate and closed after he has passed through the gate, as desired.

In the construction shown in Fig. 3 the tripping device includes a spring-supported bar K, guided on pins K′, which are encircled by the springs K^2 for supporting the tripping-bar K normally in elevated position, and a crank-shaft L, provided with an arm L′, connected with the pull-cords I and also having a rounded arm L^2 bearing beneath the tripping-bar K, so that the depression of the bar K will rock the crank-shaft L in such manner as to cause its arm L′ to pull upon the pull-cord, as desired.

The tripping devices shown in Fig. 3 may be suitably disposed in a culvert across the roadway, so that a vehicle may be driven over the same in order to depress the trip-bar K to operate in the manner desired.

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

1. The combination substantially as herein described of the gate, the latch at the swinging end of the gate, the hinge-post, the latch-post, the rods projecting from the hinge-post in the direction of the roadway, the operating-lever pivoted on the hinge-post and having an arm extending forwardly over and slidably connected with the gate in advance of the hinge thereof, said operating-lever being also provided with a rearwardly-projecting arm having a depressed portion in rear of the hinge-post, the latch-operating lever pivoted between its upper and lower ends to said depressed portion of the rear arm of the operating-lever, the latch projections at the upper end of the latch-operating lever and on opposite sides thereof to engage with the rods on the hinge-post to hold the gate open, connections between the upper end of said latch-operating lever and the gate-latch, the pull-cords and the tripping devices having spring-supported trip-bars and crank-shafts provided with arms connected with the pull-cords and with rounded arms for operation by the tripping-bars substantially as set forth.

2. The combination of the gate, the latch at the swinging end of the gate, an operating-lever having a front arm swinging horizontally above the gate and slidably connected with the gate and a rear arm, an approximately vertical latch-operating lever pivoted to the rear end of the operating-lever and rocking in a vertical plane, connections between the upper end of the latch-operating lever and the gate-latch, and pull connections at the lower end of the latch-operating lever substantially as set forth.

3. The combination of the gate, the hinge-post, the rods *a*, the operating-lever having a front arm extending over and slidably connected with the gate for opening and closing the latter and a rear arm extending in rear of the gate, a latch-operating lever pivoted between its upper and lower ends to said rear arm, the latch devices at the upper end of said latch-operating lever for engagement with the rods *a*, and pull devices connected with the lower end of the latch-operating lever substantially as set forth.

4. The combination of the hinge-post, the latch-post, the gate, the latch at the swinging end of the gate, the latch-rod extending on opposite sides of the hinge-post, the operating-lever swinging horizontally above the gate and having a front arm slidably connected with the gate and an arm in rear of the gate, the latch-operating lever pivoted between its upper and lower ends to the rear arm of the operating-lever, connections between the upper end of said latch-operating lever and the gate-latch, latch devices at the upper end of said operating-lever for engagement with the latch-rods on opposite sides of the hinge-post, and pull devices connected with the lower end of the latch-operating lever substantially as set forth.

5. The combination with the swinging gate and the latch at the swinging end thereof of the operating-lever having a front arm swinging horizontally above the gate to open and close the same, a latch-operating lever pivoted to the rear end of said operating-lever and extending above and below the same, connections between the upper end of said lever and the latch, and operating means connected with the lower end of said lever, substantially as described.

6. The combination with the swinging gate and the latch at the swinging end thereof of the operating-lever swinging horizontally above the gate and having a front arm to open and close the gate and a rear arm, a latch-lever pivoted to said operating-lever, latch projections extending on opposite sides of the latch-lever and abutments on opposite sides of the hinge of the gate for engagement by said latch projections whereby to secure the gate when the latter is opened substantially as set forth.

7. The combination of the gate, its latch, the operating-lever having a front arm slidably connected with the gate and a rear arm having a depressed portion and a shank projecting rearwardly therefrom, the latch-operating lever pivoted between its upper and lower ends to said shank, connections between the upper end of said lever and the gate-latch, latch devices carried by said latch-operating lever for holding the gate open, and pull devices connected with said latch-operating lever substantially as set forth.

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Witnesses:
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