

(No Model.)

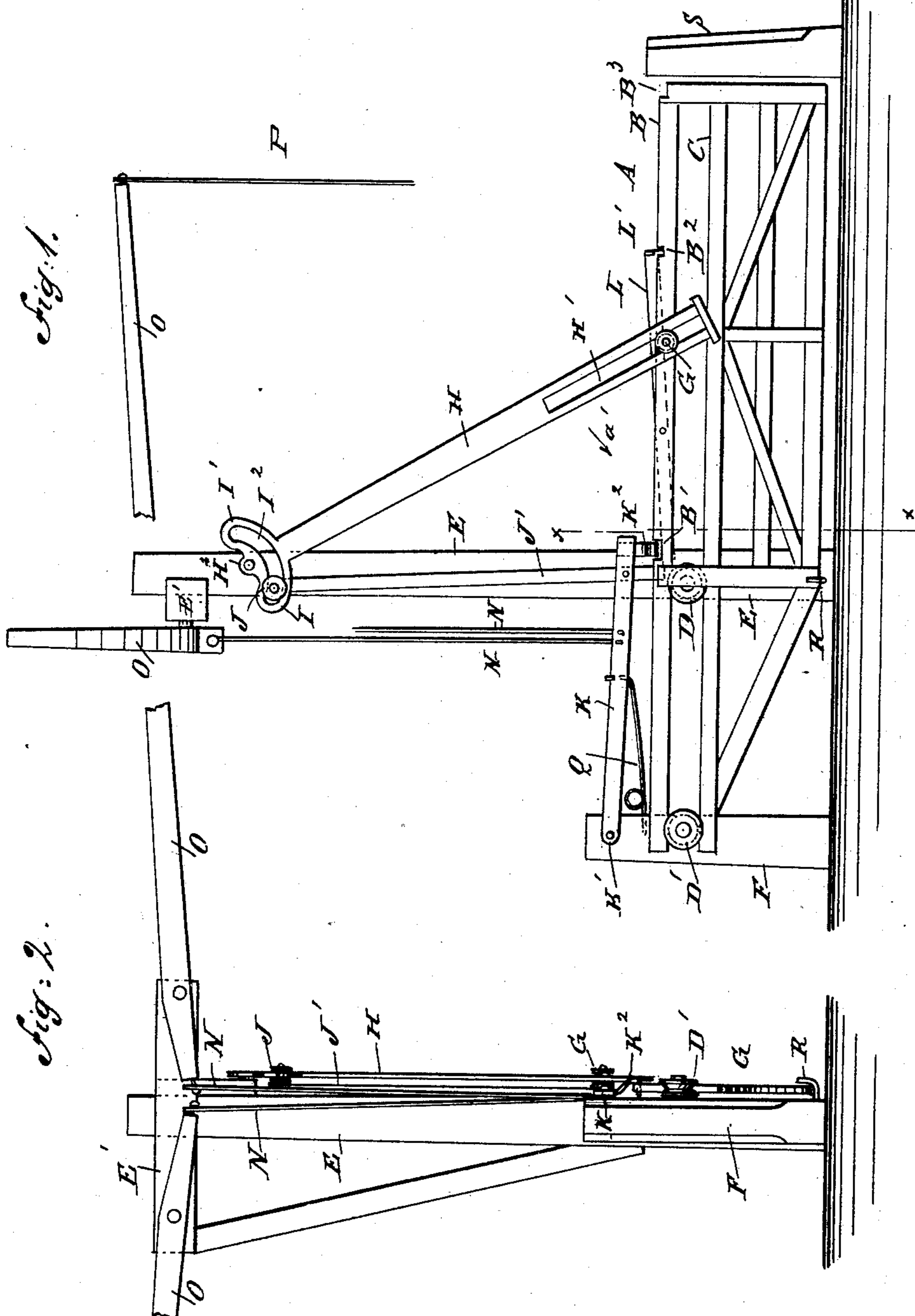
2 Sheets—Sheet 1.

E. R. & S. C. CHASE.

GATE.

No. 371,304.

Patented Oct. 11, 1887.



WITNESSES:

*Chas. Vida.*  
*C. Sedgwick.*

INVENTOR:

*E. R. Chase*  
*S. C. Chase*

BY

*Munn & Co.*  
ATTORNEYS.

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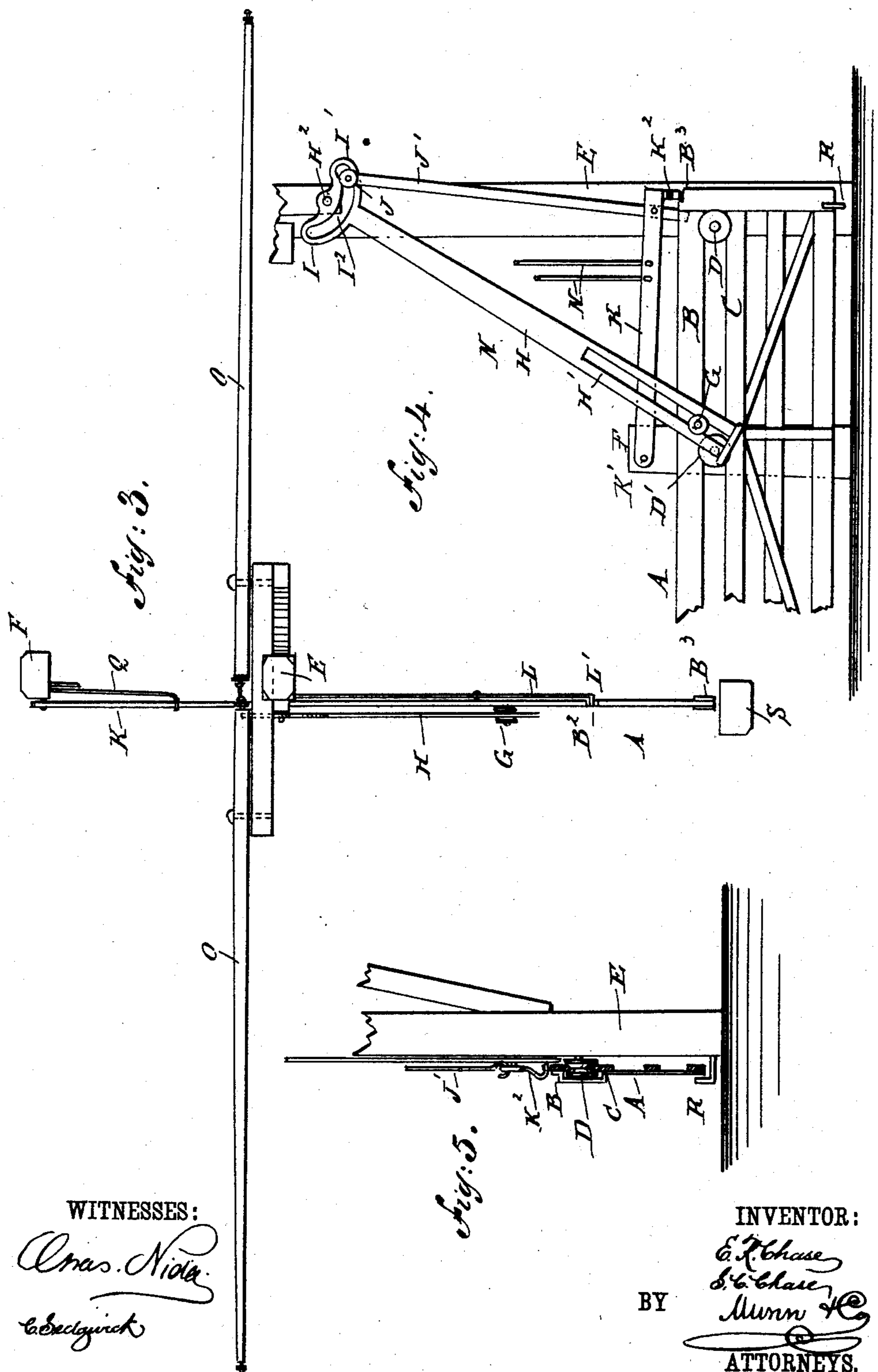
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# UNITED STATES PATENT OFFICE

EDWARD R. CHASE AND SOLOMON C. CHASE, OF FINDLAY, OHIO.

## GATE.

SPECIFICATION forming part of Letters Patent No. 371,304, dated October 11, 1887.

Application filed July 18, 1887. Serial No. 244,664. (No model.)

*To all whom it may concern:*

Be it known that we, EDWARD R. CHASE and SOLOMON C. CHASE, both of Findlay, in the county of Hancock and State of Ohio, have  
5 invented a new and Improved Gate, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved gate which is simple and  
10 durable in construction and can be easily opened and closed.

The invention consists in the construction and arrangement of various parts and details and combinations of the same, as will be fully  
15 described hereinafter, 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  
20 corresponding parts in all the figures.

Figure 1 is a side elevation of our improvement with one operating-lever removed. Fig. 2 is an end elevation of the same. Fig. 3 is a plan view of the same. Fig. 4 is a side elevation of part of our improvement, showing the  
25 gate open; and Fig. 5 is a sectional end elevation of the same on the line *x x* of Fig. 1.

The gate A travels, and is hung with its two upper rails or bars, B and C, on the pulleys D  
30 and D', mounted on the posts E and F, respectively. Near the middle of the upper rail, B, is mounted a friction-roller, G, traveling in a slot, H', of the T-shaped lever H, fulcrumed at H<sup>2</sup> at its upper end on the post E.

35 The lever H is provided with two arms, I and I', extending equal distances on both sides of the lever H. A segmental slot, I<sup>2</sup>, is formed in the arms I and I', having its center beyond the pivot-point H<sup>2</sup>. In this slot I<sup>2</sup> operates the  
40 friction-roller J, mounted on a downwardly-extending bar, J', pivotally connected with the lever K, fulcrumed at K' on the post F. The outer end of the lever K is provided with a downwardly-extending lug, K<sup>2</sup>, adapted to en-  
45 gage a notch, B', formed in the top edge of the upper rail, B, of the gate A. The lug K<sup>2</sup> also engages with one end of the lever L, pivoted on the rail B, and provided on its other end with a projection, L', fitting into the notch B<sup>2</sup>  
50 of the top edge of the said rail B. A notch, B<sup>3</sup>, is also formed on one end of the rail B, and it engages with the said lug K<sup>2</sup> when the gate

A is open, as shown in Fig. 4, thus holding the gate in an open locked position.

The lever K is pivotally connected by the  
55 links N with the inner ends of the levers O, fulcrumed on a cross-beam, E', fastened on the upper end of the post E. The inner ends of the lever O are provided with downwardly-extending handles P, for operating the gate A.  
60 The levers O extend a suitable distance into the roadway at both sides of the gate.

A spring, Q, or its equivalent is secured with one end to the post F and presses with its other end on the lever K, thus holding the lat-  
65 ter in a downward position. Near the bottom of the post E is placed the guide R, to prevent the gate from wobbling. The gate, when closed, passes with its inner end into the post S, so as to prevent animals from pushing the  
70 gate sidewise.

The operation is as follows: When the gate A is in a closed position, as shown in Fig. 1, and it is desirable to open the gate from one side by a person seated in a vehicle, then the  
75 said person pulls on the handle P, so that the inner end of the lever O is raised, thereby swinging the lever K upward, so that the lug K<sup>2</sup> is disengaged from the notch B' in the top rail, B, of the gate, and at the same time the bar  
80 J' presses with its pulley J upward on the arm I of the lever H and imparts a swinging motion to the latter in the direction of the arrow a'. The lever H by its connection with the friction-roller G on the rail B, causes the gate to  
85 move inward, traveling on the pulleys D and D', and thus opening the gate. As soon as the gate is in its innermost position and the operator ceases to pull on the handle P, then the  
90 spring Q forces the lever K downward, so that its lug K<sup>2</sup> engages the outer notch, B<sup>3</sup>, of the gate A, as shown in Fig. 4, thereby holding the gate in a locked open position. This downward movement of the lever K, caused by the  
95 spring Q, also causes the friction-roller J on the arm J' to travel downward in the slot I<sup>2</sup>, in which it rests in the lower end of the arm I' of the lever A. The levers O are also returned to their former position by the downward motion of the lever K. When the vehi-  
100 cle has passed through the gateway, the operator pulls on the other handle P and the gate is now closed in the same manner as described above in relation to the opening of the gate,

with the only difference that the arm J' presses, with its roller J, upward against the arm I', thereby causing the lever H to swing in the inverse direction of the arrow *a'*, thus moving the gate outward. If a person standing near the gate desires to open it partly or wholly, he presses his hand on the raised end of the lever L, so as to disengage the lug K<sup>2</sup> from the notch B'. The gate can now be pushed inward by hand.

Instead of using friction-rollers G or J, we may use common pins or studs, which will answer the same purpose.

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

1. The combination, with a gate formed to slide sidewise, of a slotted lever connected with the said gate having arms formed near its fulcrum, provided with a segmental slot, an arm carrying a friction roller or stud held in the said slot, and means, as described, for imparting an upward motion to the said arm, substantially as set forth.

2. The combination, with a gate adapted to slide sidewise, of a slotted lever connected with the said gate, having arms formed near its fulcrum provided with a segmental slot, an arm carrying a friction-roller held in the said slot, a spring-lever connected with the said arm, and means, as described, for actuating said device, substantially as set forth.

3. The combination, with a gate formed to slide sidewise, of a slotted lever connected with the said gate, having arms formed near its fulcrum provided with a segmental slot, an arm carrying a friction roller or stud held in the said slot, a spring-lever connected with the said arm, and a lug projecting from the said lever and adapted to engage notches on the top rail of the said gate, substantially as set forth.

4. The combination, with a gate formed to slide sidewise, of a slotted lever connected with the said gate, having arms formed near its fulcrum provided with a segmental slot, an arm carrying a friction roller or stud held in the said slot, a spring-lever connected with said arm, a lug projecting from the said lever and adapted to engage notches on the top rail of the said gate, and means, as described, for actuating said device, substantially as set forth.

5. The combination, with a gate adapted to slide sidewise, of a slotted lever connected with the said gate, having arms formed near its fulcrum provided with a segmental slot, an arm carrying a friction roller or stud held in the said slot, a spring-lever connected with the said arm, a lug projecting from the said lever and adapted to engage notches in the top rail of the said gate, and a lever pivoted on the said gate for lifting the said lug of the spring-lever, substantially as shown and described.

6. The combination, with a slotted lever operating the gate, having arms formed near its fulcrum provided with a segmental slot, of a friction roller or stud held in the said segmental slot and operating on the said arms of the lever, a rod carrying the said friction roller or stud, a spring-lever pivotally connected with the said arm or rod, and means, as described, for actuating said device, substantially as shown and described.

EDWARD R. CHASE.  
SOLOMON C. CHASE.

Witnesses for Edward R. Chase:

W. H. HAVEN,  
JOHN WEIL.

Witnesses for Solomon C. Chase:

JOHN E. CHASE,  
JOHN HAVEN.