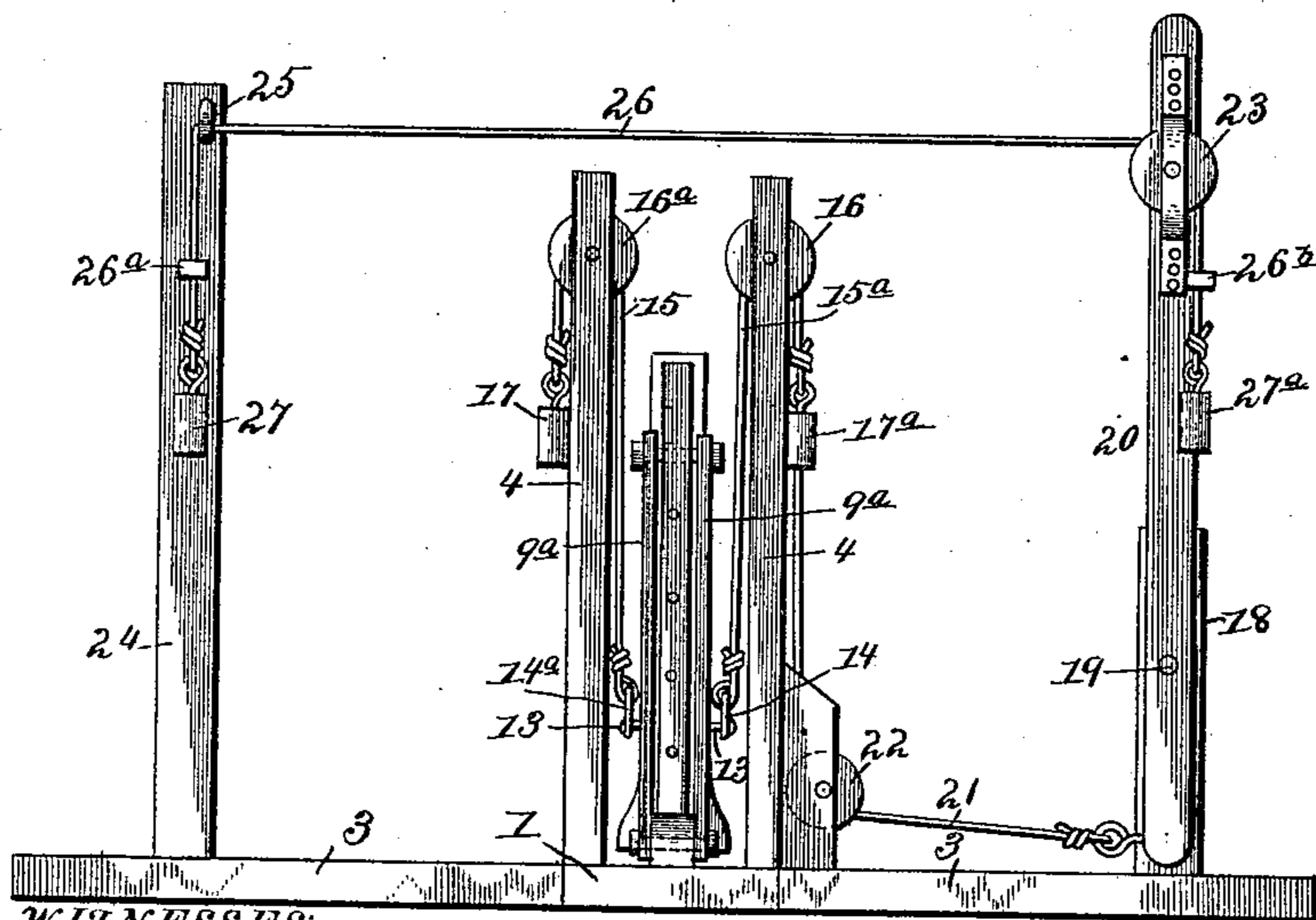
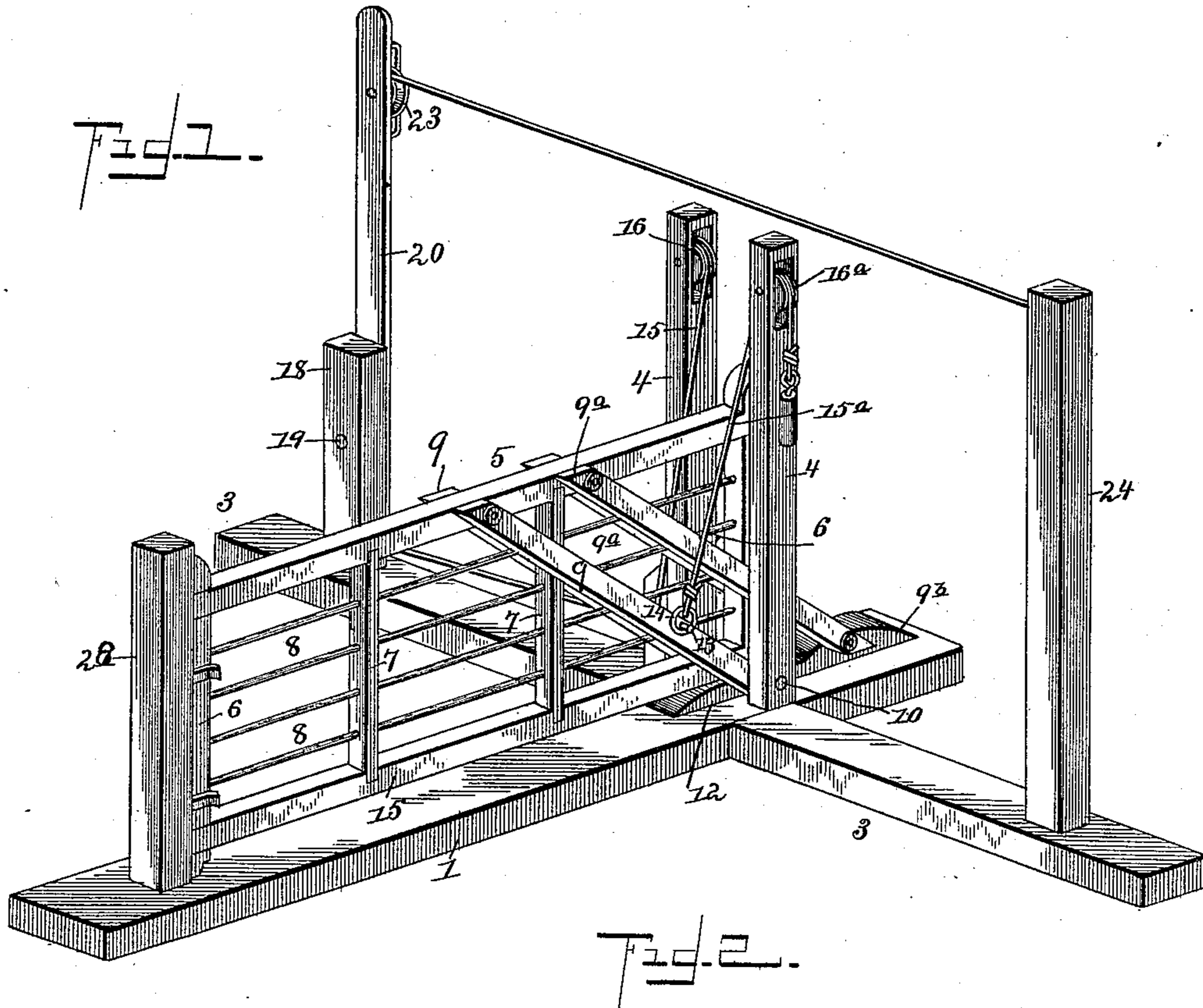


(No Model.)

G. E. CORNELL.
GATE.

No. 465,240.

Patented Dec. 15, 1891.



WITNESSES:

F. L. Curand
J. L. Crook

INVENTOR:

George F. Cornell,
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE EDWARD CORNELL, OF SAGINAW, MICHIGAN.

GATE.

SPECIFICATION forming part of Letters Patent No. 465,240, dated December 15, 1891.

Application filed May 11, 1891. Serial No. 392,359. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EDWARD CORNELL, a citizen of the United States, and a resident of Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

The object of the present invention is to provide an improved gate whereby advantages are secured with respect to economy in construction and efficiency in operation.

The invention consists in the novel construction and combination of parts herein-
after fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a gate constructed in accordance with my invention. Fig. 2 is an end view of the same, and Fig. 3 is a detail sectional view.

In the said drawings, the reference-numeral 1 designates a base-board or beam extending across the roadway or gate-opening and near one end connected to longitudinal beam 3. Secured to the board 1 are two uprights or gate-posts 4, which extend somewhat above the top of the gate.

The gate consists of top and bottom rails 5, end rails 6, intermediate vertical rails 7, and longitudinal wires 8. I do not wish, however, to confine myself to any particular form of gate, as many of the ordinary constructions may be employed in connection with my invention.

The numerals 9 9 designate two lifters pivoted at opposite sides to the upper rail of the gate at one end and at the other end mounted upon or journaled upon a shaft or rod 10, passing through the uprights 4, near the lower end thereof, said lifters when the gate is shut occupying a diagonal or inclined position with respect thereto. The gate is suspended between these lifters, and at the lower end, below the shaft 10, is a projection or lug 12, se-

cured to the base 1, which serves to keep the lifters at the proper distance apart and prevent their binding upon the gate. The gate is also provided with bars 9^a 9^a, pivoted to the upper rails thereof and to a lug 9^b, secured to base 1. These rods are parallel to the lifters and add to the stability of the device. Each of the lifters is provided with an outwardly-projecting stud or pin 13, with which engage rings 14 14^a, connected with ropes or chains 15 15^a, passing over pulleys 16 16^a in the upper ends of the uprights 4, the opposite ends of said ropes being provided with weights 17 17^a.

At one end of the beam 3 is a short post 18, having pivoted thereto at 19 a long lever 20, the lower end of which has connected with it a rope or chain 21, which passes over and around a pulley 22, journaled or secured to the lower end of one of the uprights, the other end of said rope or chain being connected with the weight 17^a, which is attached to the end of rope 15^a. The upper end of lever 20 is provided with a pulley 23, and at the opposite end of beam 3 is a long post 24, having an eye or pulley 25 at its upper end. Over these pulleys passes an operating cord or rope 26, having weights 27 27^a at each end. This cord 26 is provided near each end with stop-blocks 26^a 26^b, secured thereon for a purpose hereinafter explained.

At the outer end of the base 1 is a post 28, against which the gate abuts when closed.

The gate may be provided with a latch engaging with a keeper on the post 28, so as to latch the same when closed.

The operation will be readily understood. If the operator is on foot, he can readily swing or lift the gate, so as to open the same. If, on the other hand, he is in a carriage or wagon and desires to open the gate without dismounting, the operation is as follows: Supposing him to be on the near side of the gate, he grasps the weight 27 and pulls cord 26 thereby. This causes stop 26^b to come in contact with the pulley on lever 20, actuating the latter, which by means of cords 15^a and 21 operates the lifters and swings the gate over to the other side. As the gate is swung over, the hold on the weight is released, and the fall of the gate will return the

lever to normal position, so that after passing through the gate the same can be shut by grasping and pulling upon the other weight 27^a. In this latter case the stop 26^a will come
5 in contact with the pulley on the post 24.

I have described ropes 15^a and 21 as being separate and distinct from each other; but it is obvious that a single rope can be employed instead and the weight 17^a connected there-
10 with in any suitable manner or dispensed with entirely, if desired.

The weight 17, connected with rope 15, acts as a counterbalance for the gate.

Having thus described my invention, what
15 I claim is—

1. The combination, with a gate, of the up-
rights 4 4, having pulleys 16, 16^a, and 22, the
lifters 9 9, pivoted at their upper ends to the
upper rails of the gate and at their lower ends
20 to the uprights, the short post 18, the lever 20,
having pulley 23, the weighted rope or chain
passing over pulleys 16^a and 22 and connected
with the said lever and with one of the lift-
ers, the long post 24, having pulley 25, and

the weighted rope 26, having stop-blocks 26^a 25
and 26^b, substantially as described.

2. The combination, with a gate, of the up-
rights 4 4, having pulleys 16, 16^a, and 22, the
lifters 9 9, pivoted at their ends to the upper
rails of the gate and at their lower ends to the 30
uprights, the short post 18, the lever 20, hav-
ing pulley 23, the rope or chain passing over
pulleys 16^a and 22 and connected with the
said lever and with one of the lifters, the long
post 24, having pulley 25, the weighted rope 35
26, having stop-blocks 26^a and 26^b, passing
over pulleys 23 and 25, the rope or chain 15,
connected with one of the lifters and passing
over pulley 16, and the counterbalance-weight
17, secured to said rope or chain, substantially 40
as described.

In testimony that I claim the foregoing as
my own I have hereunto affixed my signature
in presence of two witnesses.

GEORGE EDWARD CORNELL.

Witnesses:

SOLOMON GUNDRUM,
GEORGE ATHERTON.