

No. 621,246.

Patented Mar. 14, 1899.

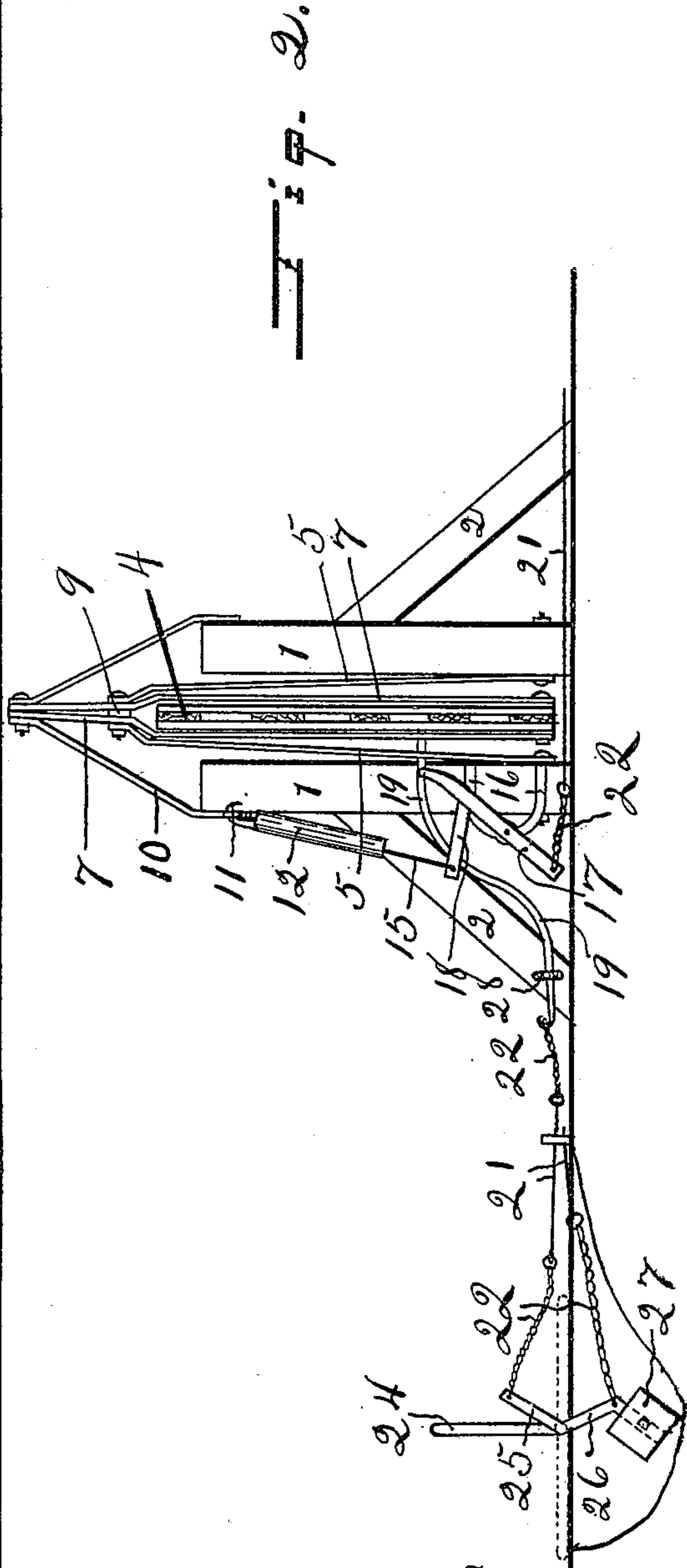
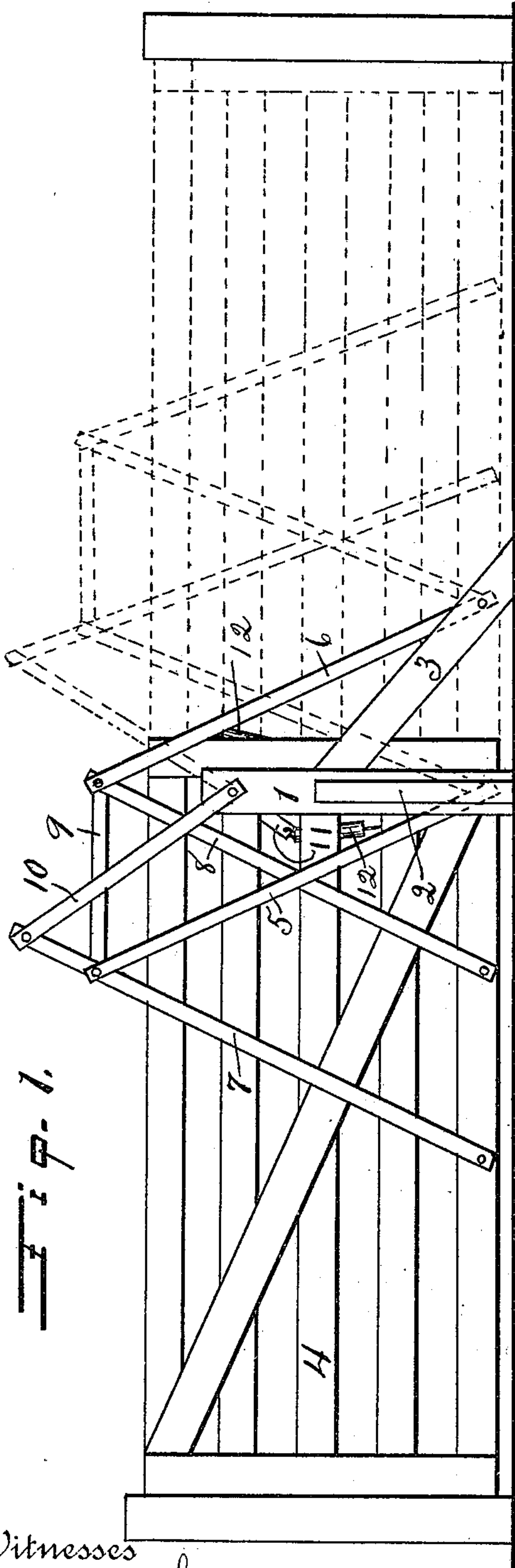
C. H. HASLAM.

GATE.

(Application filed Mar. 22, 1898.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses  
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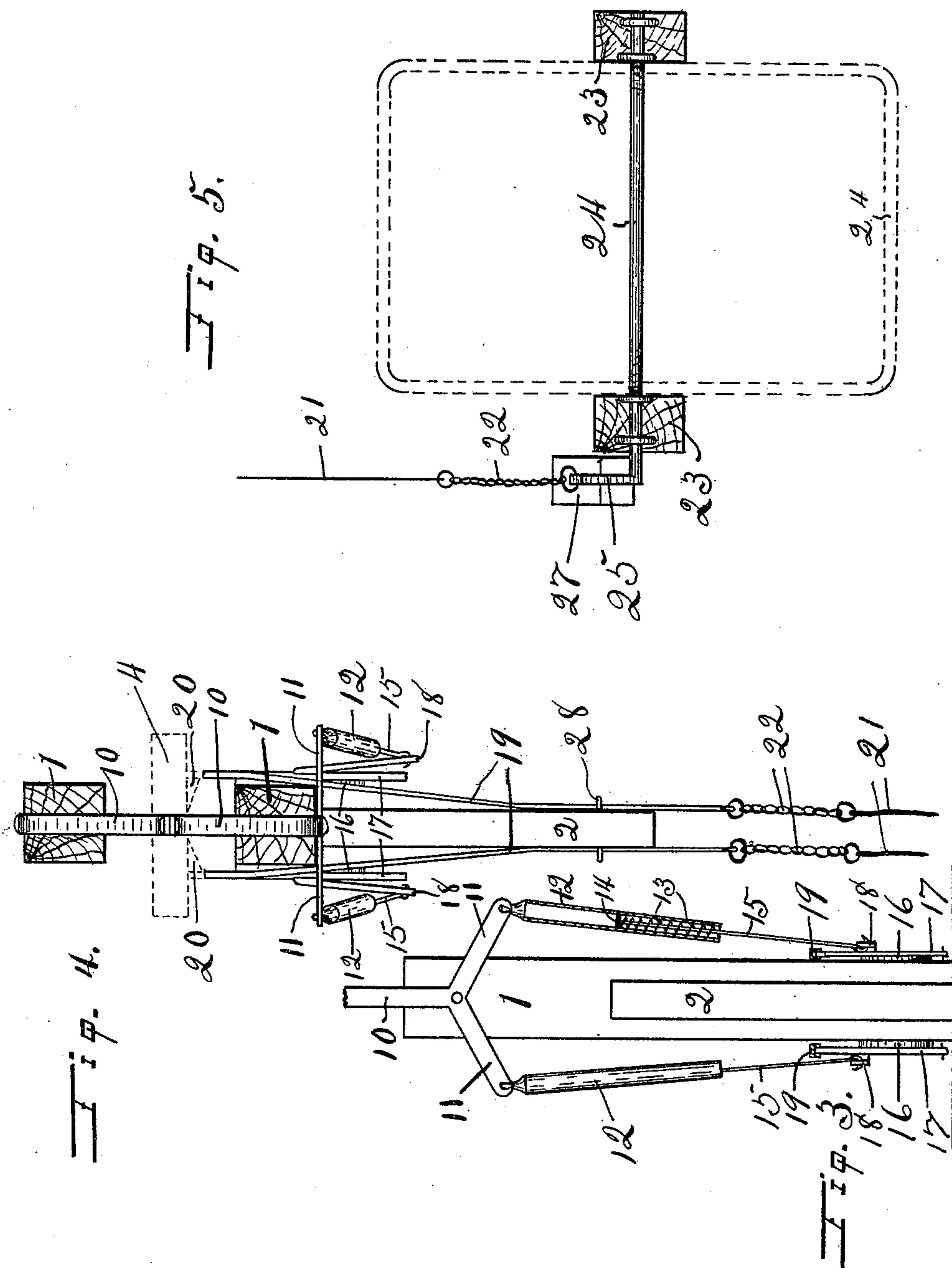
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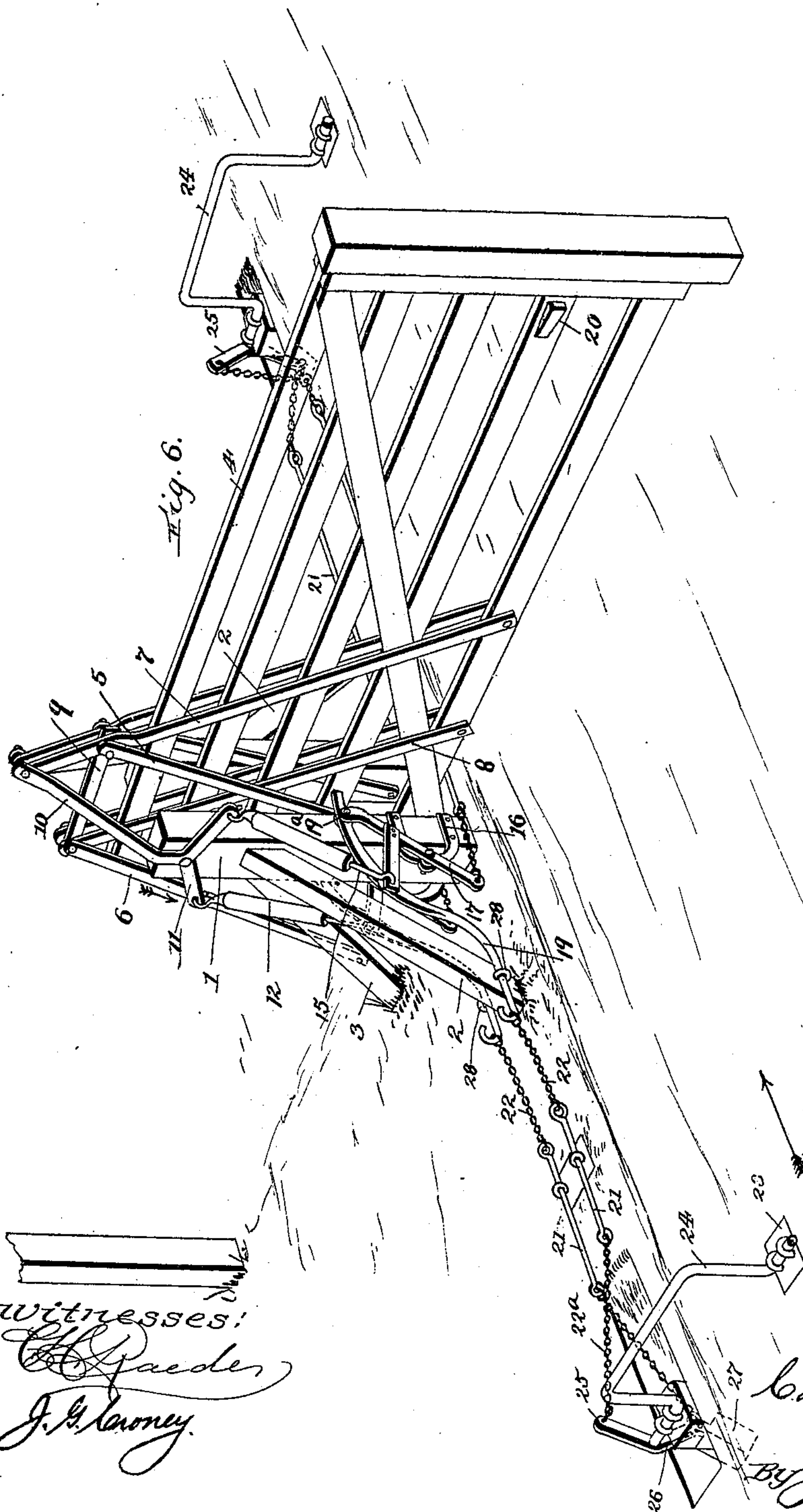
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3 Sheets—Sheet 3.



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# UNITED STATES PATENT OFFICE.

CHARLES H. HASLAM, OF STOCKTON, CALIFORNIA.

## GATE.

SPECIFICATION forming part of Letters Patent No. 621,246, dated March 14, 1899.

Application filed March 22, 1898. Serial No. 674,736. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. HASLAM, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in Gates; and I 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in gates; and it consists in the mechanism hereinafter set forth and is particularly pointed out in the claims hereunto annexed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved gate. Fig. 2 is an end elevation of the same, showing the automatic operating mechanism. Fig. 3 is a detached side elevation of the post having the operating mechanism attached thereto. Fig. 4 is a detail top view with some of the braces of the posts omitted. Fig. 5 is a top view of a part of the operating mechanism. Fig. 6 is a perspective view illustrating the gate in its closed position.

Similar figures of reference indicate corresponding parts in the several views.

1 represents two posts, arranged at a suitable distance apart, which are braced from the outer sides by means of braces 2. Such posts 1 are also braced in the rear by braces 3, which are flush with the inside of the posts 1. Said braces 3, in conjugation with the braces 2, render the posts 1 rigid.

The gate 4 may be constructed in the ordinary manner and is supported by a series of rods arranged as follows: Two pairs of rods 5 and 6 are pivotally attached at their lower ends to the inner edge of the posts 1 and braces 3, respectively, near the surface of the ground. The rods 5 and 6 are all of equal length and the points of bearing are all horizontal. The top ends of the rods 5 and 6 are pivotally attached to rods 7 and 8, which rods 7 and 8 have a bar 9 attached between and connecting the top ends of the same, said bar

9 being of a length equal to the distance between the pivotal bearings of the lower ends of the rods 5 and 6, said bar 9 and rods 7 and 8 being located between the top ends of the rods 5 and 6. The lower ends of the said rods 7 and 8 are pivotally attached near the center of the lower side of the gate 4, so as to render the said rods 7 and 8 parallel. The rods 7 are extended above the junction of the rods 5 and 7 a suitable distance, where they are pivotally connected to a pair of arms 10, which are pivotally attached to the posts 1, near the top ends of the same.

One of the arms 10 has laterally-extending arms 11 attached to its lower end, in the free ends of which arms 11 suitable openings are located. (See Fig. 4.) Suitable cylinders 12, having hooks attached to one end, which are adapted to engage with the said openings in the arms 11, are hung from said arms 11, and each cylinder contains a spiral spring 13, which occupies about one-half of said cylinder 12, on which a piston 14 rests. A rod 15 is rigidly attached to the piston 14 and extends downwardly through the spring and out of the end of the cylinder 12, where its lower end is formed into a hook. U-shaped journal-irons 16 are attached on either side of one of the posts 1, near the bottom of the same, to each of which irons 16 an angular lever 17 is pivotally attached. Angle-arms 18, fulcrumed at opposite sides of the post 1, have openings in the free ends thereof, into which the lower ends of the rods 15 are attached. Curved lever-operating rods 19 are suitably attached to the top end of the levers 17 at 19<sup>a</sup> and curve downwardly, passing through staples or lugs 28, suitably attached on the sides of the braces 2. The said rods 19 have their inner ends extended beyond the levers 17, where the rods 19 are adapted to alternately engage with catches 20 on either end of the gate 4, as hereinafter described.

I employ four wires 21, which have short chains 22 or other flexible material attached to either end of each, two of which are attached to the lower ends of the levers 17 and extend beneath the gate along the side of the road, and the remaining two are attached to the free ends of the rods 19 and extend in the opposite direction. The chains 22 on the free



ends of the wires 21 are attached to two cranks disposed at opposite sides of the gate, the description of one being sufficient for both.

23 (see Fig. 5) represents two journal-bearings rigidly secured in the ground at a suitable distance from the gate. On the bearings 23 a U-shaped crank 24 is journaled. The inner end of said crank 24 has an upwardly-extending arm 25 and downwardly-extending arm 26, as shown in Fig. 2. The arm 26 has a suitable weight 27 attached thereto, and the chains 22<sup>a</sup> are attached to the arms 25 and 26 for the purposes as will be shown.

In the practical operation of my invention a teamster approaching the gate in the direction indicated by arrow guides his vehicle so that one wheel thereof will pass over the crank 24 and rock the same downwardly and toward the gate. This will swing the arm 26 in a direction away from the gate and will pull the rod 19, adjacent to the rear end of the gate, toward the crank 24 and will rock the lever 17 18, with the result that the rod 15, connected to said lever, will be drawn downwardly, the lever 11 will be rocked in the direction indicated by arrow, the arms 10 and 11 will be swung in the same direction, and the gate will be moved toward its open position. When the gate is slightly more than half-way opened, it will travel the remainder of the distance and remain in its open position by reason of gravity. When the teamster desires to close the gate after him, he guides his vehicle so as to cause one wheel thereof to encounter the crank 24, situated at the opposite side of the gate with respect to the first-named crank. This will rock the arm 25 forward or in a direction away from the gate, and said arm being connected with the lever 17 18 on the front side of the post 1 it follows that the gate will be moved to a closed position.

The crank 24 at the right of the gate being connected with the lower ends of the levers 17 in the same manner that the crank 24 at the left of the gate is connected with the rods 19, it follows that when the first-named crank 24 is rocked toward the gate by a vehicle approaching from the right the gate will be opened in the manner and through the medium of the mechanism before described.

The chains 22 22<sup>a</sup> are of sufficient length to allow the crank 24 to regain its normal upright position at all times, except when depressed by the vehicle-wheel, by means of the weight 27.

When the gate 4 is closed, the inner end of the rear rod 19 engages with the catch 20 on the rear end of the gate, thereby holding the

same in rigid position. As the wheel depresses the crank 24 the rod 19 is withdrawn from behind the catch 20 before the gate 4 is moved by reason of the spring 13. The *modus operandi* is the same at the other end of the gate when in the act of closing.

I am well aware that many features herein shown are old and are shown to illustrate the connection only of the new, and therefore those old features I do not claim broadly; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. The combination of the posts, the gate, the rods 7 and 8 pivotally connected at their lower ends to the gate, a bar 9 pivotally connected at one end to the rod 7 at an intermediate point in the length thereof and pivotally connected at its opposite end to the upper end of the rod 8, the rods 5 and 6 pivotally connected at their lower ends to the posts and pivotally connected at their upper ends to the rods 7 and 8 and bar 9, the lever fulcrumed on one of the posts and having the arm 10 connected to the upper ends of the rods 7 and also having the oppositely-directed arms 11, and suitable mechanism connected with said arms 11 for opening and closing the gate, substantially as specified.

2. In a gate the arms or rods 5 and 6 pivotally attached at their lower ends to the posts 1 and braces 3, the arms or rods 7 and 8 pivotally attached at or near their upper ends to the arms or rods 5 and 6 and at their lower ends to the lower edge of the gate, suitable means for maintaining the top ends at a given distance apart, the arms 10 pivotally attached to the top ends of the arms or rods 7 and to the top of the posts 1, in combination with the arms 11, the cylinders 12 attached to the arms 11, the pistons 14, the springs 13, the rods 15 attached to the levers 18 17, such levers 18 17 suitably attached to either side of the post 1, the rods 19 adapted to engage with the top of the levers 18 17, the wires 21 and their attendant flexible fastening 22, attached to the rods 19 and lower ends of the levers 18 17, the cranks 24 suitably mounted on either side of the gate and having one end of the chains 22 attached thereto, and the weights 27 suitably mounted thereon, all arranged and operating substantially as shown and described and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. HASLAM.

Witnesses:

JOSHUA B. WEBSTER,  
MOLBRY HAYNES.