

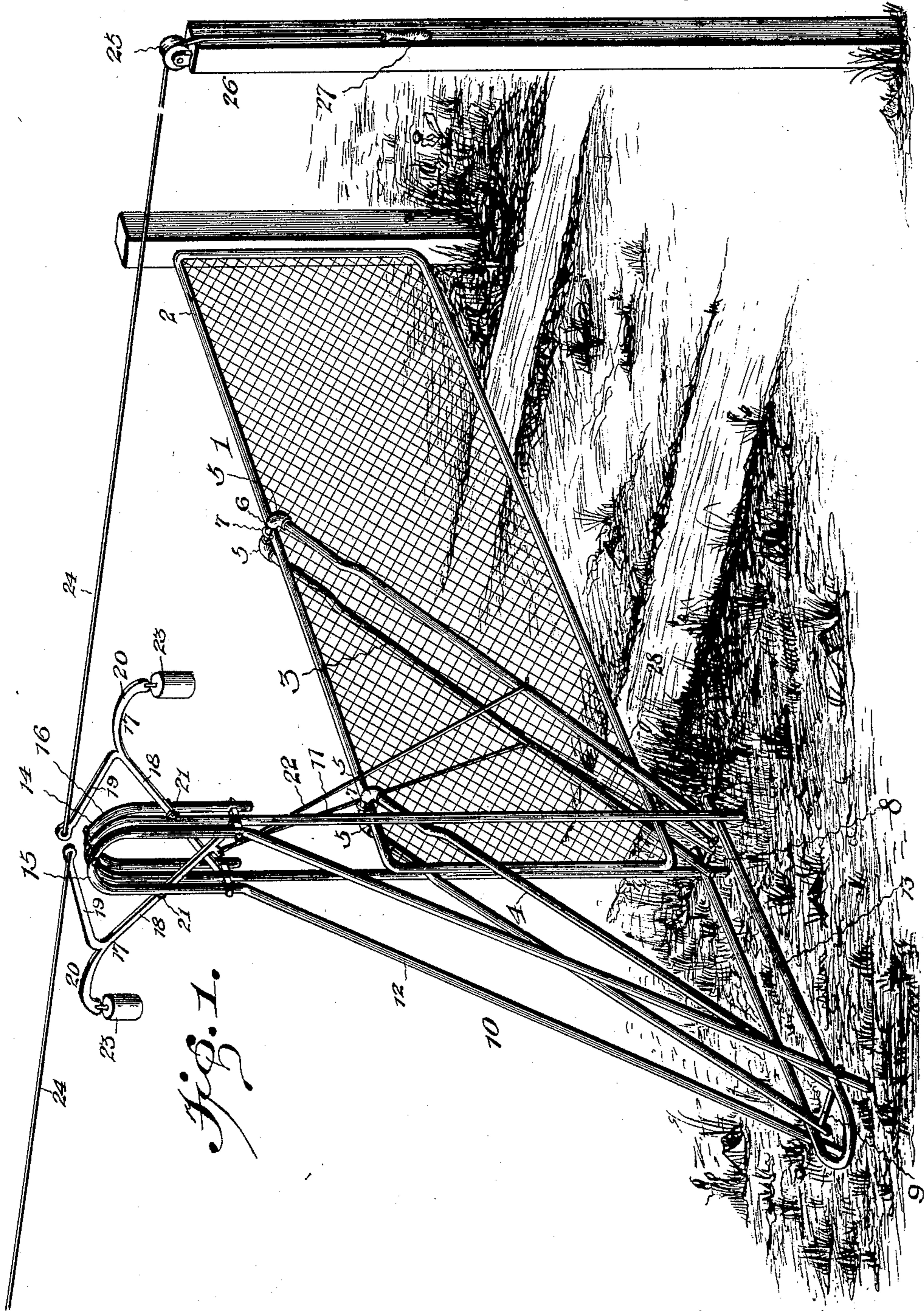
(No Model.)

2 Sheets—Sheet 1.

D. MILLER.
GATE.

No. 603,793.

Patented May 10, 1898.



Witnesses.

A. Roy Appleman

J. F. Riley

By *his* Attorneys,

David Miller, Inventor.

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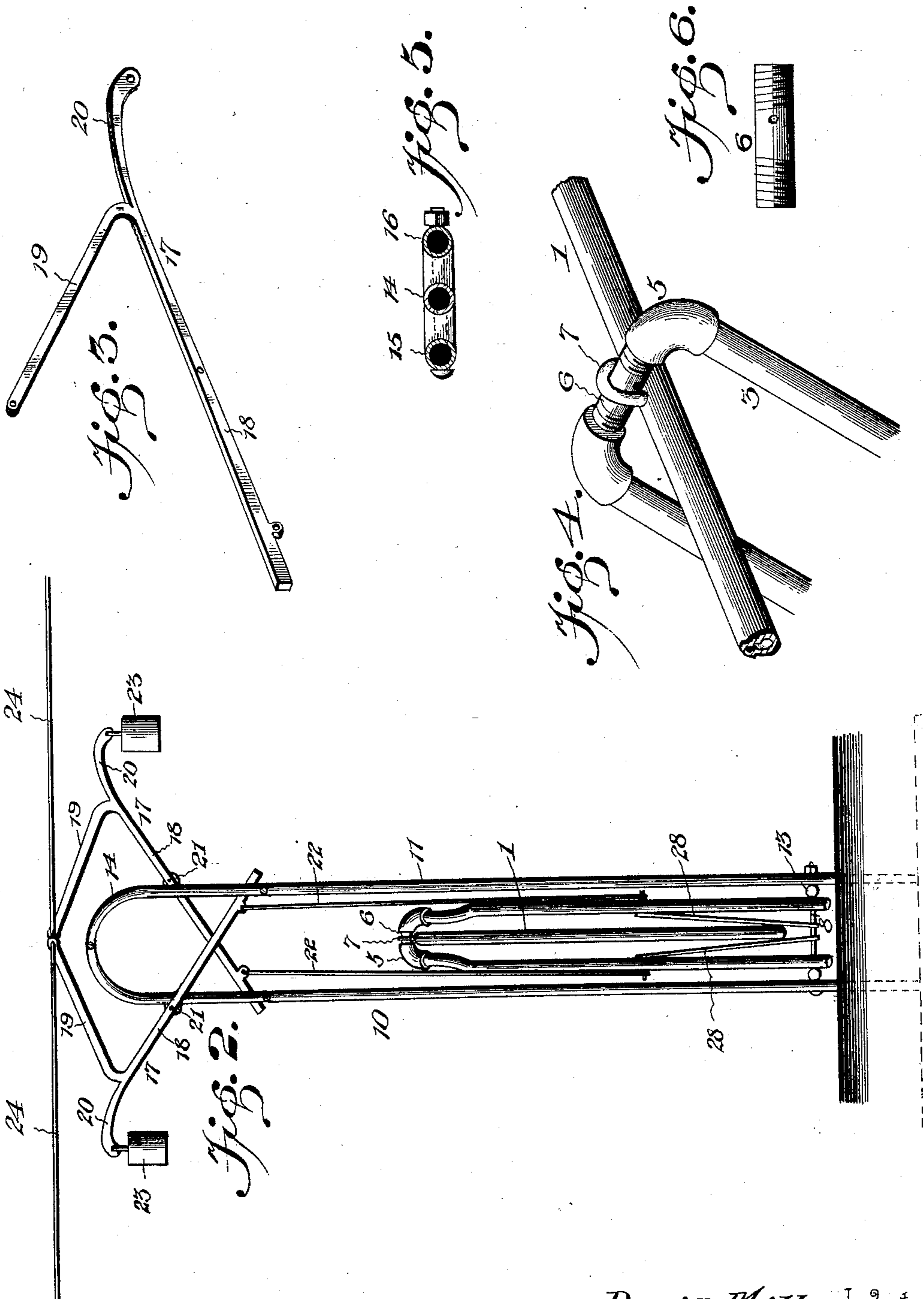
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UNITED STATES PATENT OFFICE.

DAVID MILLER, OF GARDEN CITY, MISSOURI.

GATE.

SPECIFICATION forming part of Letters Patent No. 603,793, dated May 10, 1898.

Application filed January 27, 1898. Serial No. 668,210. (No model.)

To all whom it may concern:

Be it known that I, DAVID MILLER, a citizen of the United States, residing at Garden City, in the county of Cass and State of Missouri, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

The object of the present invention is to improve the construction of oscillating gates and to provide a simple, strong, and durable one which will be inexpensive in construction and adapted to be readily operated at a distance from it without dismounting from a horse or leaving a vehicle.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of an oscillating gate constructed in accordance with this invention. Fig. 2 is a transverse sectional view. Fig. 3 is a detail view of one of the weighted levers. Fig. 4 is a detail view illustrating the manner of connecting the gate with the oscillating bars. Fig. 5 is a detail sectional view of one side of the arch of the supporting-frame. Fig. 6 is a detail view of one of the short tubes which form the pintles of the oscillating bars.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an oscillating gate constructed of any suitable material and preferably consisting of a rectangular frame 2, of tubular metal, and wire or other suitable connections between the sides and ends of the frame. The gate is connected with front and rear oscillating bars 3 and 4, arranged in pairs, as shown, and constructed, preferably, of tubular metal. Each pair of oscillating bars is provided at the upper terminals of its members with couplings 5, which are connected by a short transverse piece 6, screwing into the couplings and passing through a staple or other suitable eye 7 of the top of the gate to provide a hinge-joint. The eyes 7 of the gate are located near the center and rear or inner end, and the lower ends of the oscillating bars 3 and 4 are mounted on horizontal pivots 8 and 9 at the bottom

of a supporting-frame 10. The supporting-frame 10 comprises a pair of vertical standards 11, inclined braces 12, and a horizontal bottom portion 13, which connects the lower portions of the braces and the standards.

The lower ends of the vertical standards and the inclined braces are anchored in the ground by horizontal bars, as indicated by dotted lines in Fig. 2 of the accompanying drawings; but any other suitable means may be provided for effecting this result. The bottom portion or base of the frame is constructed of tubular metal and is substantially U-shaped, as clearly illustrated in Fig. 1 of the accompanying drawings, and it is secured to the standards and braces by the pivots 8 and 9, which consist of bolts or other suitable fastening devices.

The sides of the supporting-frame 10 are connected at the top by an arch, which consists of U-shaped bends or connecting portions 14 and 15 of the standards and the braces 11 and 12. The U-shaped upper portions 14 and 15 of the standards and the braces are bolted together and spaced apart, and a U-shaped piece 16 is similarly secured in advance of the standards 11. The U-shaped portions are spaced apart to provide guides for weighted levers 17, consisting of stems 18 and arms 19 and 20, extending upward and downward from the outer terminals of the stems. The stems 18 are fulcrumed between their ends in suitable bearings 21, and their lower or inner portions are crossed and extend across the top of the gate to opposite sides thereof, being connected with the front oscillating bars by rods 22. The rods 22 extend downward at opposite sides of the gate and are pivotally connected with the oscillating bars 3 at a point between the ends thereof. An upward lift on the rods 22 through the weighted levers oscillates the gate, and the momentum of the latter carries it beyond the center and completes the movement.

The downwardly-extending arms 20 of the levers 18 are provided with weights 23, which operate to counterbalance the gate, and when the latter is at its highest point the weights have swung downward and occupy a position close to the supporting-frame. The arm 19 extends upward from the stem of the le-

ver 17 and is connected with the operating-rope 24. The operating-ropes 24 extend from the gate in opposite directions and pass over pulleys 25 of suitable supports, such as an upright or post 26, and their outer ends are provided with depending handles 27, adapted to be readily grasped by a person on horse-back or the occupants of a vehicle without dismounting.

10 In order to enable the gate to close properly, the front oscillating bars are provided with guides 28, arranged on their inner faces and extended downward and inward to the horizontal pivot 8. The guides, which consist
15 of straight pieces of metal, converge downwardly and support the lower portion of the gate and maintain the same in proper position.

The invention has the following advantages:

20 The gate is simple and comparatively inexpensive in construction and it is adapted to be readily operated at a distance from either side of it without dismounting or leaving a vehicle.

25 The gate is detachably secured to the oscillating bars and by removing it and unbolting the arch or U-shaped connecting portion of the inclined braces the supporting-frame will fold easily, and after such folding it may
30 be readily set up.

Changes in the form, proportion, and minor details of construction, such as varying the form of the support for the operating wires or ropes, may be resorted to without departing from the spirit or sacrificing any of the
35 advantages of this invention.

What I claim is—

1. The combination with a gate, of oscillating bars arranged in pairs and supporting
40 the gate, the converging guides arranged

within one pair of the oscillating bars, converging downwardly and supporting the lower portion of the gate to hold the latter in proper position for closing, and operating mechanism, substantially as described.

2. The combination of a supporting-frame comprising vertical standards connected at their upper ends by a substantially U-shaped portion, inclined braces arranged in pairs and connected at their upper terminals by a U-shaped portion secured to the standards, and a substantially U-shaped horizontal base portion connecting the lower portions of the standards and the braces, oscillating bars mounted on the frame, a gate connected with
55 the oscillating bars, and operating mechanism, substantially as described.

3. The combination of a supporting-frame comprising vertical standards connected at their upper ends by a substantially U-shaped portion, the inclined braces connected at their upper terminals by a vertical U-shaped portion secured to the standards and spaced therefrom to form guides, and the U-shaped piece 16 located at the opposite side of the standards and spaced from them to form guides, an oscillating gate, oscillating bars supporting the gate, and the levers fulcrumed on the supporting-frame, extending across the same and arranged in the said guides, said
65 levers being connected with the oscillating bars, substantially as described.

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

DAVID MILLER.

Witnesses:

D. H. KIRK,
I. R. BAKER.