

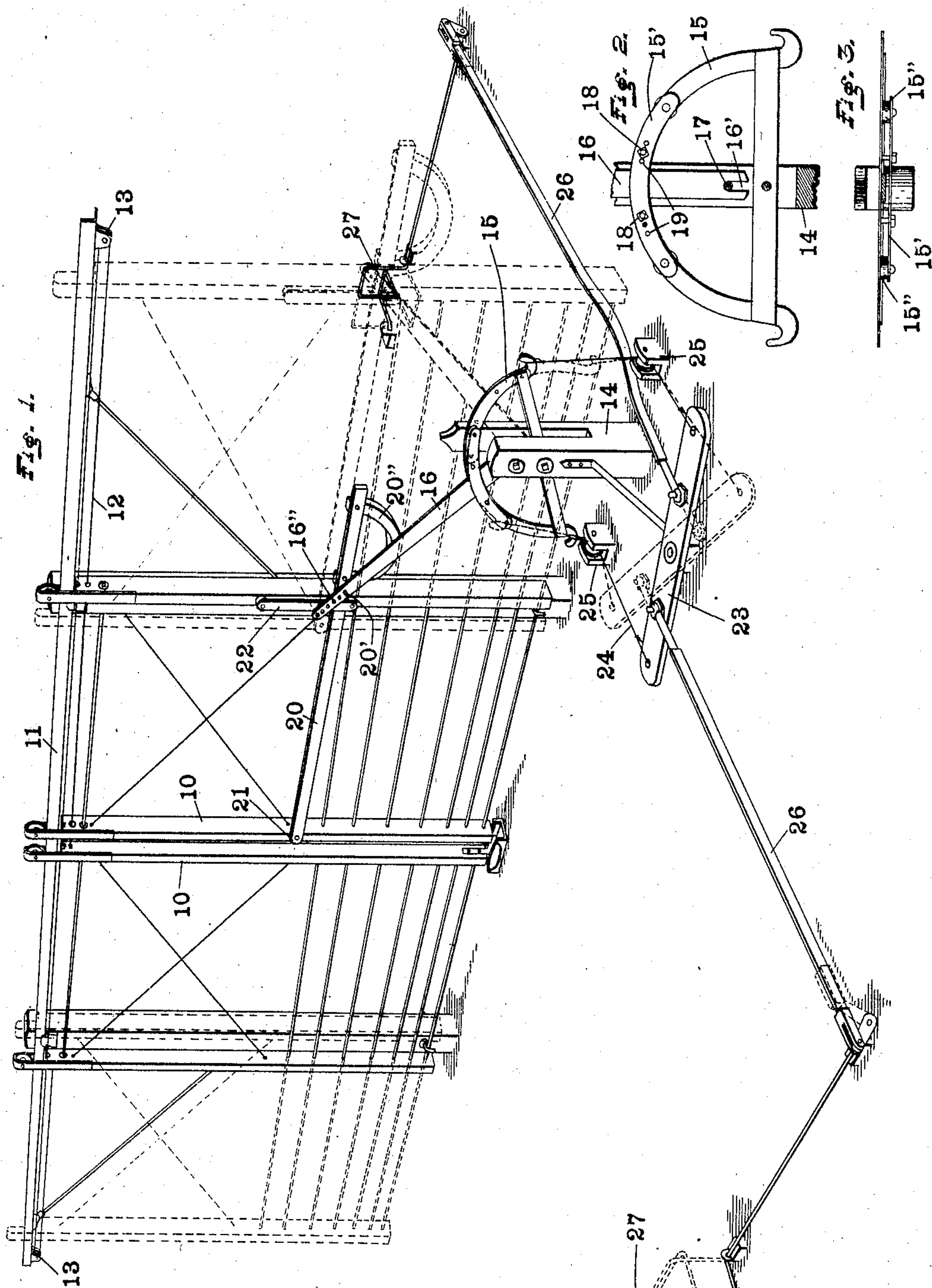
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J. B. MIESSE & A. J. LANDIS.

GATE.

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Witnesses

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UNITED STATES PATENT OFFICE.

JACOB B. MIESSE, OF NOBLESVILLE, AND ANDREW J. LANDIS, OF DELAWARE TOWNSHIP, HAMILTON COUNTY, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 778,324, dated December 27, 1904.

Application filed August 3, 1904. Serial No. 219,366.

To all whom it may concern:

Be it known that we, JACOB B. MIESSE, residing at Noblesville, and ANDREW J. LANDIS, residing in Delaware township, in the county of Hamilton and State of Indiana, citizens of the United States, have invented certain new and useful Improvements in Gates, of which the following is a specification.

The object of our invention is to provide an improved means for operating sliding gates, either single or double, the construction being such that no latches are necessary to hold the gates in either open or closed position.

The accompanying drawings illustrate our invention.

Figure 1 is a perspective view of a gate provided with our improvements; Fig. 2, a detail of the operating segment and lever, and Fig. 3 a plan of the parts shown in Fig. 2.

In the drawings, 10 10 indicate a pair of sliding gates which are supported in any desired manner upon a horizontal track-rail 11 and connected together by means of a single operating-cord 12 passing over pulleys 13 13 at the ends of the track in a well-known manner, such as to produce simultaneous opposite movement of the two gates upon an exertion of a pull or push upon either one.

Arranged alongside of the roadway adjacent the gates 10 is a post 14, upon which is pivoted on a horizontal axis parallel with the roadway a segment 15. Forming part of the segment 15 is an arc-shaped bar or plate 15', which is supported a short distance from the main segment by means of posts 15'', thus forming a slot through which one arm, 16, of the operating-toggle may freely pass. The arm 16 is provided with a slot 16' at its lower end, adapted to receive a pin 17, arranged parallel with the pivot of the segment 15, but slightly above the same. In order to permit movement of the arm 16 independent of the segment 15, we provide a pair of bolts 18, which extend between the plate 15' and the adjacent portion of the segment 15, and these may be placed in any one of the series of holes 19 in order to adjust the amount of independent movement. The free end of arm 16 is

provided with a plurality of holes 16'', any one of which is adapted to receive a pin 20' of the other arm, 20, of the operating-toggle, the end of said arm being pivoted at 21 to one of the gates 10. Arm 20 carries a weight 20''. Arm 20 swings freely through a vertical guide 22, carried by the gate 10, to which the arm 20 is pivoted.

Pivoted on a vertical axis adjacent post 14 is a lever 23, each end of which is connected by a flexible connection 24 with the adjacent end of the segment 15, said flexible connections passing under suitable guide-rollers 25. The opposite ends of the lever 23 are connected by links 26 26 with the usual operating-cranks 27 in the usual well-known manner.

In operation with the parts in position shown in full lines in Fig. 1 the weight 20'' tends to straighten the operating-toggle 16 20, thus tending to hold the two gates together. By turning either one of the cranks 27 to the position indicated in dotted lines one of the bolts 18 of the segment 15 will be brought into engagement with arm 16 and throw the same toward the position indicated in dotted lines. Shortly after the arm 16 has passed the vertical center, however, the weight 20'', acting upon the knuckle of the toggle, tends to collapse the same, and therefore serves to continue the movement of the gate until the arm 16 comes into engagement with the other bolt 18, and the weight serves to hold the gates in the open position.

We claim as our invention—

1. The combination, with a sliding gate and the support therefor, of an operating-toggle connected at one end to said gate and at the other end to a suitable support, a weight carried by said toggle, and an operating element for engaging and swinging one arm of said toggle, said element having means for engaging the toggle to permit limited independent movement of the toggle-lever.

2. The combination, with a sliding gate and the support therefor, of an operating-toggle connected at one end to said gate and at the other end to a suitable support, an operating element for engaging and swinging one arm

of said toggle, said element having means for engaging the toggle such as to permit limited independent movement of the toggle-lever.

3. The combination, with a sliding gate and the support therefor, of an operating-toggle, one arm pivoted to said gate and the other arm pivoted to a suitable support, a weight carried by said toggle, an operating-segment 15, and the bolts 18 carried by said segment, substantially as and for the purpose set forth.

4. The combination, with a sliding gate and the support therefor, of an operating-toggle, one arm pivoted to said gate and the other arm pivoted to a suitable support, an operating-segment 15, and the bolts 18 carried by said segment, substantially as and for the purpose set forth.

5. The combination, with a sliding gate and the support therefor, of an operating-segment 20 pivoted to swing in a vertical plane adjacent said gate, an operating-toggle, having one end pivoted adjacent said segment but on an independent center, and its other end pivoted to the gate, and means carried by the segment 25 for engaging the first-mentioned arm of the

toggle and swinging it in either direction, said means being such as to permit limited independent movement of the toggle-arm.

6. The combination with a sliding gate and the support therefor, of an operating-segment 30 pivoted to swing in a vertical plane adjacent said gate, an operating-toggle, having one end pivoted adjacent said segment but on an independent center, and its other end pivoted to the gate, means carried by the segment for 35 engaging the first-mentioned arm of the toggle and swinging it in either direction, said means being such as to permit limited independent movement of the toggle-arm, and a weight carried by the toggle-arm, substantially as and for the purpose set forth. 40

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, this 1st day of August, A. D. 1904.

JACOB B. MIESSE. [L. s.]
ANDREW J. LANDIS. [L. s.]

Witnesses:

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