

No. 757,367.

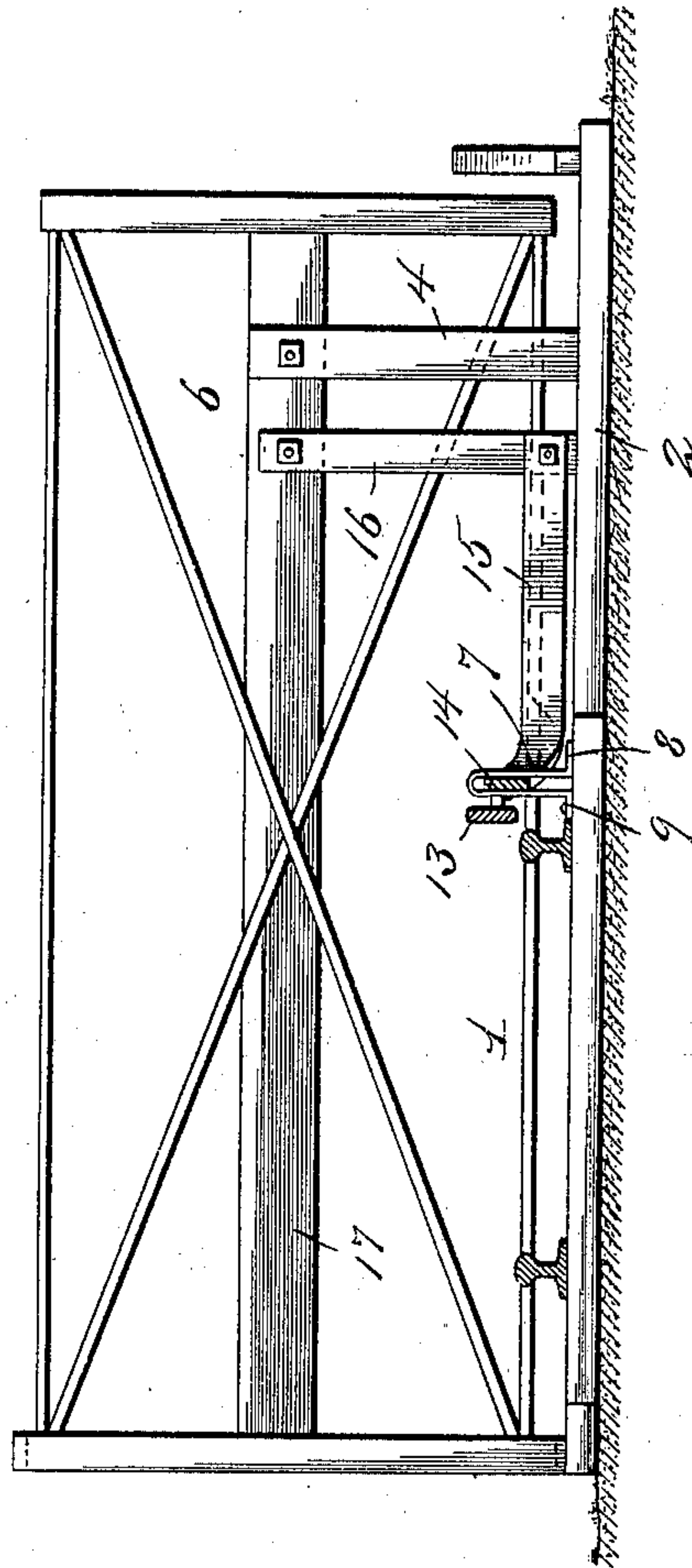
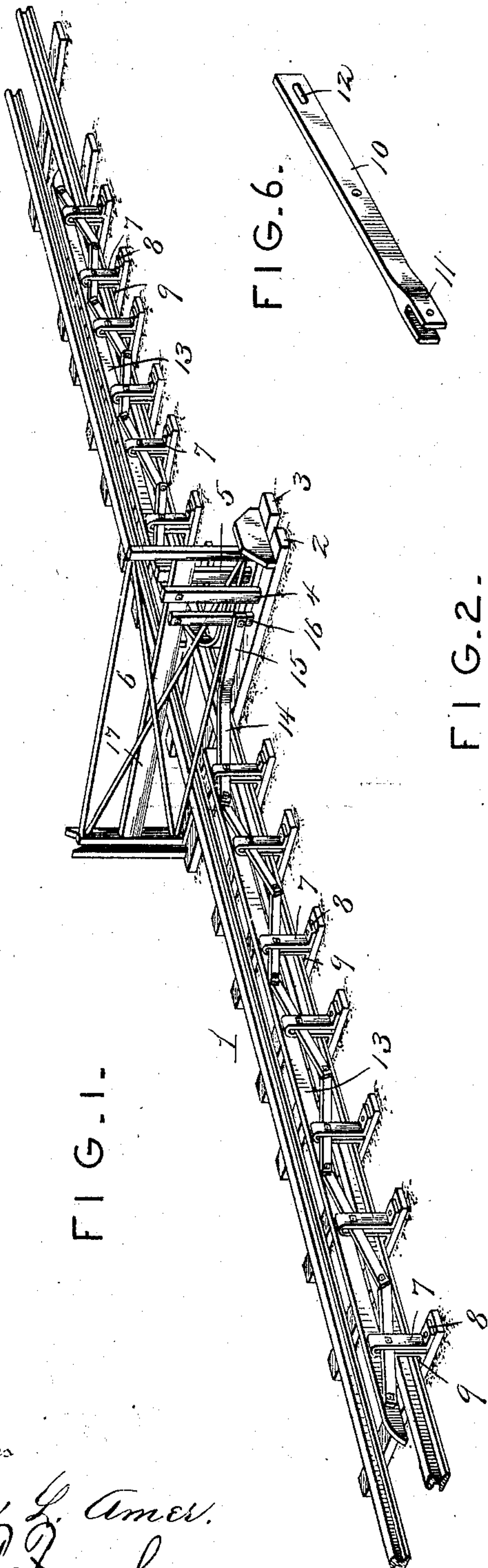
PATENTED APR. 12, 1904.

L. TREBERT.
RAILWAY GATE.

APPLICATION FILED OCT. 4, 1902.

NO MODEL.

3 SHEETS—SHEET 1.



Witnesses

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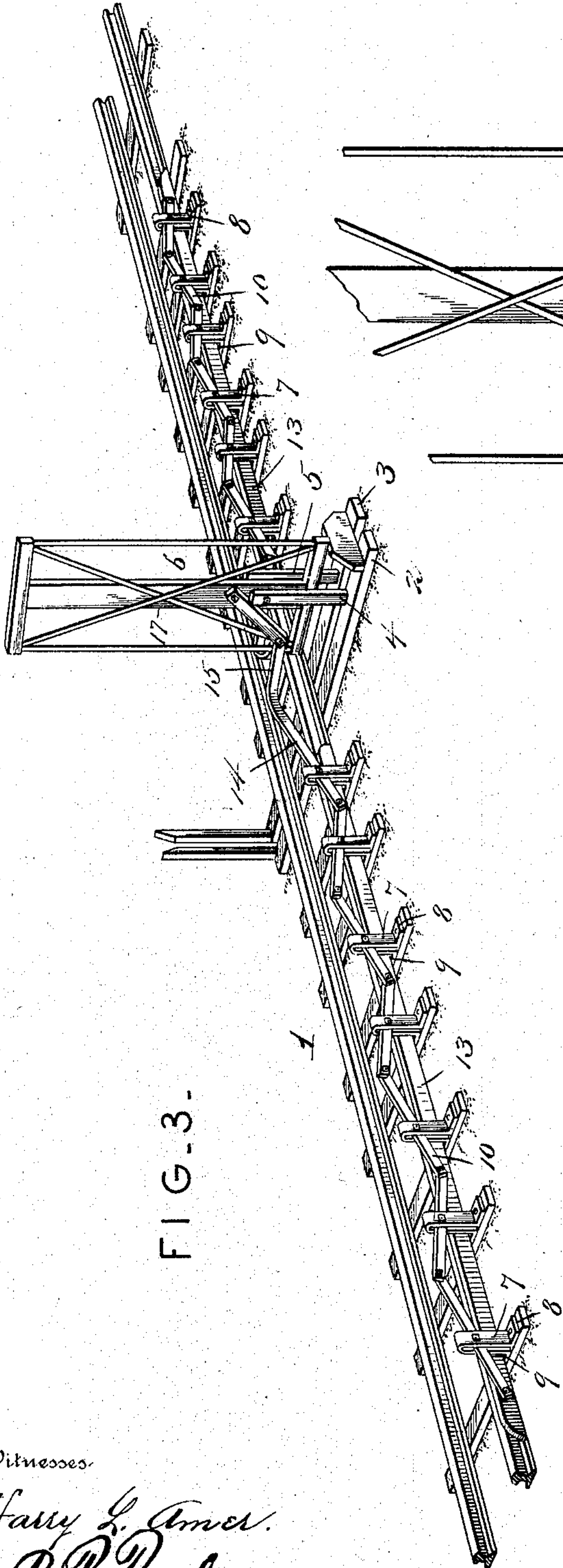


FIG. 3.

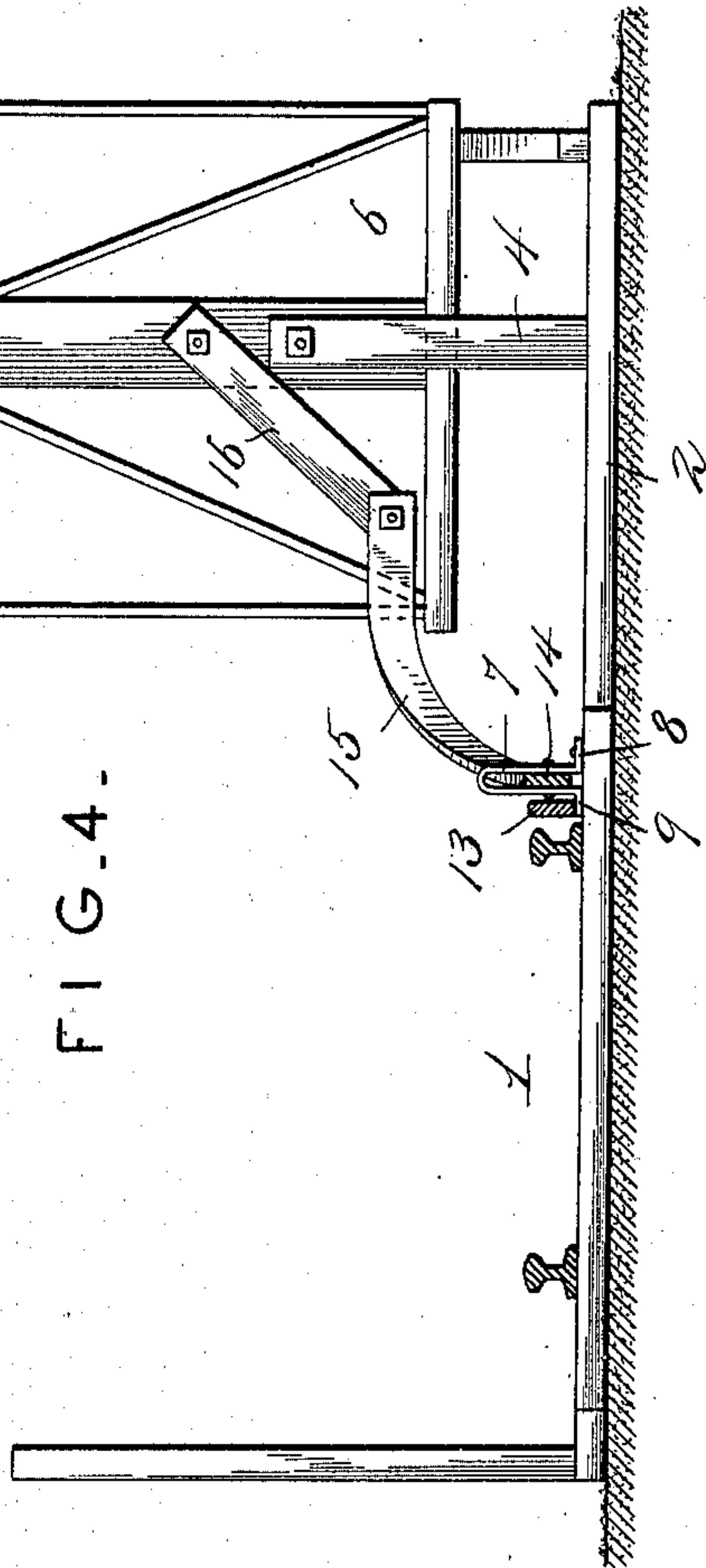


FIG. 4.

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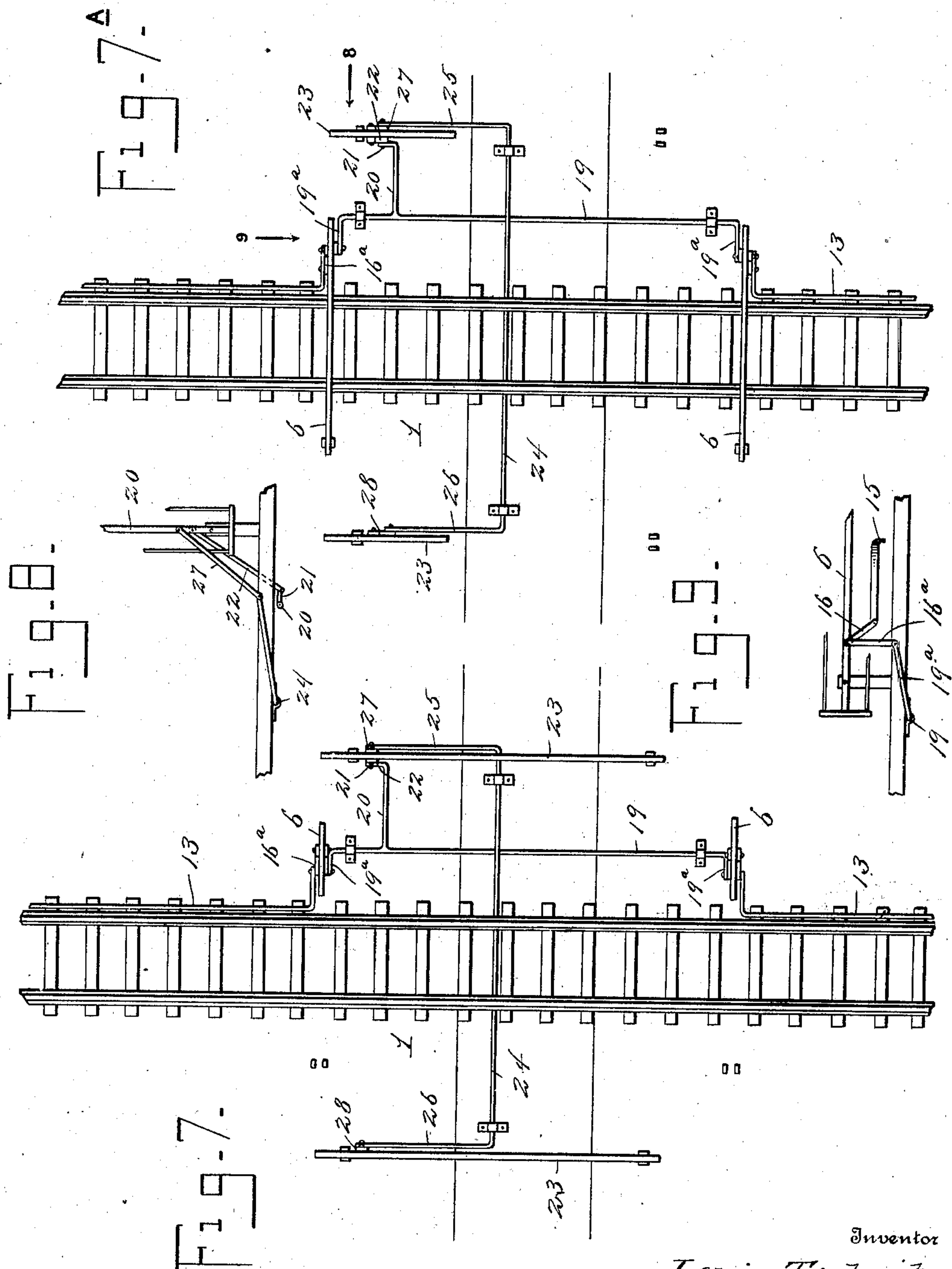
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UNITED STATES PATENT OFFICE.

LOUIS TREBERT, OF BEAVER, WISCONSIN, ASSIGNOR OF ONE-HALF TO
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RAILWAY-GATE.

SPECIFICATION forming part of Letters Patent No. 757,367, dated April 12, 1904.

Application filed October 4, 1902. Serial No. 125,921. (No model.)

To all whom it may concern:

Be it known that I, LOUIS TREBERT, a citizen of the United States, residing at Beaver, in the county of Marinette and State of Wisconsin, have invented new and useful Improvements in Railway-Gates, of which the following is a specification.

This invention relates to railway-gates, but more particularly to that class known as "tilting automatically-operated gates;" and the object thereof is to provide a simple and effective means for automatically operating the gate, so as to close a portion of the track and open the same without manual means. The manner of accomplishing the desired result will be clearly illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of the track, showing the gate closed and the operating mechanism therefor. Fig. 2 is an enlarged view of a gate closed, showing the track and operating mechanism in section. Fig. 3 is a perspective view of a portion of the track, showing the position of the gate when open. Fig. 4 is an enlarged view of the gate open, showing the track and operating mechanism in section. Fig. 5 is a detail perspective view of one of the standards for the operating mechanism. Fig. 6 is a detail perspective view of one of the levers for transmitting power along the track whereby the gate is opened. Fig. 7 is a top plan view of a modified form of operating mechanism, showing the gates closing the street on either side of the track, the gates designed to close the track being raised. Fig. 7^a is a top plan view of the portion of the track, showing the position of the mechanism when the gates are across the track and the street-gates are in a raised position. Fig. 8 is a side elevation of one of the street-closing gates looking in the direction indicated by the arrow 8. Fig. 9 is a side elevation of one of the track-closing gates looking in the direction indicated by the arrow 9 in Fig. 7^a.

The reference-numeral 1 designates a track constructed in an ordinary manner, and beneath it are transversely-arranged base-timbers 2 and 3, the ends of which extend on

either side of the track. Near the ends of the timbers and on one side of the track are parallel standards or supports 4 and 5, pivoted between which is a gate 6, adapted to be raised into a vertical position and which will be permitted to drop by gravity across the track to close the same. Arranged on the ties to which the rails are secured a plurality of standards 7 are arranged in series on either side of the gate and comprise each an approximately U-shaped casting having right-angular flanges 8 and 9 at its bottom edges, which are secured to the ties. Within each standard 7 is centrally pivoted a link rod or bar 10. Each bar is arranged on a diagonal plane and at an opposite inclination to the one preceding it, and one end of each bar is bifurcated, as at 11, to receive the end of the succeeding bar, which is provided with an elongated slot 12 to permit of a slight play when pressure is applied thereto. These bars are also connected at their upper ends to a longitudinally-arranged actuating-rail 13, which may receive pressure from a suitable throwing device on a locomotive or car. When pressure is applied to the rail 13, all of the link-bars 10 are actuated, thereby exerting pressure upon the gate-actuating lever 14, which is connected to one of the bars 10 at the end of the series of standards 7, said lever 14 terminating in a laterally-curved extension 15, which is connected to a pivoted link 16, fastened or secured to the batten 17 of the gate 6. On the opposite side of the gate a similar organization of levers and actuating-bar is arranged, so that in the event of a single-track system being employed the gate will be raised by the train coming in either direction. In the raised position of the gate the greatest weight is on the side of the fulcrum nearest the track, and as soon as the train has passed the gates will drop by gravity across the track into the position shown in Fig. 1. As soon as the throwing device (not shown) which is carried by the train comes in contact with one of the rails 13 the gate will be raised and will remain in such position until the last car of the train passes the extremity of the bar on the other side. It will be obvious that this can

be accomplished by having the throwing device on the cars arranged so that they will be in continuous contact with either of the bars 13.

In Figs. 7 to 9 I have illustrated the slightly-modified form for alternately closing the track and the street-crossing. In this form the mechanism for throwing the track-closing gates is precisely the same as that illustrated in the preferred form. In the modified construction I arrange loosely-mounted depending links 16^a, which are carried by the battens of the gates 6 and are connected to a rock-shaft 19, running parallel with the tracks. Projecting from the shaft 19 is an arm 20, which is provided with a right-angularly-projecting end 21, to which is loosely secured a link 22, also connected to one of the battens of the street-gates, (designated by the reference-numeral 23.) The reference-numeral 24 designates a transversely-arranged rock-shaft which extends beneath the rails of the track and on the extremities of which are right-angularly-extending projections 25 and 26. The end 25 of the shaft 24 is connected to the batten of the gate 23 by a link connection 27. The end 26 is connected by a similar link 28. When the gates 6 are down and across the track, the right-angular ends 19^a of the rock-shaft 19 will be depressed, throwing the arm 21 upward. This will cause one of the gates 23 to be thrown up into a position indicated in Fig. 8 through the medium of the link 22. Inasmuch as the rock-shaft 24 is secured to the gate 23 opposite the arm 21 by a link connection, the same movement will be imparted to the opposite gate through the medium of the shaft 24, the arm 26, and the link 28, so that both gates will rise simultaneously. The gates 6 are heavier than the gates 23 and will be weighted to compensate for the friction of the mechanism for operating the gates 23, so that when the train or car has passed over the track the gates 6 will drop by gravity across the same, thus closing the track on either side of the street. As the gates 6 move toward the track motion will be imparted to the side or street gates through the medium of the mechanism indicated, thus raising them and opening up the street for traffic.

It will thus be seen that I have provided an efficient and durable mechanism for operating a gate or a plurality of them in a convenient and expeditious manner.

While I have specifically described what at this time I believe the very best means of accomplishing the desired result, I would have it understood that I do not limit myself to the exact details of construction shown, but reserve the right to make such changes and alterations as will suggest themselves from time to time without departing from the spirit of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a railway-gate, the combination with a transversely-arranged gate pivoted to be swung in a vertical plane, of a plurality of approximately inverted-U-shaped castings forming standards and arranged in series adjacent to the gate, inclined levers pivoted in the standards and connected to each other and to the gate, and means for actuating the levers simultaneously so as to raise or lower the gate.

2. In a device of the character described, the combination with a gate, standards on either side of the gate to which it is pivoted, a plurality of pivoted levers connected to the gate, each alternate lever being inclined at an opposite direction to the preceding one, and a rail connected to the levers and adapted to be operated upon so as to actuate the levers to raise and lower the gate.

3. The combination with a gate, of a plurality of levers arranged adjacent to the gate and inclined in opposite alternating series, said levers being connected to each other, a rail connecting the levers so as to operate them simultaneously, an operating-lever at the end of the first-named levers, a link connection between the gate and the operating-levers, whereby pressure upon the rail will tilt the gate.

4. In a railway-gate, the combination with a gate, of levers, each lever having one of its ends bifurcated and the other end slotted, and means for connecting the inmost lever to the gate, and means for connecting the levers and adapted to be operated upon so as to actuate the levers to operate the gate.

5. In a railway-gate, the combination with a gate, means for operating said gate, gates arranged at angles to the first-named gate, a shaft, links connecting the shaft to the last-named gates to permit the operation of one gate to operate the other, another shaft, links connecting the last-named shaft to the first-named gate and one of the last-named gates, whereby the opening of the first-named gate will close the last-named gates and the closing of the first-named gate will open the last-named gates.

6. In a railway-gate, the combination with a gate, of levers, each lever having one of its ends bifurcated and the other end slotted, means for connecting the inmost lever to the gate, means for connecting the levers and adapted to be operated upon to actuate the levers to operate the gate, gates arranged at angles to the first-named gate, a shaft, links connecting the shaft to the last-named gates to permit the operation of one gate to operate the other, another shaft, links connecting the last-named shaft to the first-named gate and one of the last-named gates, whereby the opening of the first-named gate will close the last-named gates, and the closing of the first-named gate will close the last-named gates.

7. In a railway-gate, the combination with a gate, of levers, each alternate lever being inclined in an opposite direction to the one preceding it, means for connecting the inmost

lever to the gate, means for actuating the levers
to operate the gate, gates arranged at angles
to the first-named gate, a shaft provided with
an arm, a link connecting the shaft to the first-
5 named gate, a link connecting the arm to one of
the last-mentioned gates, a shaft provided with
arms, and links connecting the last-named arms
to the last-named gates.

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

LOUIS ^{his} × TREBERT.
mark

Witnesses:

M. MARTENS,
ALEIDE ROBECHAUD.