

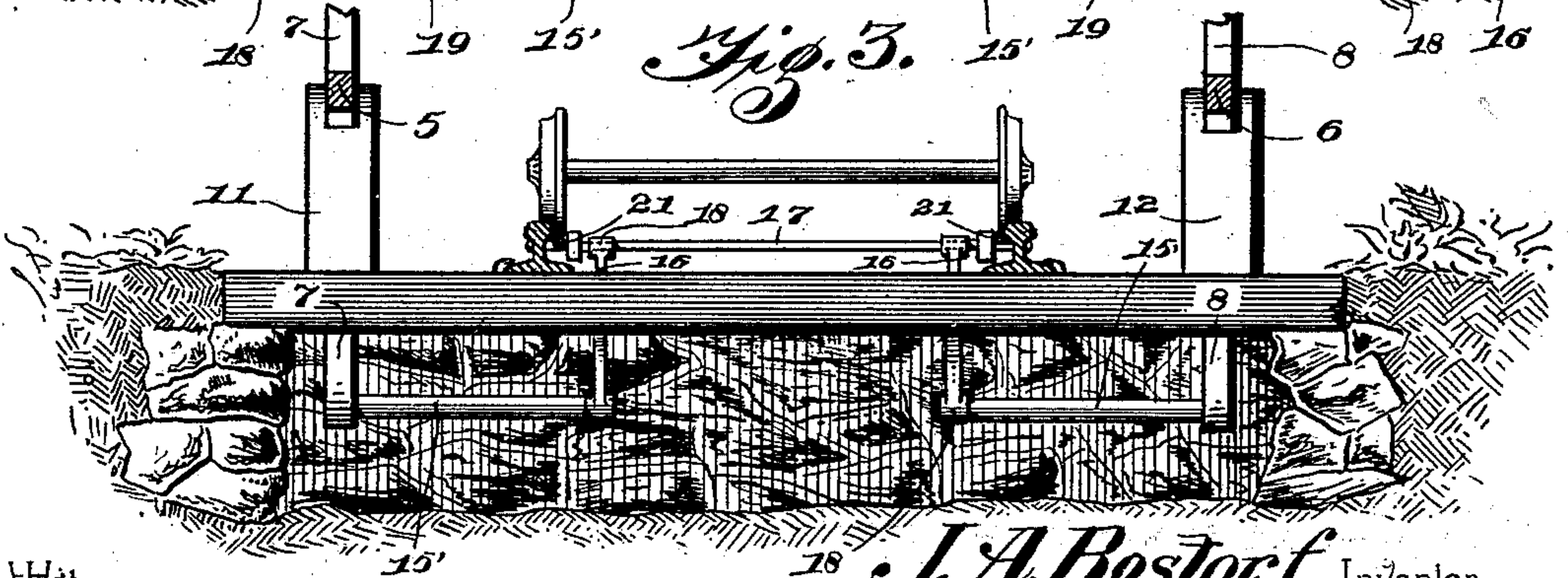
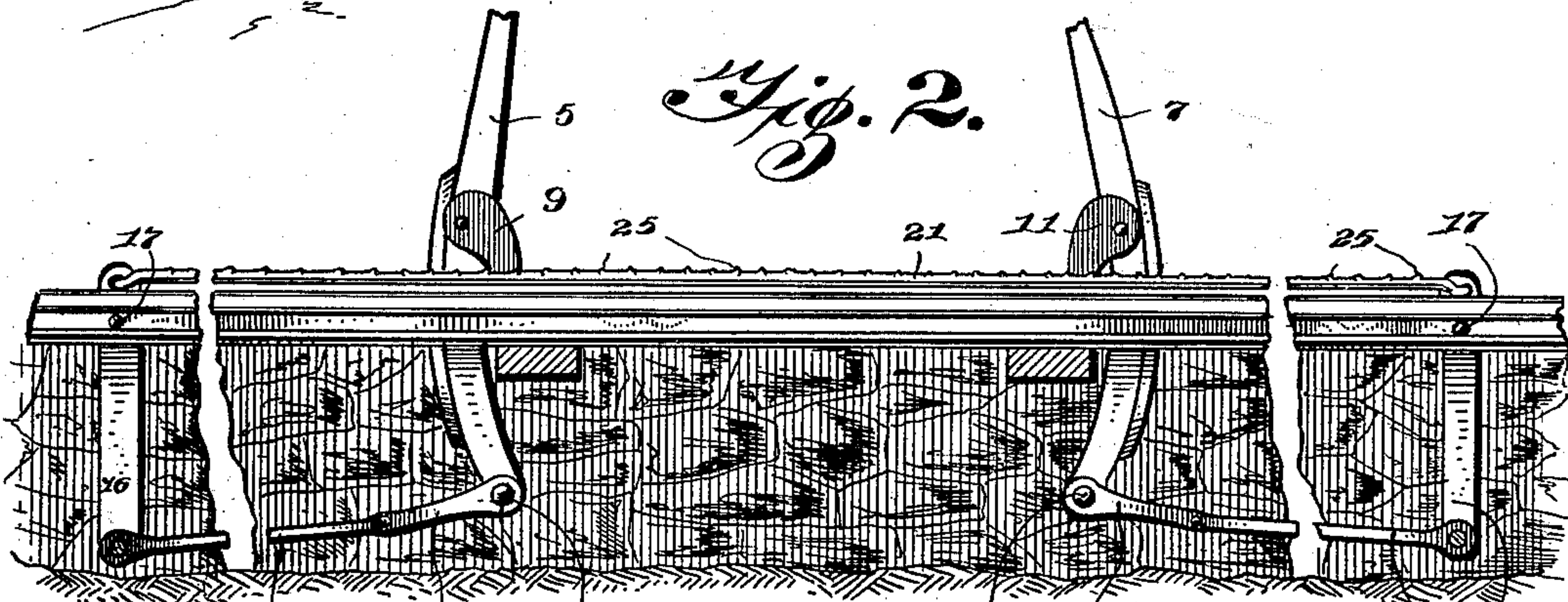
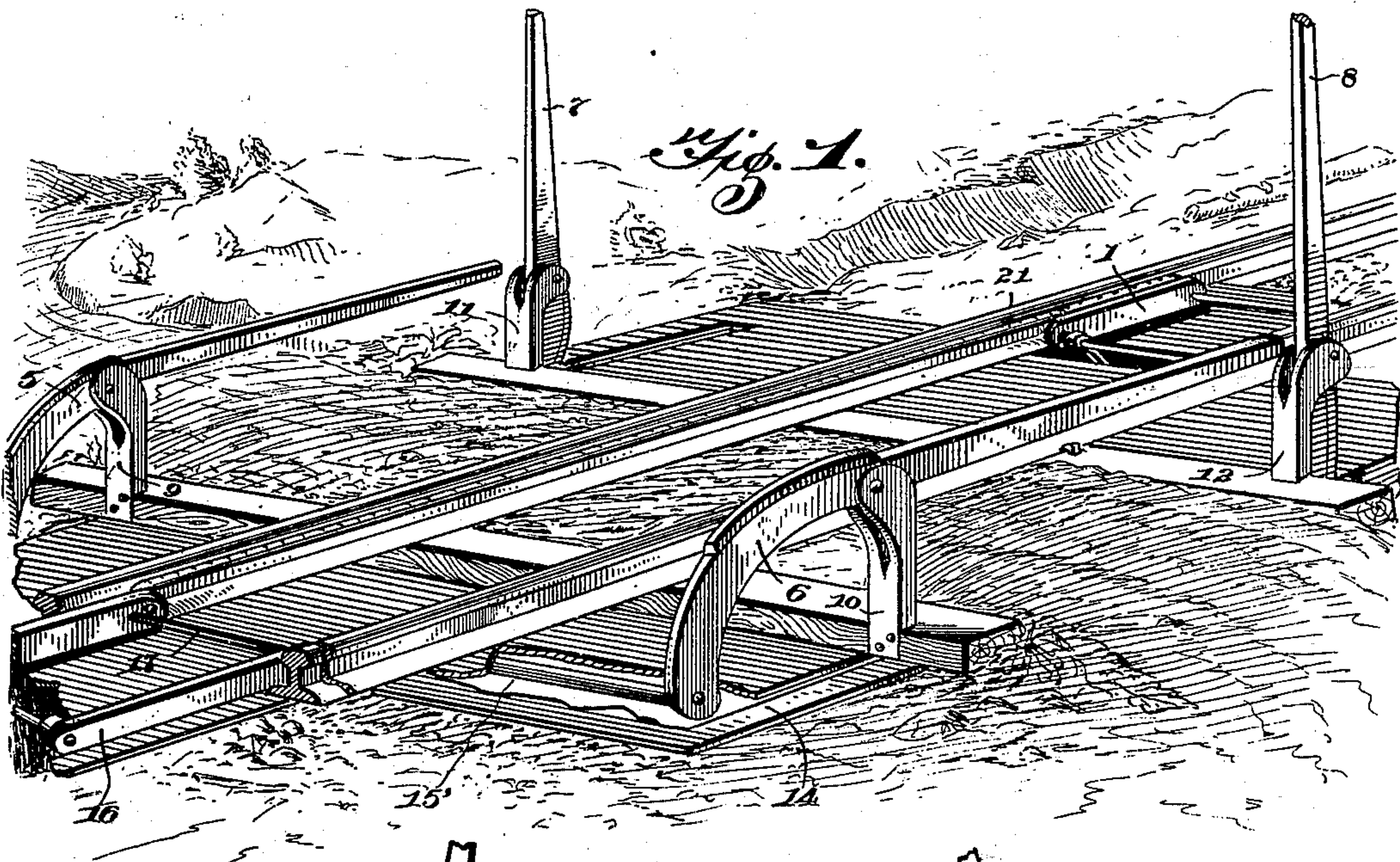
No. 665,867.

Patented Jan. 15, 1901.

J. A. BOSTORF.  
RAILROAD GATE.

(Application filed Oct. 6, 1900.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN A. BOSTORF, OF YORK, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO  
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## RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 665,867, dated January 15, 1901.

Application filed October 6, 1900. Serial No. 32,260. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. BOSTORF, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a new and useful Railroad-Gate, of which the following is a specification.

This invention relates to railroad-gates in general, and more particularly to automatic gates, one object of the invention being to provide a construction wherein when a train has reached a predetermined point near to the gates the wheels of the train by engagement with a portion of the structure will move the gates to lower them and will hold them lowered until the train has passed a proper distance beyond the gates.

Further objects and advantages of the invention will be evident from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the application of the gates to a crossing, one pair of gates being in their lowered position. Fig. 2 is a longitudinal section taken between the rails of a track and showing the connections between the gates and their operating means. Fig. 3 is a transverse section of Fig. 1, taken between the posts of the gates and showing one set of gates in section.

Referring now to the drawings, the present structure comprises four pivoted gate sections or members 5, 6, 7, and 8, which are pivotally mounted in the bifurcated upper ends of posts 9, 10, 11, and 12 in such position that they may be moved to lie alternately in vertical and horizontal positions. One pair of members 5 and 6 are disposed on opposite sides of the trackway and at one side of the crossing, while the second pair of members 7 and 8 are similarly disposed on the opposite side of the crossing. These gate members are adapted to extend entirely across the crossing when in their lowered or horizontal positions, and the pairs of gate members are alternately operated to accomplish this result.

In order to lower the pairs of gate members alternately, the lower end of each member is

extended below the surface of the earth through an opening in a plate 14 and into a subway therebelow, and at the lower end of each member is a laterally-extending arm 15', the arms of each pair of members extending toward each other and in axial alinement, but not touching.

At points at each side of the crossing and distant therefrom there are arranged depending levers 16, these levers being disposed between the rails and pivoted by a common pivot rod 17, extending from one rail to the other. Pivoted to the lower end of each of these levers 16 is one member 18 of a pair of mutually-pivoted links 18 and 19, the link 19 being pivotally mounted upon the laterally-extending arm 15' of its corresponding gate member, whereby when the depending lever is moved in one direction—that is, with its upper end in the direction of the crossing—the links connected therewith will be drawn upon and will move the lower end of the gate member to project the upper end thereof across the crossing in a horizontal position. When pressure is removed from the upper ends of these depending levers, the gate members connected therewith return to their erect positions by reason of the weights which are attached to their lower or rear ends. The upper ends of the levers 16, which project above the treads of the rails, are not directly engaged by the car-wheels; but the levers of each opposite pair are rigidly connected by means of a rod 21, the ends of which are bent laterally and engaged with perforations in the outer faces of the levers, whereby said rods will lie against or in close proximity to the inner sides of the treads of the rails to be struck, moved longitudinally, and depressed by the flanges of the car-wheels. As the rods 21 extend along the rails from one side of the crossing to the other they will be held depressed during the whole time that the train is passing from one set of levers 16 to the other. When the rods are thus engaged by the wheel-flanges, their movements cause the levers 16 to swing, the lower ends of the levers at one side of the track-crossing moving away from the crossing to lower their connected gate members, while the levers at the opposite side of the crossing move in the direction



of the crossing. The connected ends of the links of the latter levers, however, drop when their levers move inwardly, and said links are therefore folded and do not act to change the positions of the gate members. Referring to Fig. 3 of the drawings, it will be seen that if a train is moving to the left it will run onto the rods 21 and because of the traction will move them to the left, causing the gate members 5 and 6 to be moved to the positions shown in Fig. 1, while if the train be moving to the right it will move along the rods in an opposite direction and will act to lower the gate members 7 and 8. To prevent slipping of the rods 21 along the contacting portions of the car-wheels, the upper contacting surfaces of the rods are roughened or provided with projections 25, as shown.

What is claimed is—

1. The combination with a railway and gate members pivoted adjacent thereto, of pivoted levers having connections with their respective gate members, said connections being formed to collapse when they are moved in one direction, and a rod connecting the levers and disposed for engagement by a passing train to rock the levers.

2. The combination with a railway and gate members pivoted adjacent thereto, of levers having connections with the gate members adapted to collapse when moved in one direction and to move the gate members when moved in an opposite direction, and means connected with the levers for engagement by the wheels of a passing train to move the levers in the direction of movement of the train, to operate a corresponding gate member.

3. The combination with a railway and gate members pivoted adjacent thereto, of levers having connections with the gate members adapted to collapse when moved in one direction and to operate the gate members when moved in the opposite direction, and a rod connecting the levers above their fulcrums and disposed in close relation to a rail for engagement and operation by a passing train to move the levers alternately in opposite directions as the direction of movement of the train is reversed, to lower the gate members alternately, the contacting portions of the rod being roughened to prevent slipping.

4. The combination with a railway, of spaced pairs of gate members independently pivoted, a pivoted lever for each gate member disposed at the outer sides of said members, a rod connecting the upper ends of the levers adjacent to each rail and having its upper face roughened and disposed for contact at its end and upper surface by the flanges of the wheels of a train, and a pair of pivoted links pivoted at one end to each lever and at the opposite end to the adjacent gate member, whereby, when the rods are moved in one direction, one pair of pivoted links connected therewith will collapse while the other pair will draw upon the gate member connected therewith.

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

JOHN A. BOSTORF.

Witnesses:

MARTIN L. EYSTER,  
JOHN DOHN.