

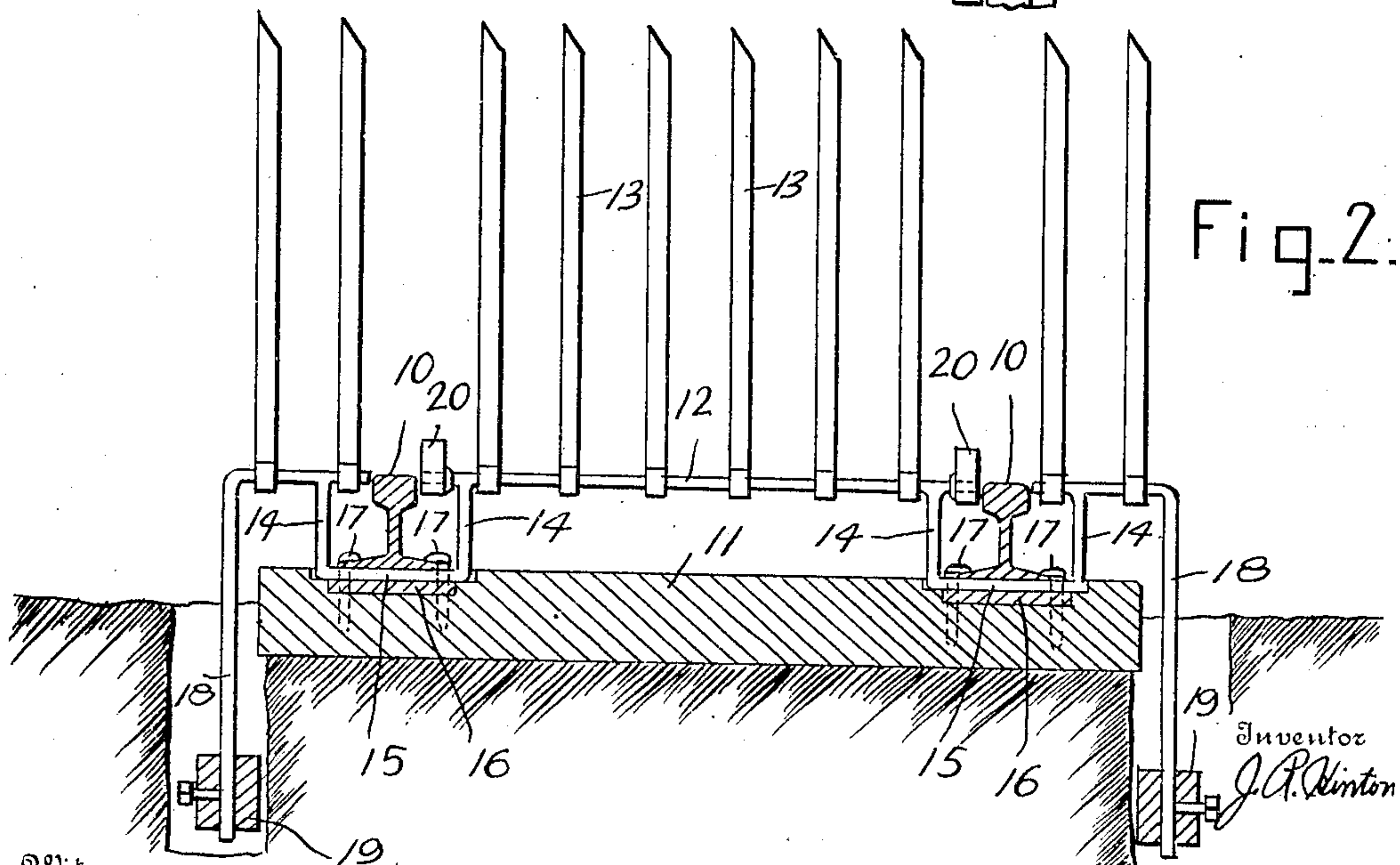
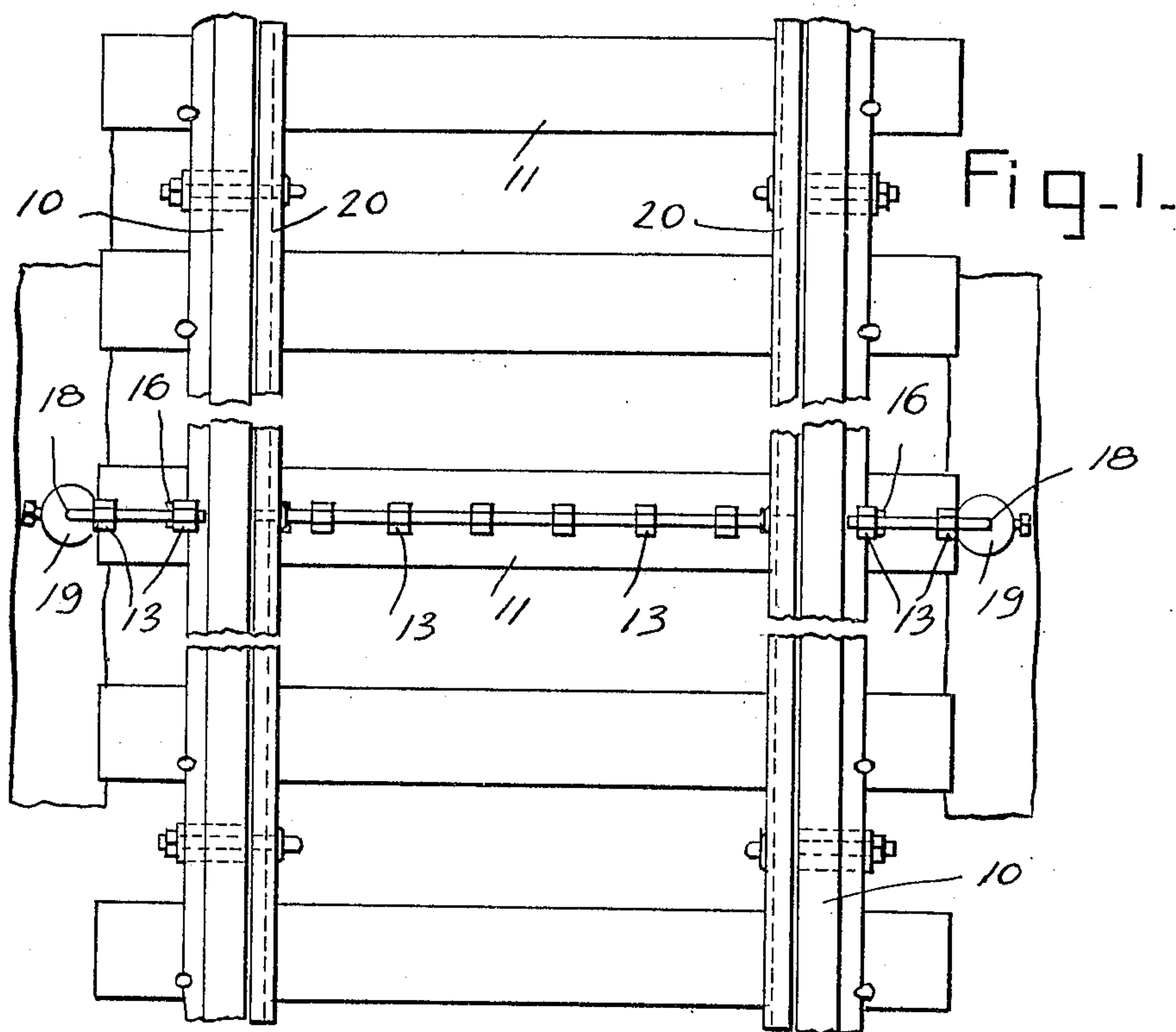
No. 875,814.

PATENTED JAN. 7, 1908.

J. R. HINTON.
RAILWAY GATE.

APPLICATION FILED APR. 11, 1907.

2 SHEETS—SHEET 1.



Witnesses
W. S. Rockwell
Nellie K. McGee

By *Charles Chandler*

Attorneys

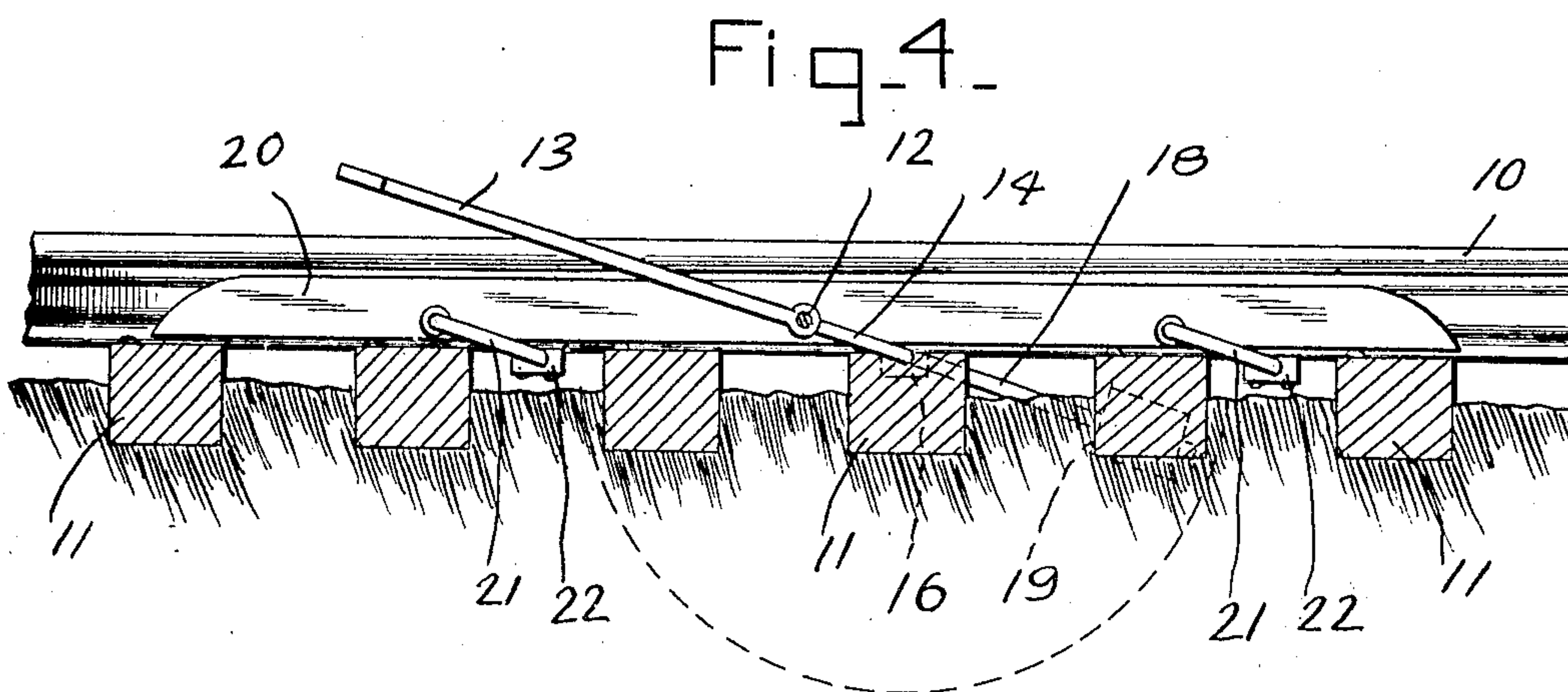
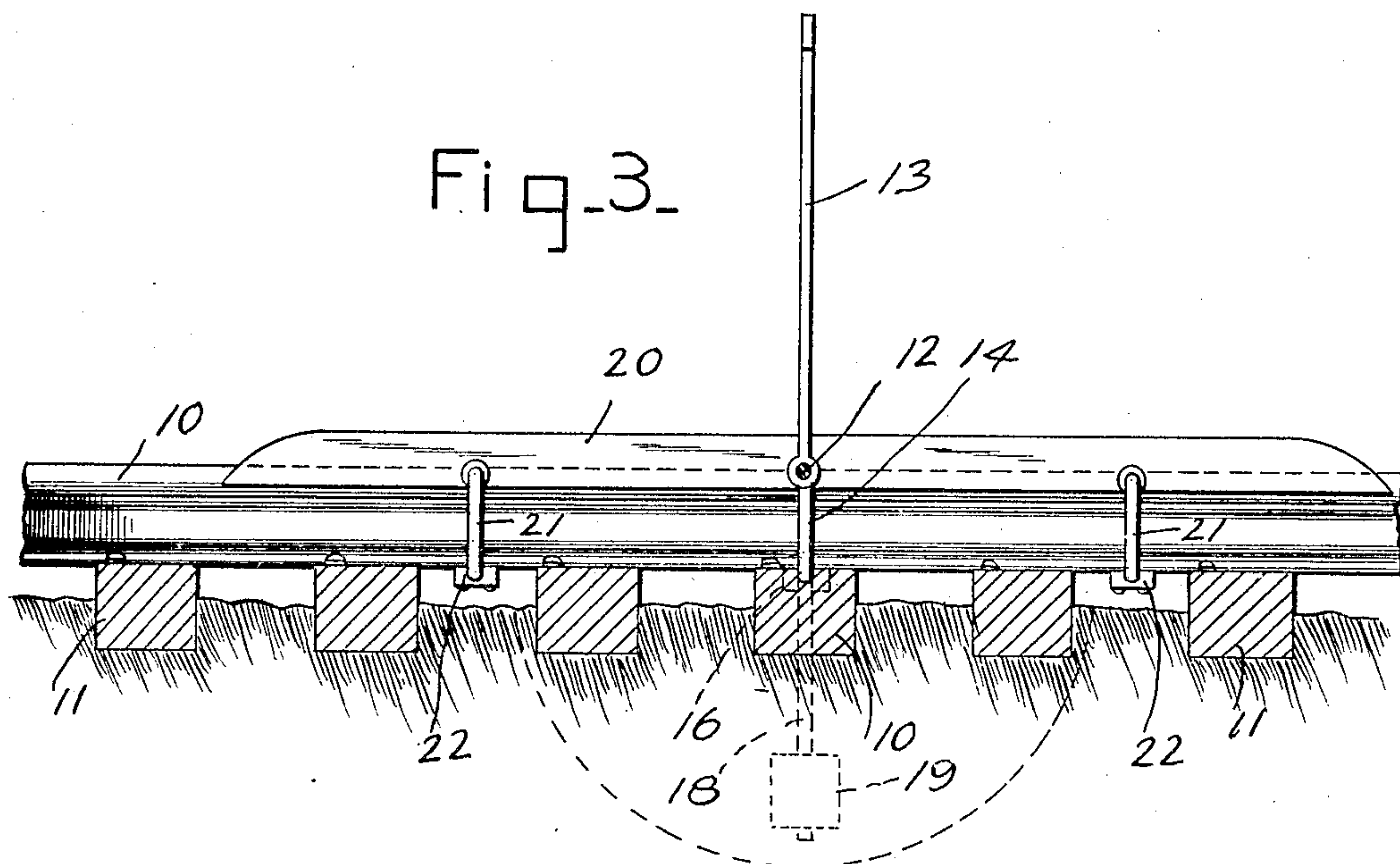
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Inventor

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UNITED STATES PATENT OFFICE.

JOHN R. HINTON, OF CASHMERE, WASHINGTON.

RAILWAY-GATE.

No. 875,814.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed April 11, 1907. Serial No. 367,612.

To all whom it may concern:

Be it known that I, JOHN R. HINTON, a citizen of the United States, residing at Cashmere, in the county of Chelan, State of Washington, have invented certain new and useful Improvements in Railway-Gates; and I do hereby 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.

This invention has relation to railway gates that are arranged transversely of the track, and that are automatically thrown down or lowered when a train is passing to let it go by, and are in like manner raised in position after the train shall have passed.

It is the object of my improvements to provide means that shall be simple in construction and efficient in use to a maximum degree for the purposes for which they are employed.

The nature of the invention may be fully and clearly ascertained from the device portrayed in the annexed drawings, forming a part of this specification, in view of which it will first be described with respect to its construction and mode of operation and then be particularly pointed out in the subjoined claims.

Of the said drawings—Figure 1 is a plan of my improved railway gate shown as applied to a section of a railroad track. Fig. 2 is a transverse section thereof in the plane of the gate bar showing the latter and its immediate connections in elevation. Fig. 3 is a sectional side view showing the gate in raised position. Fig. 4 is a similar view showing the gate lowered.

In the drawings, 10, designates the rails and 11, the ties of a railway track of common construction.

12, is a gate-bar provided at intervals with pickets 13 which stand vertically when the said bar is in normal position and form a cattle-guard across the railroad track at a fence or roadway to keep farm-stock from entering fenced fields or walking upon the track.

The gate-bar 12 extends across the track beyond the ends of the ties, and has crank offsets 14 formed therein at the lines where the rails are located. The cranks 15 proper of the gate-bar have each a bearing, 16, below the rail, which bearing is made in the form of a yoke connected at its ends by spikes 17 to the base-flange of the rail. This construction leaves the gate-bar 12 free above the rails

so that it may be operated without interference with the latter.

To keep the pickets of the gate in raised position the gate-bar 12 is provided at its ends with arms 18 on the ends of which are secured heavy weights 19 that operate freely in holes or gutters at the sides of the track and when they are allowed to hang down the pickets are raised, and then the latter are lowered, the gate-rod is rocked on its cranks 15, supported in the bearings 16 so that the weights 19 will be raised and the arms 18 brought to horizontal position. This construction serves to keep the weights and the weight arms completely below the plane of all parts of the moving train at all times.

20 designates what I term tread-bars which are connected with the gate-rod 12 on the insides of the rails and in close proximity thereto so that the flanges of the wheels of cars passing over the rails will roll upon the said tread-bars upon first striking the same, move them forward and depress them so as to rock the gate-bar 12 on its crank-journals 15 against the stress of the weights 19 and turn the pickets of the gate down so as to open the gate. The tread-bars 20 extend to a distance beyond each side of the gate-bar 12 so that one or more wheels of a train of cars will rest upon the tread-bars at all times in the passing of the train. Furthermore, the ends of the tread-bars are inclined downwardly so that the flanges of the wheels may readily press against them and ride over them to keep them down. The extent of the tread-bars beyond the gate-bar is also such that the wheels of the engine or cars will strike the tread-bar to operate the gate-bar and close the gate before the engine or car reaches the gate proper. The tread-bars, at opposite sides of the gate-bar, are supported by arms 21 which are pivoted to them and to stationary blocks 22 beneath the rails, so that as the wheels of the car act upon the tread-bar to move it longitudinally and to depress it, it will be carried in a plane parallel with the rails. After the train shall have passed the gate and the wheels left the tread-bars, the weights 19 on the ends of the arms 18 will operate the gate-bar 12 and raise the pickets 13 thereon to vertical position and so close it.

It is understood, of course, that the arms 18 and their weights 19 will have free space in which to swing in opposite directions so that the gate-rod 12 may be rocked in either direction and the pickets thereon closed

down in like manner—that is, either on one side or the other of the gate-bar, depending upon the direction in which the train may be moving that acts upon tread-bars 20.

5 It has been ascertained by practical use that a gate organized, supported and operated as hereinbefore described is not only exceedingly simple in construction and hence economical in cost, but entirely efficient for
10 the purpose for which it is intended.

What is claimed is—

In a railway gate, the combination, with the railway rails and ties, of a gate-bar provided with gate palings extending transversely of the
15 rails and the pales normally projecting vertically above the said bar, the latter having crank offsets extending below the rails, the said crank offsets having bearings below each rail, and the ends of the gate bar having also

vertical weighted arms extending from the 20 ends of the bar vertically downward and in the plane of the paling to hold the gate closed, tread-bars arranged on the inner sides of the rails for a distance beyond opposite sides of the gate to permit several wheels of a 25 train to run upon the tread-bars before the gate is reached, and crank arms, 21, pivotally connected at each end portion of the tread-bar and in bearings below the rail, in order that the tread bars may be bodily operated 30 and the gate opened before the engine or any other part of the train reaches the pales.

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

JOHN R. HINTON.

Witnesses:

L. N. WILCOX,
JOHN COMBS.