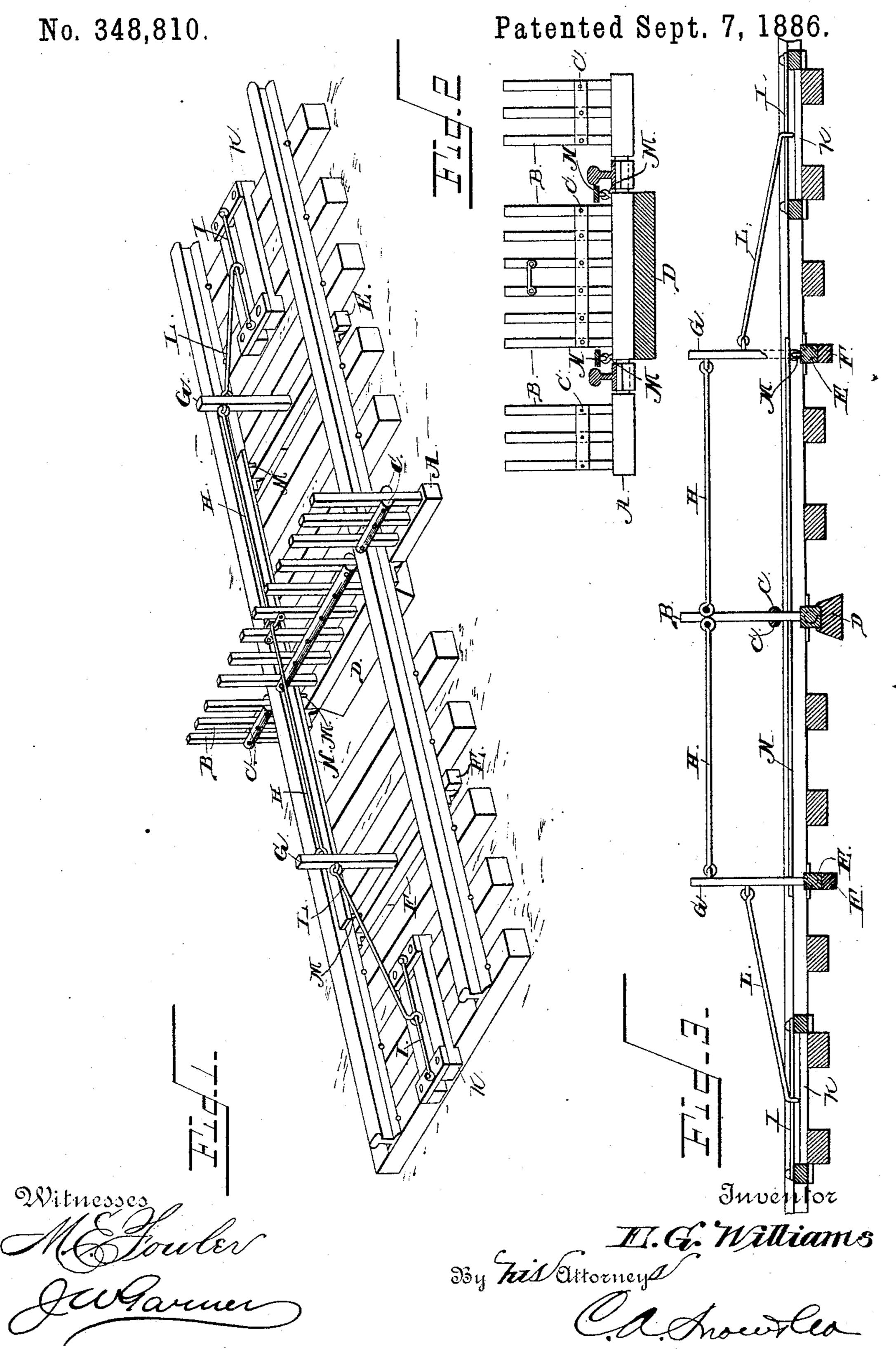
E. G. WILLIAMS.

RAILROAD GATE.



## United States Patent Office.

ELKANAH G. WILLIAMS, OF PITT, OHIO.

## RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 348,810, dated September 7, 1886.

Application filed March 23, 1886. Serial No. 196,268. (No model.)

To all whom it may concern:

Be it known that I, ELKANAH G. WILLIAMS, a citizen of the United States, residing at Pitt, in the county of Wyandot and State of Ohio, have invented a new and useful Improvement in Railroad-Gates, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in railroad-gates; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a longi-

tudinal sectional view.

A represents a transverse rock-shaft, which is secured in suitable journals on the under sides of the rails of the railroad-track and extends across the said track. From the upper side of the rock-shaft projects a series of vertical pickets, B, which are connected by transverse bars C, and form a gate having three sections, one section being between the rails and one on the outer side of each of the latter. The bars C are made in three detached pieces, in order to enable them to clear the rails when the gate is inclined. To the under side of the rock-shaft A is secured a weight, D, the function of which is to keep the gate normally in a vertical position.

E represents a pair of rock-shafts, one of which is journaled under the rails of the track on each side of the gate, at a suitable distance from it, and the said shafts E are provided on their under sides with weights F and on their upper sides with central vertically-extending arms, G. The said arms G are connected to the center of the gate by means of rods H, which extend down the center of the track at a suitable distance above

the level-thereof.

I represents a pair of guide-bars, each of which is secured in a rectangular frame, K, that is fastened to the cross-ties in the center of the track at a suitable distance from one of the shafts E, the said bars I extending longitudinally in the center of the track.

L represents connecting rods, which are connected to the arms G at one end and have their outer extremities connected to the guidebars I, and adapted to slide longitudinally thereon.

From the upper sides of the rock-shafts E and 55 A, on the inner side of one of the rails of the track, project arms M, to the upper ends of which is pivoted a pressure-rail, N, which is arranged along the inner side of one of the rails of the track and connects the rock-shafts 50 A and E.

The operation of my invention is as follows: The pivoted gate and the pivoted arms G connected thereto are held normally in a vertical position by the weights D and F. When a 65 train approaches the gate from either direction, it strikes one of the arms G and inclines the same, and as the said arm is attached to the gate it follows that the latter is also inclined, and in the direction in which the train 70 is proceeding, thus opening the gate in advance of the train, and lowering the pressure rail N. The flanges of the wheels of the train pass over the rail N, in contact with the upper side thereof, and as the rail is of consid-75 erable length it is always under the pressure of two or more of the wheels of the train, and thereby the gate is held in the inclined position until the train has entirely passed over it, thus preventing the gate from returning to 80 its normal position during the interval between the passage of the successive trucks of the train over the gate, thus preventing the gate from swinging up and striking against the bottoms of the cars.

Having thus described my invention, I

claim-

The combination, with the horizontally-pivoted gate extending across a railway-track, of the guide - bars I, located in the track, the 90 rock-shaft carrying arms G, connected to the gate, the weights suspended from the gate and from the rock-shafts for the purpose set forth, the pressure-rail N, arranged along one of the track-rails and connected to the rock-shafts 95 and to the gate, and the rods L, connecting the arms to the guide-bars, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signa- 100 ture in presence of two witnesses.

ELKANAH G. × WILLIAMS.

Witnesses:

H. M. CUNNINGHAM, J. J. SURHART.