W. L. CASSIDY.
AUTOMATIC RAILWAY GATE.
APPLICATION FILED AUG. 2, 1919.

2 SHEETS—SHEET 1.

Inventor
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Witness

My

Copyrights

Attorney
AUTOMATIC RAILWAY-GATE.

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To all whom it may concern:

Be it known that I, WADE L. CASSIDY, a citizen of the United States, residing at Hamlet, in the county of Richmond and State of North Carolina, have invented a new and useful Automatic Railway-Gate, of which the following is a specification.

This invention relates to automatic gates, and more particularly to gates employed in connection with railroad crossings to guard against persons crossing the railway gates without first determining whether or not a train is approaching the crossing.

A further object of the invention is to provide a gate of this character, which, when in its normal position, closes the highway on which the same is located, and one which will be operated to open or close, by the weight of a vehicle passing over the controlling platform thereof.

Another object of the invention is to provide a gate of this character which will not close until after the vehicle, passing over the platforms thereof, has passed a predetermined point thereby insuring the vehicle against being caught by the closing gates.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination of the arrangement of parts and the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 illustrates an end elevational view of a gate structure constructed in accordance with the present invention.

Fig. 2 illustrates a plan view of the same.

Fig. 3 illustrates a side elevational view of the same.

Fig. 4 is a fragmental sectional view taken on line 4—4 of Fig. 1.

Referring to the drawings in detail the reference character 5 indicates the spaced vertical bars forming the support for the gate proper, and the upper ends of the controlling platforms, which are indicated at 6 and 7.

These controlling platforms, are of a suitable length, each of which includes a plurality of longitudinal supporting members 8 and the transverse boards 9, forming the platform thereof, the rear ends of the supporting members 8 being provided with a wear plate 10 which engages the wear plate 11, positioned between the guide bars 12, between which the rear ends of the supporting members 8 operate.

A stationary platform 12 is provided adjacent one end of each of the platforms 6 and 7, and includes the guide bars 12, inclined as at 12' to receive the boards 13, the upper boards 13' of the platform being constructed to overlap the rear ends of the respective supporting members 8, so that a vehicle passing onto the platforms 6 and 7, will pass over the inclined boards 13', and drop off onto the platform, thereby obviating the strain directed to the platforms, due to vehicles contacting therewith, at an angle.

The front end of the supporting members 8, are provided with metallic bearing members 9', through which the metallic rod 14 passes, for connecting the platforms together, and at the same time connecting the platforms to the vertical supporting bars 5.

The outer ends of said metallic rod 14 extend beyond the vertical plane of the vertical bars 5, the same being provided with hooks 15 formed at the ends thereof.

The gate proper includes opposed vertically swinging gate sections 15 and 17, each of which comprises a substantially long upper bar 18, a depending leg portion 19, and an angular bracing rod 20, which extends rearwardly from a point adjacent the bottom of the leg portion 19, terminating at a point adjacent the vertical rods 5.

These upper bars 18, have their outer ends, pivotally connected to the vertical bars 5, by means of the bolts 21, passing through the bars 5 and upper bar 18. Secured to the outer end of each of the upper bars 18, is a metallic sleeve 22, provided with an opening 23 to receive the upper end of a connecting rod 24, which is provided with the hooked portion 25, the lower end of said rod 24 being also provided with a hooked member 26, cooperating with the eye 27 formed on the collar 28, positioned on the respective ends of the metallic rod 14.

Due to the fact that the weight of the gate sections, is greater than the weight of the platforms 6 and 7, the front ends of the
platforms are normally held in spaced relation with the ground surface, the gates assuming a horizontal, or closed position.

The operation of the device is as follows:

A device of this character is positioned on each side of the railroad track at the crossing of the highway, the platforms 6 and 7 thereof, being spaced a suitable distance from the railroad track, so that a car or vehicle, in passing over the platform nearest to the railway tracks, will have sufficient room to stop without danger of being hit by a passing train.

It will therefore be seen that when a vehicle or car passes over the platform 6, or 7, the gates are raised due to the connection between the platform and swinging gates, the gates remaining in such open position, until the vehicle has passed down the inclined platform on the other side of the supporting bars 5, with the result that as the vehicle descends the opposite platform the gates gradually close until the vehicle has cleared the platform, whereupon the gates have reached their closed positions.

Having thus described the invention, what is claimed is:

1. In an automatic gate, spaced supporting bars, platforms having their forward ends connected, pivoted gate sections supported by the supporting bars, means for connecting the gate sections and forward ends of the platforms, guide ways for guiding the rear ends of the platforms, and a relatively wide board guiding the upper portions of the rear ends of the platforms.

2. In an automatic gate, spaced supporting bars, platforms, having their forward ends connected, pivoted gate sections supported by the supporting bars, and having connection with the platforms, whereby movement of the platforms produces a relative movement of the gate sections, said platforms having the rear ends thereof curved to provide wearing surfaces, and guiding means adapted to house each of the rear end sections of the platforms.

3. In an automatic gate, spaced supporting bars, platforms having their forward ends connected, pivoted gate sections having connection with the platforms, whereby movement of the platforms produces a relative movement of the gate sections, inclined guiding members for guiding a vehicle onto the platforms, and said guiding members adapted to house the rear ends of each of the platforms.

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

WADE L. CASSIDY.

Witnesses:
L. H. GIBBONS,
W. K. McNIEL.