

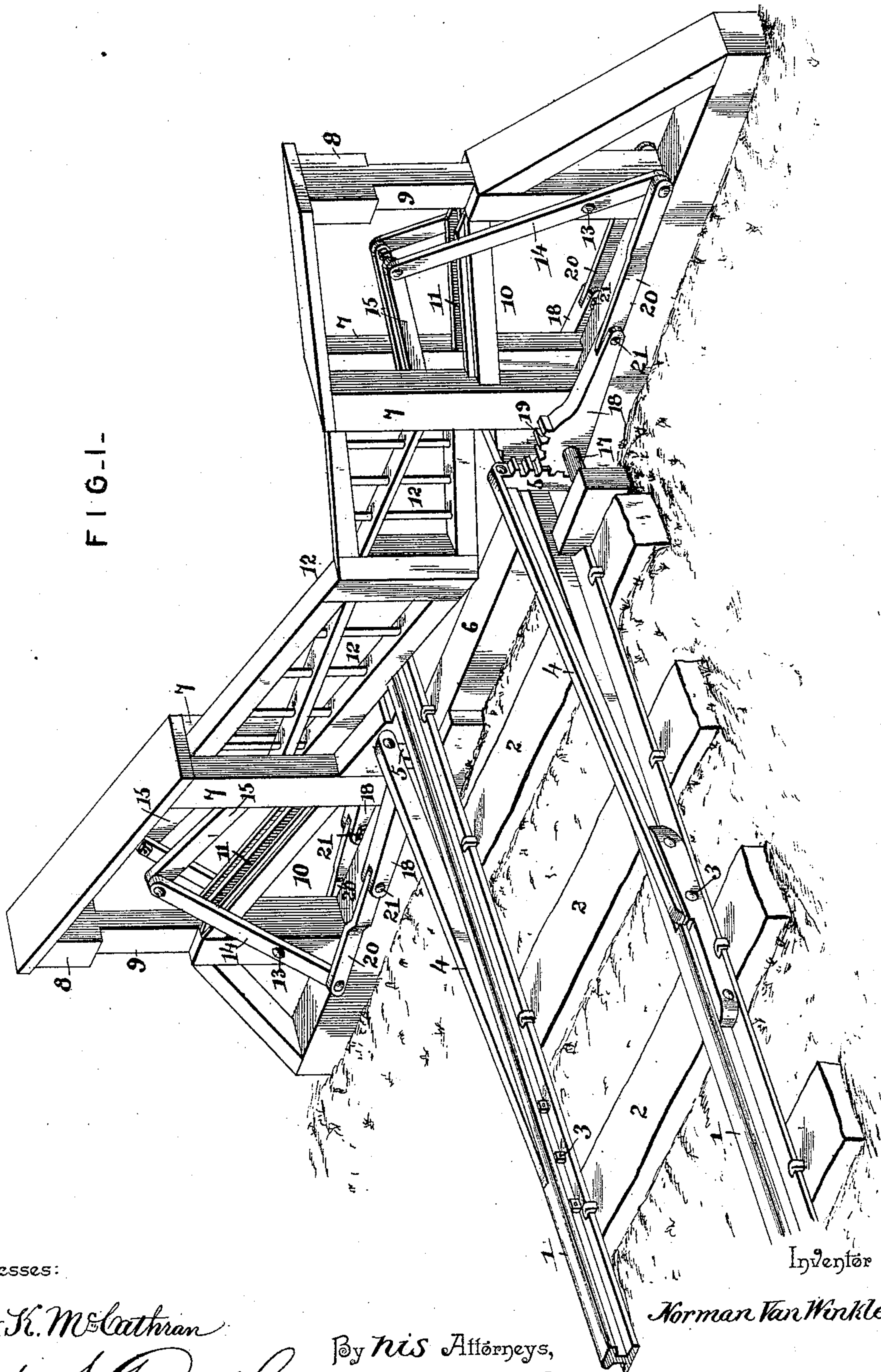
(No Model.)

2 Sheets—Sheet 1.

N. VAN WINKLE.  
RAILROAD GATE.

No. 471,040.

Patented Mar. 15, 1892.



Witnesses:

Jas. K. McLaughlin

W. J. Ruff

By his Attorneys,

C. A. Snow & Co.

(No Model.)

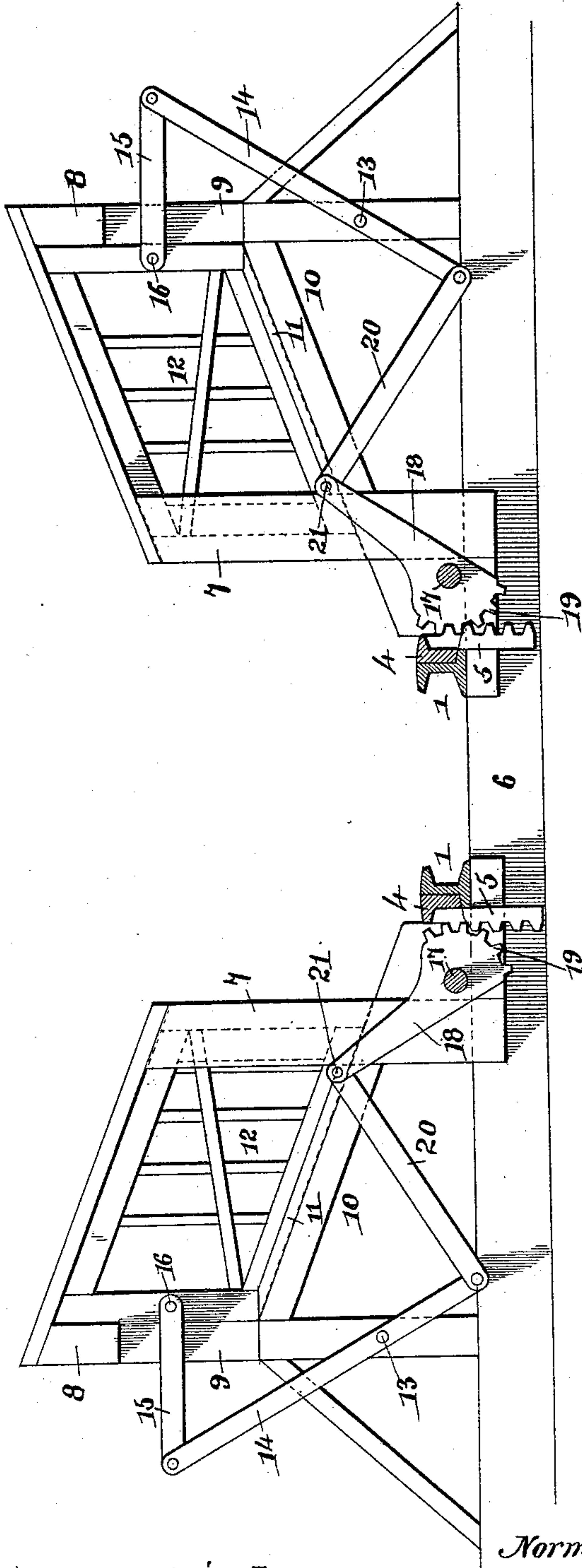
2 Sheets—Sheet 2.

N. VAN WINKLE.  
RAILROAD GATE.

No. 471,040.

Patented Mar. 15, 1892.

FIG-2-



Witnesses

Jas. K. McClathran

W. J. Revell

By his Attorneys,

C. A. Snow & Co.

Inventor

Norman Van Winkle



# UNITED STATES PATENT OFFICE.

NORMAN VAN WINKLE, OF EUREKA SPRINGS, ARKANSAS.

## RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 471,040, dated March 15, 1892.

Application filed September 22, 1891. Serial No. 406,511. (No model.)

*To all whom it may concern:*

Be it known that I, NORMAN VAN WINKLE, a citizen of the United States, residing at Eureka Springs, in the county of Carroll and State of Arkansas, have invented a new and useful Railroad-Gate, of which the following is a specification.

This invention relates to that class of railroad-gates intended to prevent cattle from wandering up the tracks when in the act of passing crossings.

The objects of my invention are to provide a cheap and simply-constructed gate designed to be opened by the approach of a car or train of cars from either side of the gate and to close automatically after such car or train of cars has passed beyond the gate.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a gate constructed in accordance with my invention. Fig. 2 is an elevation of the gate, the rails being in section.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 indicates the track-rails, of which there are a pair, and the same are supported upon the usual ties 2. The outer edges of the rails at each side of the point where the gate is to be located are cut away, or, in other words, said rails are of but half-width, and to the same are pivoted, as at 3, levers 4, the forms of which are such as to form continuations of the rails. These levers at their inner ends terminate short of each other, as shown, and each is provided with a depending rack-bar 5. Upon a transverse sleeper or base-piece 6, located under the rails and between the inner ends of the levers or treads 4, there is mounted at each side of the track a pair of inner or front standards 7 and an outer or rear standard 8, the rear standards being cut away near their upper ends at opposite sides, as at 9. Supported in these standards are inclined ways or guides 10, which are disposed at a suitable angle for a purpose hereinafter apparent, and at their rear ends are connected to the rear standards 8, while their inner or front ends terminate flush with the rails 1. The guides or ways are centrally grooved upon

their upper sides, as at 11, and in each of the same there is mounted for sliding a gate 12, of rhomboid shape.

Pivoted, as at 13, to the opposite sides of the rear standards 8 are pairs of levers 14, the upper ends of which are loosely connected to the rear ends of their respective gates by means of pairs of links 15, pivoted, as at 16, to the gates. To each of the inner standards 7 there is pivoted, as at 17, a lever 18, the inner ends of which levers are provided with toothed sectors or heads 19 and the outer ends of which are bifurcated. Links 20 have their inner ends pivoted, as at 21, to the outer bifurcated ends of the levers 18, and the outer ends of said links are pivoted to the lower ends of the levers 14.

The operation of the invention will be obvious from the foregoing description, taken in connection with the accompanying drawings, but may be briefly stated as follows: The wheels of an approaching car coming in contact with the levers or treads 4 depress the same, and they, through the medium of their rack-bars 5, rotate partially the levers 18 by reason of the fact that the segmental heads of said levers are each in engagement with a rack-bar. The oscillation of the levers 18 at one side of the gate serves to oscillate or swing the levers 14, and thus draw outwardly the two gates. The car may now pass between the gates, and after it has passed beyond the same and its weight is removed from the levers or treads the gates will slide by gravity down their inclined ways to a closed position, thus preventing cattle from wandering up the track when going over the crossing.

It will of course be understood that two gates and their mechanism are employed for each crossing, one at each side thereof; but I have deemed it only necessary to show one for the purpose of explaining my invention.

Having described my invention, what I claim is—

1. The combination, with the rails and the opposite frames located at opposite sides of the rails and provided with inclined ways, of gravitating gates mounted in the ways, levers pivoted to the sides of the frames and connected with the gates, levers pivoted at the sides of the gates having toothed segmental heads and loosely connected to the lower ends



of the first-mentioned levers, treads pivoted to the rails, and rack-bars depending from the treads and engaging said segmental heads, substantially as specified.

5 2. The combination, with the rails, the opposite frames having guides inclined in said frames, and the gravitating gates mounted in the ways, of the pivoted treads terminating at their free ends in rack-bars and located at  
10 opposite sides of the gates, and levers pivoted to the frames and terminating at their inner ends in segmental heads connected to the rack-bars, and mechanism between the outer ends of the levers and the rear ends of the  
15 gates, whereby a depression of the treads causes an opening of the gates, substantially as specified.

3. The combination, with the rails recessed upon their outer sides, and the front or inner  
20 pairs of standards located at opposite sides of the rails, and the single standard in rear of each pair, said standards being supported upon a suitable base, of inclined ways sup-

ported by the standards and terminating flush with and at the sides of the rails, the 25  
gravitating gates mounted for movement in the ways, levers pivoted to the rear standards, links connecting the same at their upper ends with the rear ends of the gates, levers pivoted at their front ends to the base and having 30  
toothed segmental heads, links connecting the outer ends of said levers with the first-mentioned levers, treads pivoted at their outer ends in the recesses and forming continua- 35  
tions of the rails, and rack-bars depending from the inner ends of the treads and engaging the teeth of the segmental levers, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 40  
the presence of two witnesses.

NORMAN VAN WINKLE.

Witnesses:

J. W. WOODRUFF,  
DAN CORNELL.