

(No Model.)

2 Sheets—Sheet 1.

H. L. SIMMONS.
RAILROAD TRAIN.

No. 536,360.

Patented Mar. 26, 1895.

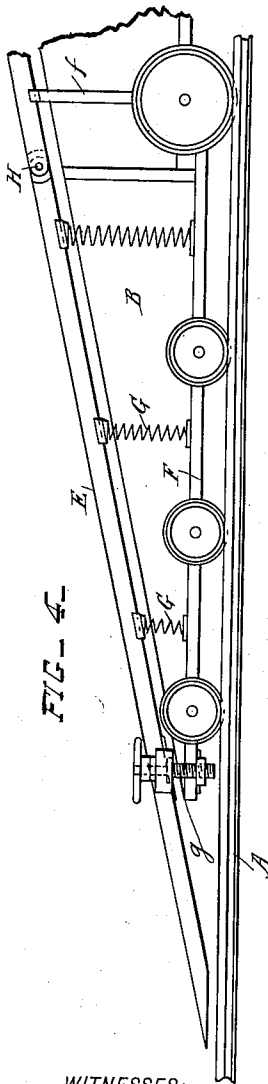


FIG. 4-

WITNESSES:

W. E. Hallin
W. H. Ronsaville,

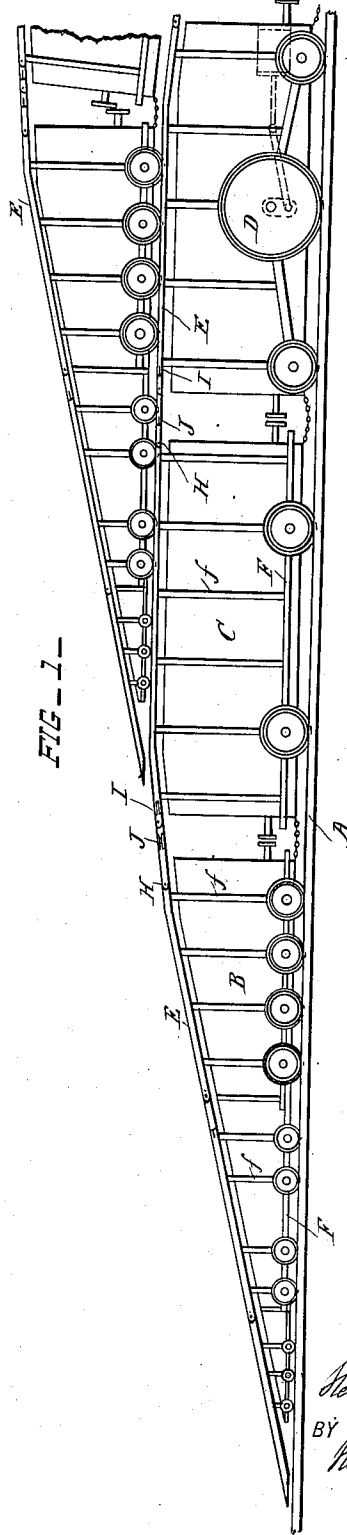


FIG. 1-

FIG. 7-

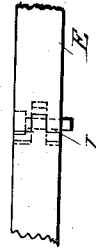
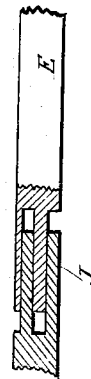


FIG. 6-



FIG. 5-



INVENTOR

Henry L. Simmons.

BY

Herbert W. Jenner.

ATTORNEY.

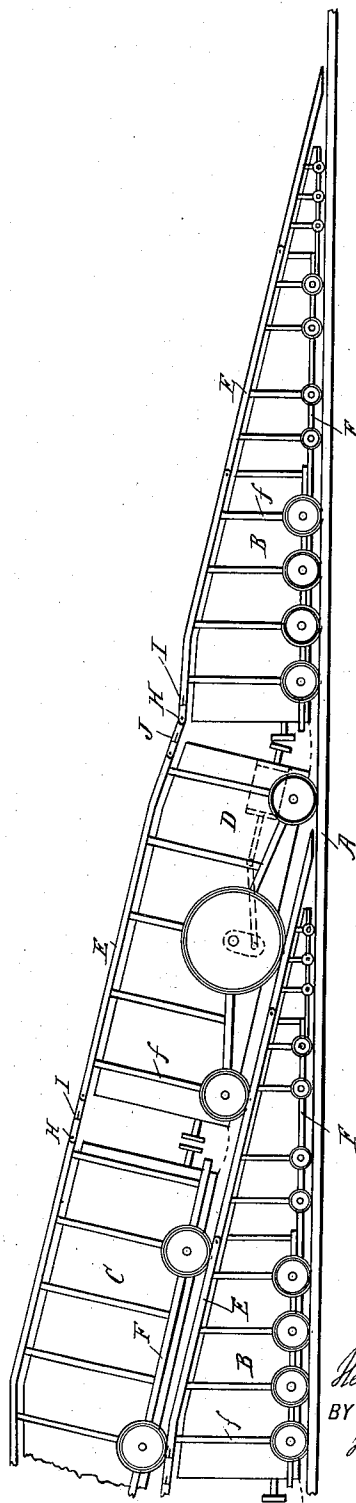
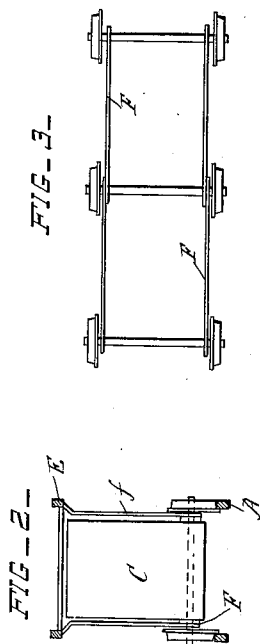
(No Model.)

H. L. SIMMONS.
RAILROAD TRAIN.

2 Sheets—Sheet 2.

No. 536,360.

Patented Mar. 26, 1895.



WITNESSES:

W. E. Hellen
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UNITED STATES PATENT OFFICE.

HENRY LATIMER SIMMONS, OF WICKES, MONTANA.

RAILROAD-TRAIN.

SPECIFICATION forming part of Letters Patent No. 536,360, dated March 26, 1895.

Application filed October 13, 1894. Serial No. 525,824. (No model.)

To all whom it may concern:

Be it known that I, HENRY LATIMER SIMMONS, a citizen of the United States, residing at Wickes, in the county of Jefferson and State of Montana, have invented certain new and useful Improvements in Railroad-Trains; 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 relates to railroad trains; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed, whereby one train may pass over another train which it meets or overtakes upon the same track.

In the drawings: Figure 1 is a side view of two trains in the act of passing each other on the same track. This figure is shown upon two sheets as it could not be placed upon a single one and be clear. Fig. 2 is an end view of one of the intermediate carriages; and Fig. 3 is a plan view of the wheels and axles of the same. Fig. 4 is a side view of part of one of the end cars. Fig. 5 is a side view of one of the longitudinally-sliding rail joints, partly in section. Fig. 6 is a plan view of one of the horizontally-vibrating rail joints; and Fig. 7 is a side view of the same.

A are the main rails the trains run on. Each train consists of two end cars B having inclined upper portions, and one or more intermediate carriages C for containing parcels, mail matter, freight, passengers, or anything else which can be transported by rail. One of the intermediate carriages may contain a motor, or a motor D may form a part of the train. The motor may be an electric motor, or it may be worked by steam, gas or any other approved means for obtaining power.

E are the upper rails supported above the cars and carriages of the train. These rails are of exactly the same gage as the track rails A. The rails E above the end cars are inclined and their lower ends come as near the rails A as possible.

F are longitudinal bars attached to the axles of the cars and carriages, or otherwise supported by the said axles, and *f* are vertical bars having their lower ends secured to the bars F. The upper ends of the bars *f*

have plates or shoes to which the upper rails E are secured, and the bars F form a strong framework which supports the weight of a train when passing over the rails E. The bars F form a rigid support for the rails E, but if desired the end portions of the rails E on the end cars may be supported upon strong springs G. A hand-wheel and screw *g* may be used for regulating the height of the end portions of the rails E above the rails A, or any other approved adjusting device, such as a rack and pinion, may be used for the same purpose.

H are vertically-vibrating joints in the rails E, for allowing the end portions of the rails to be adjusted, and permitting the rails E to adjust themselves to irregularities of the road bed under the rails A.

I are horizontally-vibrating joints in the rails E, to permit them to adjust themselves to curves in the track. The pins of the joints I are provided with countersunk heads so that the wheels can run over them smoothly.

J are longitudinally-sliding joints in the rails E permitting the cars and carriages to which the rails E are attached to move endwise to a limited extent with respect to each other without breaking the continuity of the rails E.

I do not confine myself to any particular form of joints H, I and J, as joints of any approved form may be used provided they will give the requisite freedom of movement.

The inclination of the end portions of the train may be varied and adapted to the speed at which the trains run and to their weight.

When one train meets or overtakes another train, one train will run up the rails E, carried by the other train, and will run along the rails E and descend onto the rails A at the other end of the lower train, as shown in Fig. 1.

The trains have the inclined lower ends of their rails E adjusted at different distances from the rails A in a prearranged manner so that the ends of the rails E of successive trains are not exactly upon the same level when they meet. The train having the ends of its rails E higher above the rails A than those of the train it meets will rise and run up on the rails E of the other train.

What I claim is—

1. A railroad train provided with rails supported above the train and having inclined

end portions, said rails being of the same gage as the main rails and provided with vertically and horizontally vibrating joints and longitudinally-sliding joints, substantially as and for the purpose set forth.

2. An end car for a railroad train provided with a supporting framework carried by the axles and consisting of rigid bars and springs; and inclined rails, of the same gage as the main rails, carried by the said framework, and provided with vertically-vibrating joints, substantially as and for the purpose set forth.

3. An end car for a railroad train provided with a supporting framework carried by the axles and consisting of rigid bars and springs, inclined rails carried by the said framework, and means for adjusting the inclination of the portions of the said inclined rails which

are carried by the said springs, substantially as and for the purpose set forth.

4. The combination, with the stationary main rails A, of two trains provided with rails E of the same gage as the main rails, supported above the trains and having inclined front and rear end portions and means for adjusting the heights of the said end portions above the rails A, whereby one train may rise and pass over the other, substantially as set forth.

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

HENRY LATIMER SIMMONS.

Witnesses:

J. M. KELLOGG,
H. DENBOW.