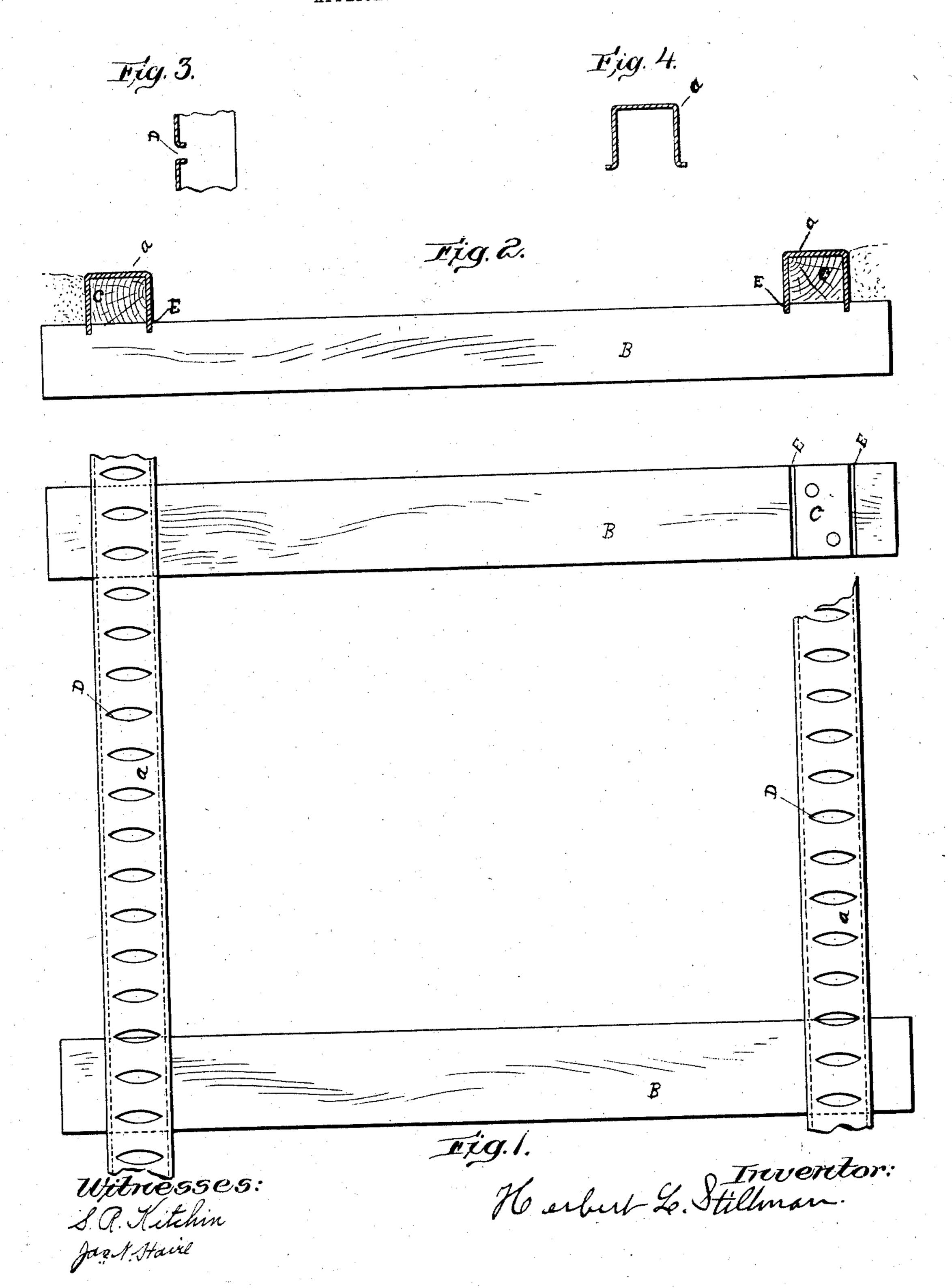
No. 864,870.

H. L. STILLMAN. RAILWAY.

APPLICATION FILED DEC. 26, 1906.



UNITED STATES PATENT OFFICE.

HERBERT L. STILLMAN, OF WEST ACTON, MASSACHUSETTS.

RAILWAY.

No. 864,870.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed December 26, 1906. Serial No. 349,529.

To all whom it may concern:

Be it known that I, Herbert L. Stillman, of West Acton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Railways; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has relation to improvements in railways but is more particularly adapted for light cars having rubber tires or a combination tire of rubber and metal.

The invention will be fully understood from the following description when taken in connection with the accompanying drawings in which—

Figure 1 is a plan top view of a section of a railway with my improvements attached. Fig. 2 is a cross section of railway showing a section of tie rails and tie blocks. Fig. 3 shows a transverse slot in the top of a rail with a downward turned lip. Fig. 4 is a cross section of a rail with clenching points on the bottom of the webs.

Referring by letter to said drawings a a a shows the 25 rail in top plan view and cross sections.

B, B, show cross ties.

C, C, show tie blocks.

D, D, show transverse retaining slots in the body or top of the rail.

E, E, shows double furrows across the ties.

In operation after the tie blocks have been secured to the ties I saw the cross furrows close to said blocks in the tie at an approximate depth of one inch. The rail which is an inverted channel is then placed on the ties fitting over the blocks and driven down in the

furrows until the body rests on the blocks, or a continuous stringer may be used in the place of the blocks, and secured by additional fastenings or may be secured by outward retaining lips on the bottom of the webs made in short sections on the rail and placed 40 similar to my Patent 565,045, dated Aug. 4th 1896. (See lines from 35 to 46.) It will thus be seen that for light traffic there is secured a strong track with light rails and, in a narrow gage, with a minimum amount of material.

The transverse slots in rails are to be punched only on such rails as are on comparatively steep grades and are for the purpose of securing a hold for rubber tires to prevent slipping of the wheels and at the same time to allow the metal tread or treads of the tire to 50 run smoothly over the rails where a compound tire is used.

I am aware that a transverse corrugated rail has been invented but the practical advantages in draining to prevent filling from ice, snow, &c. securing 55 smooth running and prevent rapid wear will be readily seen and that the downward turned lip in the slot strengthens the rail body and prevents cutting the rubber projecting into them to secure retention.

Having described this invention, what I craim is— 60 The improved railway herein described, consisting of the inverted channel rail with the transverse slots and the retaining web lips, the cross ties with the double transverse furrows and the tie blocks substantially as specified.

In testimony that I claim the foregoing invention, I 65 have hereunto set my hand this 19th day of Dec., 1906.

HERBERT L. STILLMAN.

Witnesses:

WM. H. GUTTERIDGE,
JAS. N. HAIRE.