

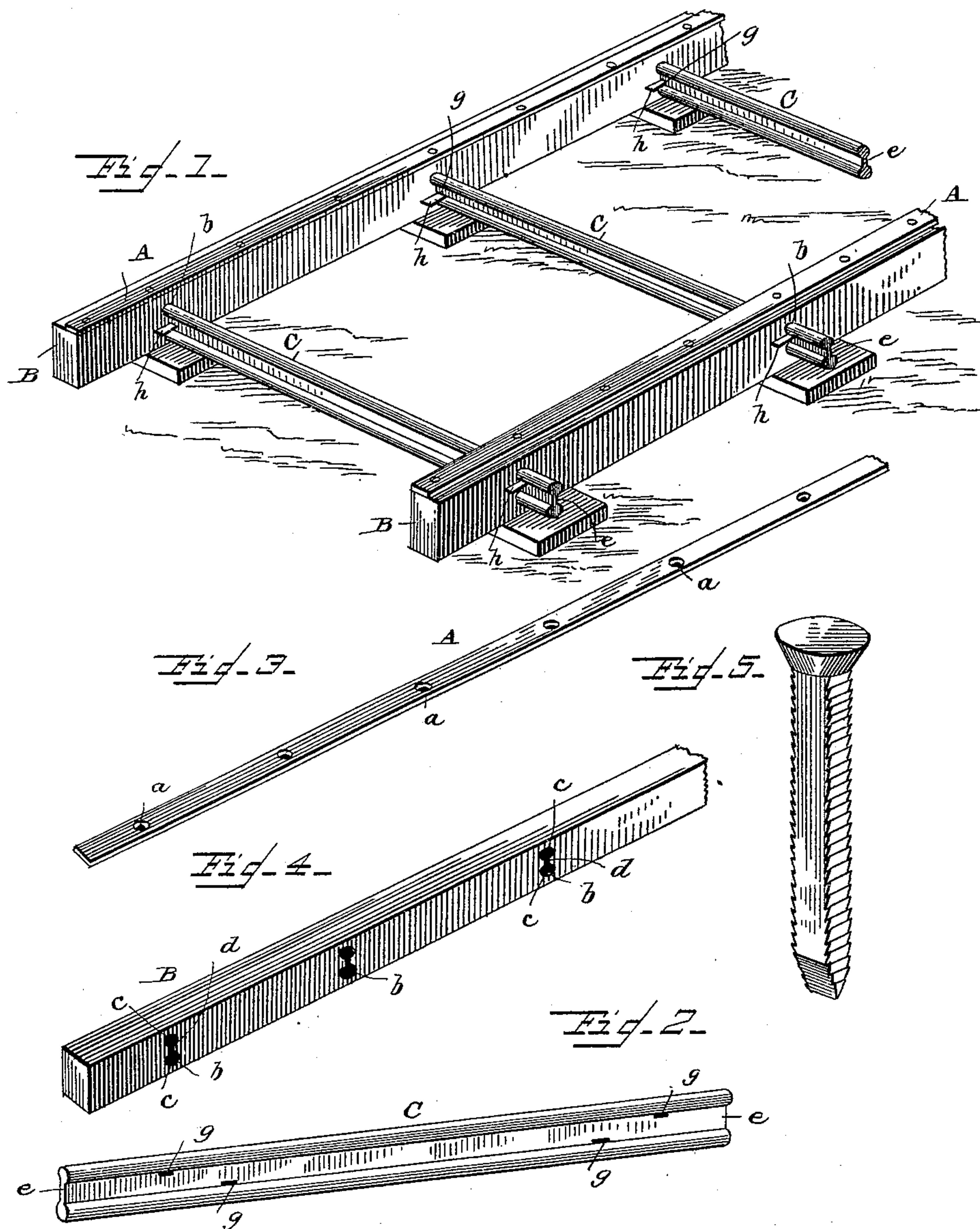
(No Model.)

H. L. STILLMAN.

RAILWAY.

No. 370,164.

Patented Sept. 20, 1887.



WITNESSES

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RAILWAY.

SPECIFICATION forming part of Letters Patent No. 370,164, dated September 20, 1887.

Application filed February 23, 1887. Serial No. 228,498. (No model.)

To all whom it may concern:

Be it known that I, HERBERT L. STILLMAN, a citizen of the United States, residing at Allenton, in the county of Washington and State of Rhode Island, have invented certain new and useful Improvements in Railways; and I do 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 has relation to improvements in railways, and is more particularly adapted for street-railways.

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

Figure 1 is a perspective view of a section of a railway with my improvements attached. Fig. 2 is a perspective view of one of the ties removed. Fig. 3 is a perspective view of one of the rails removed. Fig. 4 is a perspective view of one of the stringers, and Fig. 5 is a perspective view of one of the spikes employed to secure the rails to the stringers.

Referring by letter to the said drawings, A indicates the rails, which are of flat contour, having elongated vertical transverse apertures *a*, which are beveled on their upper sides to seat the heads of spikes, as will be presently explained.

B indicates the stringers, which are designed to receive the rails, as shown. These stringers are provided at desired points with transverse apertures to receive the ties C. These apertures *b* are of a peculiar construction, being formed by boring two auger-holes, *c c*, which are connected by means of a slot, *d*, made in a transverse plane with relation to the said stringer. Thus it will be seen that the apertures are of elongated form, having the annular portions *c c* at opposite ends.

C indicates the metallic ties, which are of approximately I form in cross-section, having the longitudinal edges rounded, as shown, and connected by the integral web *e*. These web

portions of the ties are slotted transversely, as at *g*, to receive locking-keys *h*, which are designed to secure the said ties to the stringers.

The spikes I employ are of a form substantially as shown in Fig. 5, having a shank with flat sides and barbed or toothed longitudinal sides, with a flat head beveled on its under side, so as to snugly seat itself in the countersunk apertures of the rails when driven to place in securing the said rails to the stringers.

In operation, after the apertures have been formed in the stringers, I place the ends of the ties therein, as shown, after which the keys are applied on opposite sides of the stringers, and when the rails have been spiked to the upper sides of the said stringers the whole is ready for use, and may be suitably placed upon sleepers or other means of support.

It will be seen that by having the ties of the form described and the stringer-apertures adapted to receive them the parts may be firmly secured together and the joints prevented from working loose by torsional strain.

It will be seen that when desired the railway may be put together in sections, and the parts may be made and united without the employment of skilled workmen.

Having described this invention, what I claim is—

A railway composed, essentially, of the stringers having the transverse apertures formed with the annular ends united by the straight slot, the rails having the countersunk apertures secured to the stringers by the spikes, the ties having the rounded longitudinal edges connected by the web and slotted transversely, and the keys securing the ties to the stringers and placed on opposite sides of the latter, substantially as specified.

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

HERBERT L. STILLMAN.

Witnesses:

MARY TOWNEND,
SARAH E. STILLMAN.