

G. C. MORGAN.
Railroad-Rails.

No. 136,852.

Patented March 18, 1873.

Fig. 1.

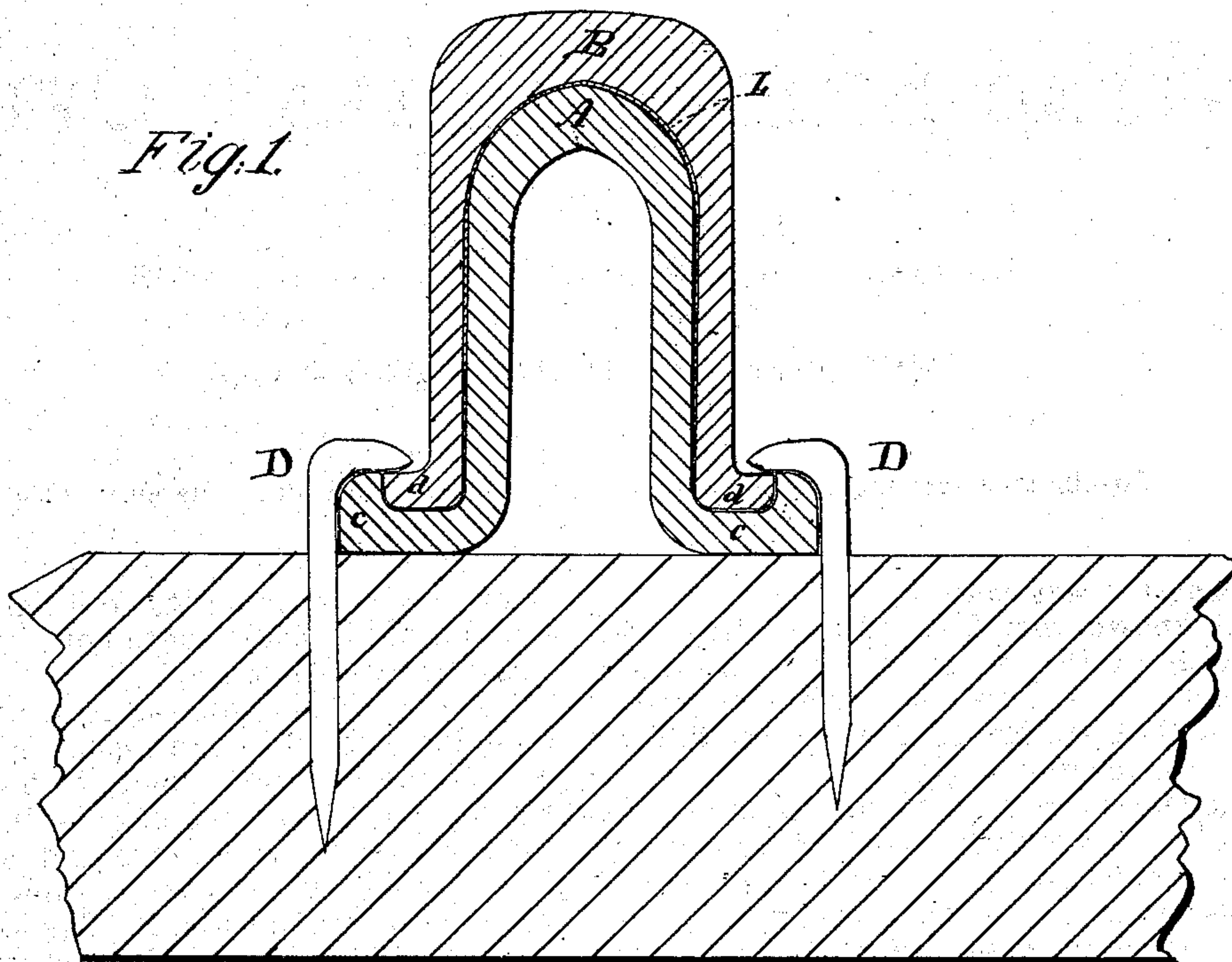
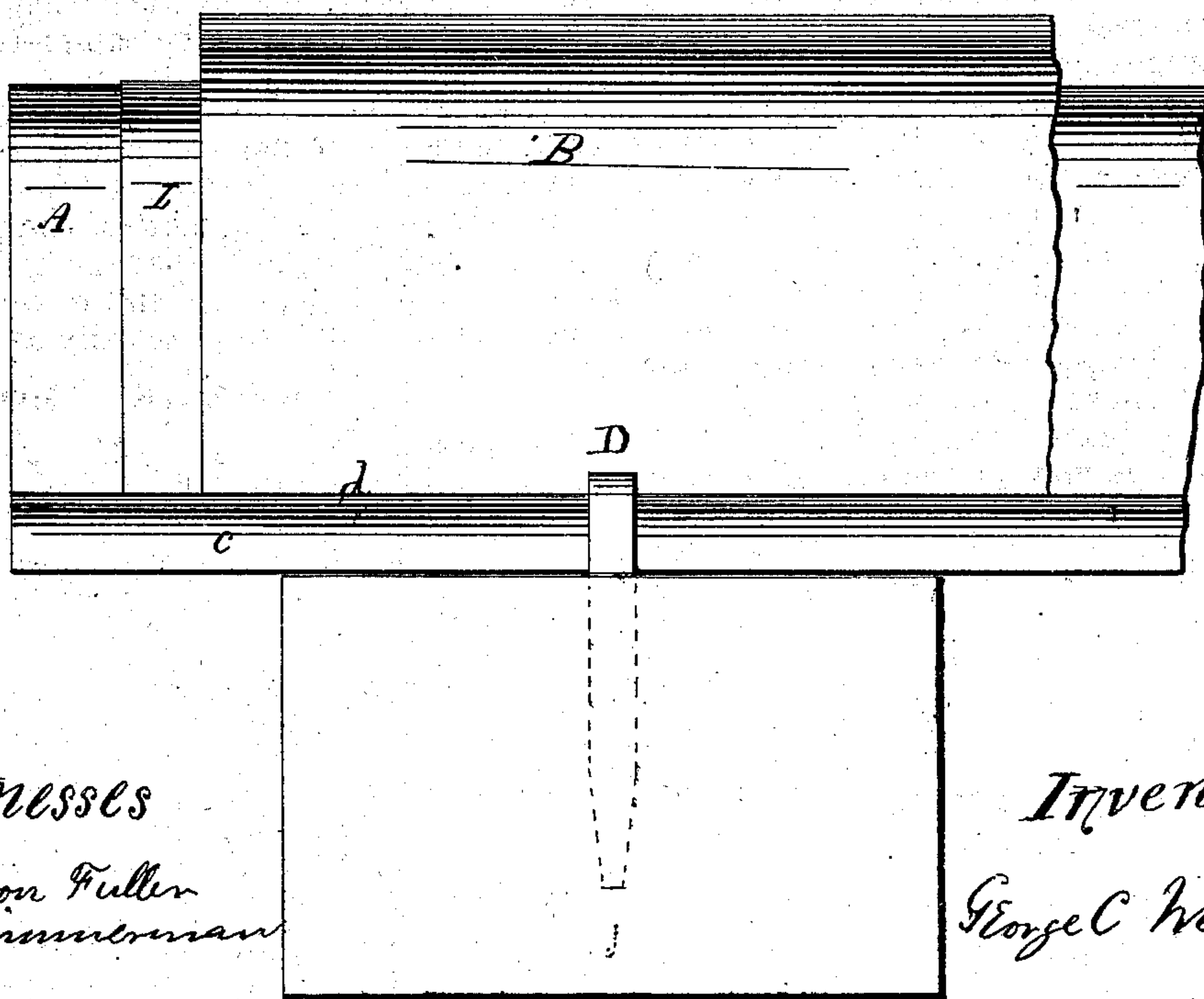


Fig. 2.



Witnesses
Byron Fuller
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UNITED STATES PATENT OFFICE.

GEORGE C. MORGAN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN RAILROAD RAILS.

Specification forming part of Letters Patent No. **136,852**, dated March 18, 1873.

To all whom it may concern:

Be it known that I, GEORGE C. MORGAN, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Railroad Rails, of which the following is a specification:

My invention relates to the forming of a solid rail by a combination of parts, by which method I am enabled to connect all of the parts together and to the cross-ties by the spikes, and to dispense with all bolts for connecting the parts together.

Figure 1 is a vertical transverse section, showing the rail formed by a combination of the three parts.

The letter A represents the standard or sub-rail, made of steel, iron, or other suitable material, the flanges *c c* resting upon the sleeper. The letter L represents a soft lining or coating, resting upon the sub-rail. The object of this is to make a closer fitting between the sub-rail A and the cap-rail B. The letter B represents the cap part of the rail. It may be made of steel or any suitable material. It fits upon the sub-rail, as shown, with even pressure, the flanges *d d* pressing against and supported by the shoulders of the flanges *c c*, and are held in place by the spikes D.

Fig. 2 is a side view of the rail, also showing a combination of the three parts as fitted

together and forming the rail; also showing how the rail is made continuous by a process called "breaking joints."

The joint of the sub-rail is made with the adjoining sub-rail at the point A, while the joint of the cap-rail is made with the adjoining cap-rail at B, thus making the joints at different points, saving vertical strength at these points by supporting each other, and forming a continuous rail. The rail is then fastened to the ties and the sections fastened together by spikes driven into the ties, thus obviating the necessity for bolts, rivets, or other device for fastening the sections together.

I make no claim to the mode of fastening the rail to the sleeper or track when the spike-heads do not also lock the cap-piece; but

I claim as my invention—

The combination of the sub-rail A, provided with the recessed flanges *c* and narrow boundary ledges, with the lining L and cap-rail B, provided with the flanges *d* extending laterally to the side ledges so that the spikes D will fasten the parts together and to the ties without rivets or bolts, substantially as specified.

GEORGE C. MORGAN.

Witnesses:

L. BYRON FULLER,
WM. ZIMMERMAN.