

No. 714,923.

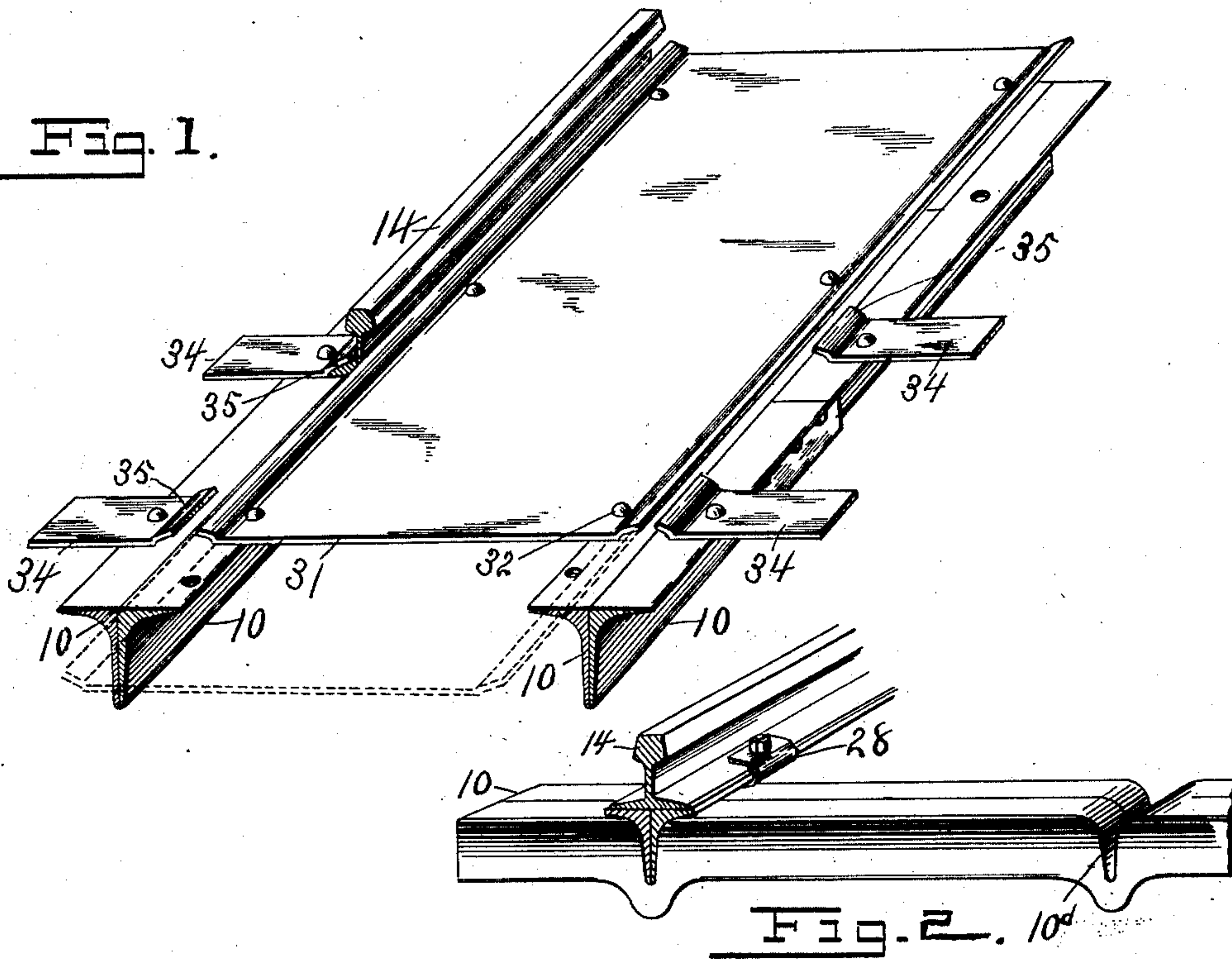
Patented Dec. 2, 1902.

G. A. LE FEVRE.  
ROAD BED.

(Application filed Jan. 25, 1902.)

(No Model.)

Fig. 1.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE A. LE FEVRE, OF NEW YORK, N. Y.

## ROAD-BED.

SPECIFICATION forming part of Letters Patent No. 714,923, dated December 2, 1902.

Application filed January 25, 1902. Serial No. 91,152. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. LE FEVRE, of the city, county, and State of New York, have invented certain new and useful Improvements in Road-Beds, of which the following is a full, clear, and exact description.

My invention relates to improvements in road-beds for railway-cars and rolling-stock; and the object of my invention is to produce a simple, substantial, and homogeneous structure which shall comprise in its make-up ties, clips, and longitudinal sleepers, which can also be arranged to cover the entire surface of the track, so as to form practically a metallic bed, which is constructed so that the parts can be readily rolled out to the required shape, which is especially adapted for rapid track-laying, and which provides against serious rail displacement, either lateral or longitudinal.

To these ends my invention consists of certain features of construction and combinations of parts, which will hereinafter be described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar figures of reference refer to similar parts throughout the several views.

Figure 1 is a broken perspective view with parts in section, showing my improved road-bed; and Fig. 2 is a broken detail perspective view with parts in section, showing especially the form of cross-tie or subcross-tie which I employ.

In carrying out my invention I employ longitudinal sleepers 10, which are formed of two angle-irons placed together with their flat sides abutting and so as to leave a flat top surface, the united parts forming practically a T, and, in fact, the sleepers could be made in the form of a single T; but I prefer the construction shown. The T-shaped sleeper has the angle-irons composing it arranged, preferably, so as to break joints, thus forming continuous sleepers, and the parts can be riveted, bolted, or otherwise fastened together. For a foundation or cross-tie I use a structure exactly similar to the longitudinal sleepers, except that at points below the longitudinal sleepers it is bent downward, so as to

form seats 10<sup>d</sup>, which are shaped to receive the depending or essentially vertical parts of the longitudinal sleepers 10.

It will be observed that the material for both the longitudinal sleepers and cross-ties can be rolled out. In fact, ordinary commercial angle-iron is suitable for the purpose, and when the longitudinal sleepers are seated in the parts 10<sup>d</sup> they are held securely against lateral displacement and can move enough to provide for ordinary contraction and expansion.

The rails 14 can be fastened to the sleepers by means of clips 28, which are strapped over the rail-flanges and the sleeper-tops and then bolted or riveted in place; but I prefer to use the flat plate 31, which extends the entire way across between the track-rails, each plate being riveted or otherwise fastened to the longitudinal sleepers 10 and each plate having its outer edge formed into the clip or flange 33, which fits snugly over the inner rail-flanges, and so fastens the rails in place. The outer rail-flanges are held by similar clips 35, which are formed on the short plates 34, and these are bolted to the outer parts of the sleepers 10, and, if desired, the plates 34 on each side of the track can be made continuous, like the plate 31.

It will thus be seen that I provide a very simple and substantial road-bed in which the parts are not likely to separate, and, in fact, in which the whole structure is bound together in a very substantial way.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An improved metallic road-bed comprising longitudinal sleepers formed of angle-iron, and cross-ties connecting the sleepers, said cross-ties having seats therein to receive the depending flanges of the sleepers.

2. The herein-described road-bed comprising longitudinal sleepers formed of angle-iron, the flat sides of the angle-irons being fastened together, and angle-iron cross-ties having depressed seats to receive the lower portions of the longitudinal sleepers.

3. The herein-described road-bed comprising longitudinal sleepers formed of angle-irons

bolted together, and cross-ties formed of angle-iron with their flat sides fastened together, the said cross-ties being bent downward at points beneath the sleepers so as to form seats  
5 to receive the sleepers.

4. The combination with longitudinal sleepers and the track-rails of a flat metallic plate spanning the space between the sleepers and having means of attachment to the sleepers,  
10 the side edges of the said plate being shaped

into binding-clips adapted to fit over the flanges of the rails.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE A. LE FEVRE.

In presence of—

WARREN B. HUTCHINSON,  
THERON DAVIS.