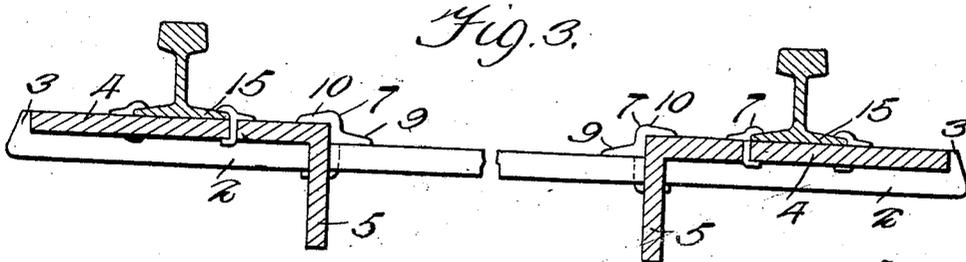
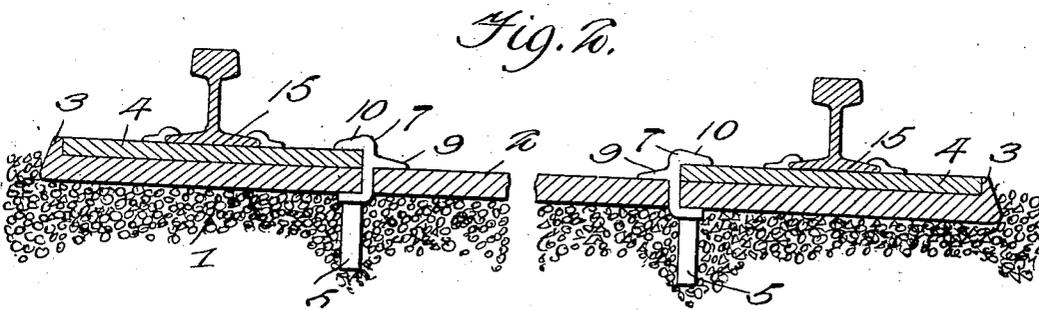
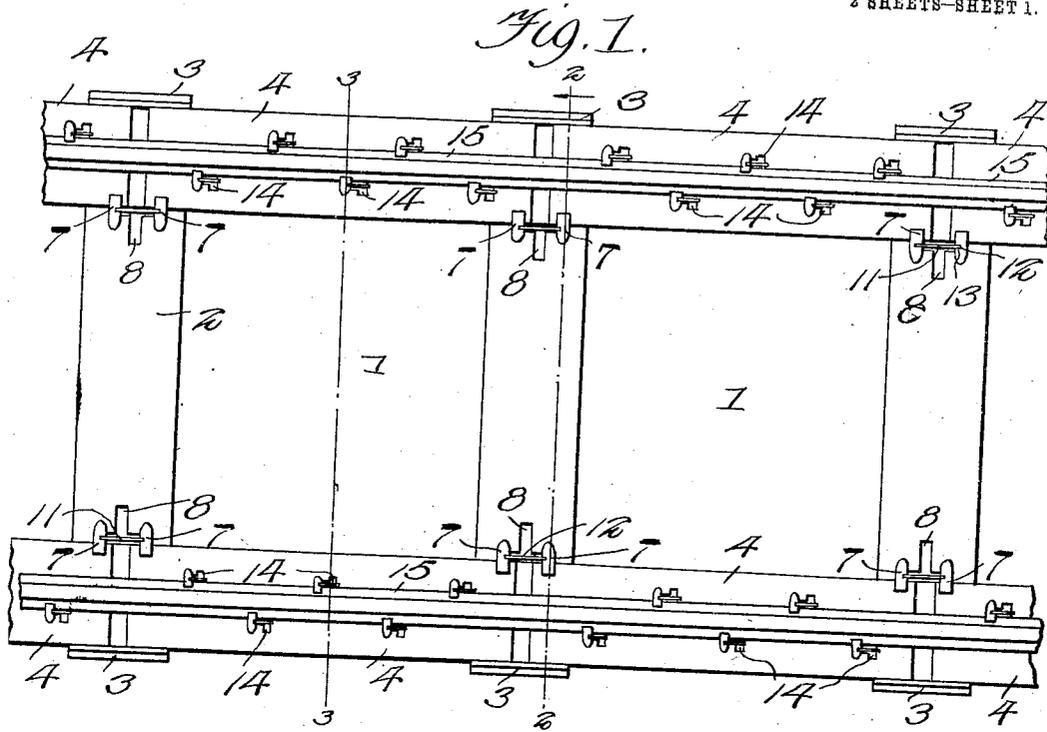


S. MAHURIN.
ROAD BED.
APPLICATION FILED SEPT. 24, 1910.

999,173.

Patented July 25, 1911.
2 SHEETS—SHEET 1.



Witnesses

Hugh Helt
C. Edmonston, Jr.

Inventor

Sherman Mahurin

By Victor J. Evans

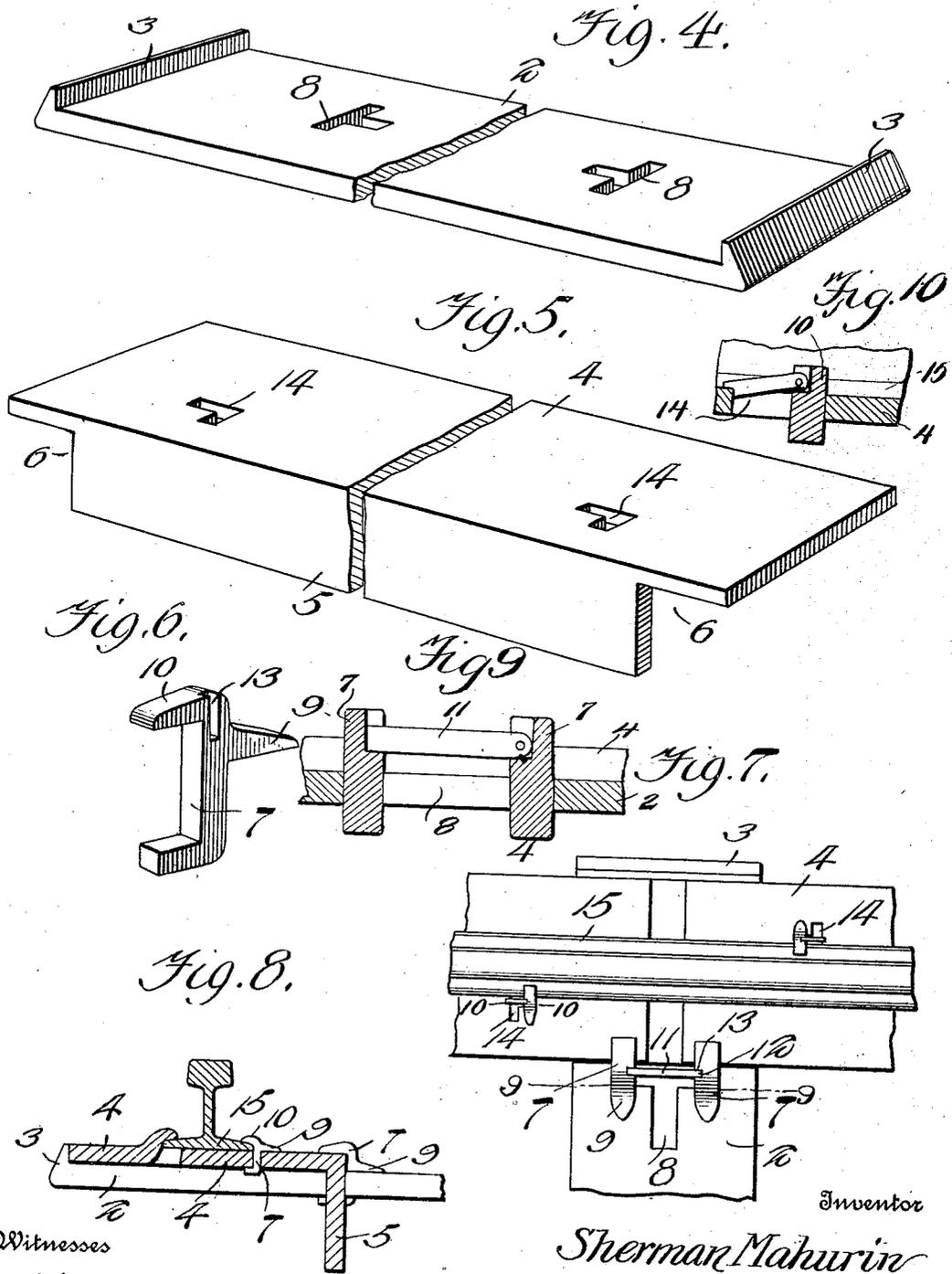
Attorney

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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

SHERMAN MAHURIN, OF FRANKFORT, SOUTH DAKOTA.

ROAD-BED.

999,173.

Specification of Letters Patent. Patented July 25, 1911.

Application filed September 24, 1910. Serial No. 583,636.

To all whom it may concern:

Be it known that I, SHERMAN MAHURIN, a citizen of the United States, residing at Frankfort, in the county of Spink and State of South Dakota, have invented new and useful Improvements in Road-Beds, of which the following is a specification.

This invention relates to railroad road beds and more particularly to metallic road beds.

The object of the invention is to provide a continuous and rigid supporting surface for the rails and to provide means for conveniently and expeditiously attaching said rails.

A further object of the invention is the provision of novel metallic ties and stringers for interconnecting the ties and supporting the rails together with novel attaching means for the stringers and rails.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawing which forms a part of this application, and in which:

Figure 1 is a top plan view. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a detail perspective of one of the ties. Fig. 5 is a similar view of one of the stringers. Fig. 6 is a perspective view of one of the connecting devices. Fig. 7 is an enlarged detail top plan view. Fig. 8 is a sectional view of a modified form of stringer. Fig. 9 is a section on the line 9—9 of Fig. 7. Fig. 10 is a section on the line 10—10 of Fig. 7.

Referring more particularly to the drawings 1 represents the road bed upon which are mounted a plurality of ties 2 each consisting of a flat piece of metal with its ends formed into vertical upstanding flanges 3 which are adapted to engage and hold one side of the stringers 4. The stringers comprise a flat piece of metal having its opposite side edges bent downwardly into retaining flanges 5 which are adapted to enter the road bed and prevent lateral slipping of the ties and stringers. The flanges are cut away as at 6 so as to permit the ends of the stringers to rest upon the ties 2 and the flanges 5 extend downwardly into the road bed between the ties. The stringers are mounted upon the ties as shown in Fig. 1 with their ends slightly separated so as to permit expansion and contraction thereof and are held in position upon the ties by

means of fastening devices or clips 7 which are adapted to enter T-shaped slots 8 formed in the ties 2. These fastening devices are substantially U-shaped in outline and have projecting from their vertical leg a bracing extension 9 which rests upon the tie and prevents the head 10 from becoming disengaged with the stringers. In applying the clips the horizontal leg thereof is placed in the T-shaped slot and moved forward until the head engages over the stringer. The clip is then moved laterally in the slot so that the extension 9 will rest upon the portion of the tie on the side of the slot. Two of these clips are placed in each slot to engage the adjoining stringers and in order to prevent their accidental removal from the slot one of the clips is provided with a pivoted locking pawl 11 with a shouldered end 12 adapted to enter a slot 13 formed upon the opposite clip as shown in Fig. 9. This construction permits disengagement of either clip.

Throughout the length of each stringer on opposite sides of its longitudinal center are formed L-shaped slots 14 in which the clips 7 are adapted to be placed and forced against the base flanges of the rails 15 as shown. The pivoted dog 11 in this instance will engage the wall of the longitudinal leg of the slot when the clip is positioned in the lateral leg thereof as shown in Fig. 10. It will thus be seen that I have provided a boltless road bed which may be expeditiously constructed and which will be durable and efficient in operation.

In the modification shown in Fig. 8 a stringer 16 is shown having clips punched up adjacent its outer edge to receive the outer base flange of the rails. The stringer is provided with the usual L-shaped slots adjacent its inner edge so as to receive clips adapted to engage the inner base flange of the rail.

Having thus described the invention, what is claimed is—

1. In a device of the class described, the combination with a plurality of metallic ties having end flanges stringers mounted upon said ties and having one side edge abutting against said flange, said ties having slots therein, clips mounted in said slots and adapted to engage the opposite side edge of said stringers, and means carried by one of the clips and coacting with the opposite one to prevent disengagement of the clips from the slots.

2. In a device of the class described, the

combination with a plurality of metallic ties, of stringers mounted thereon and having the ends thereof closely related, flanges on the opposite ends of said ties adapted to engage
5 the outside edges of the stringers, T-shaped slots in said ties, pairs of clips mounted in said T-shaped slots, a locking pawl pivoted to one of the clips of each pair and adapted to engage the opposite clip of the pair to lock
10 the clips in the slots, heads on the clips to en-

gage the inside edges of said stringers, and means carried by the stringers for securing the rails thereto.

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

SHERMAN MAHURIN.

Witnesses:

C. R. WILSON,
P. W. HANSEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
