

R. BROWNE.
RAILROAD CROSSING.
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1,055,442.

Patented Mar. 11, 1913.

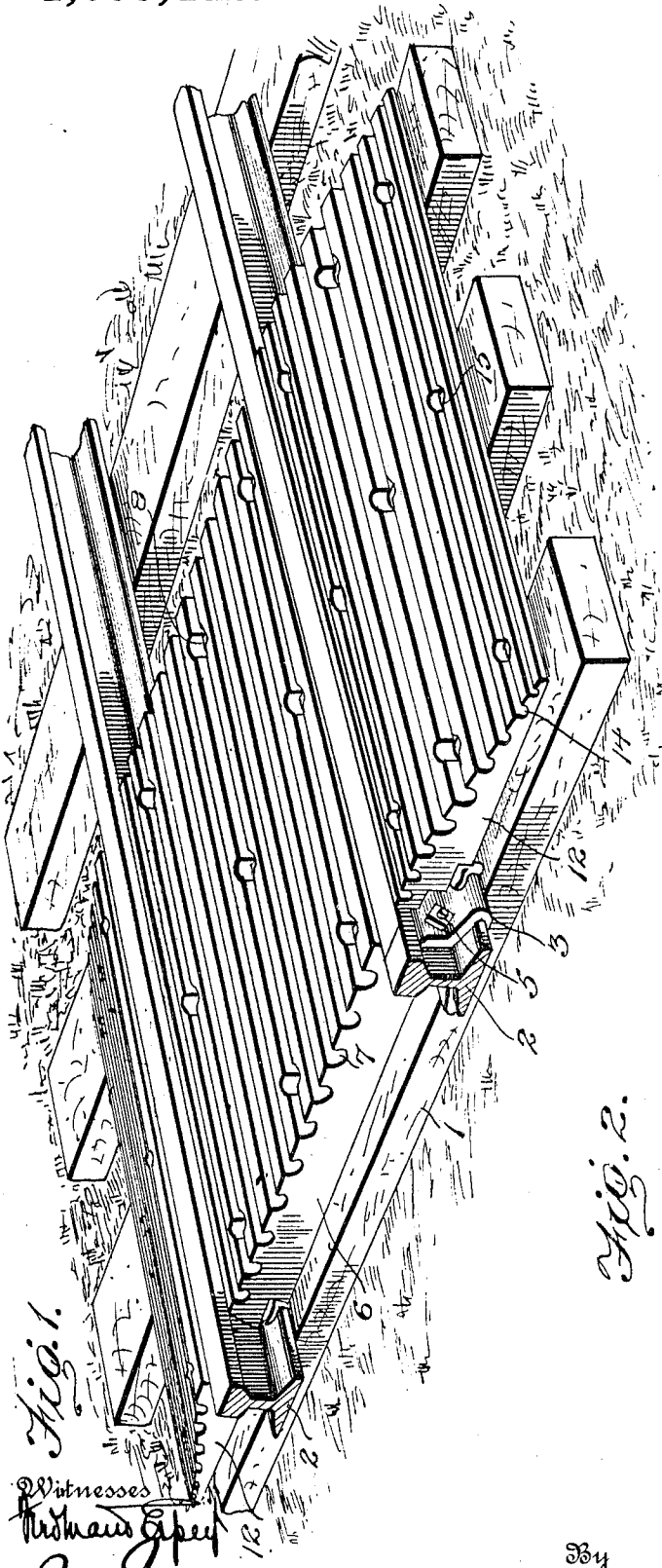


Fig. 1.

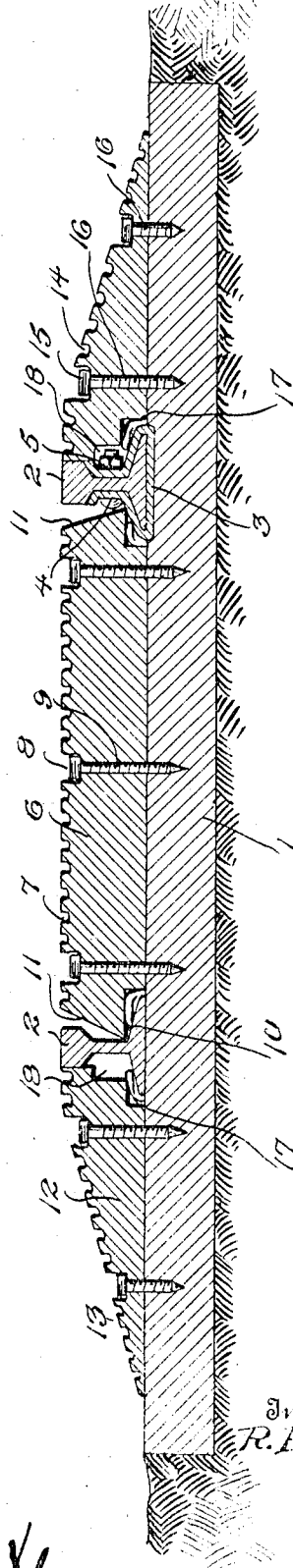


Fig. 2.

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UNITED STATES PATENT OFFICE.

ROBERT BROWNE, OF BUTTE, MONTANA.

RAILROAD-CROSSING.

1,055,442.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT BROWNE, citizen of the United States, residing at Butte, in the county of Silverbow and State of Montana, have invented certain new and useful Improvements in Railroad-Crossings, of which the following is a specification.

This invention relates to crossings of rail-ways and roads or streets, and has for its object the provision of simple, durable and inexpensive means whereby the passage of vehicles across the railroad tracks will be facilitated.

A further object of the invention is to provide means whereby the spreading of the rails at the crossing will be prevented.

The stated objects, and such other incidental objects as will appear from the description of the invention hereinafter given, are obtained in the structure illustrated in the accompanying drawings, and the invention consists in certain novel features which will be particularly pointed out in the claim following the description.

In the drawings: Figure 1 is a perspective view of a railway crossing showing my invention in connection therewith; Fig. 2 is a transverse section.

The ties 1 and the track rails 2 may be of the usual form and dimensions, and the track rails may be secured to the ties in the usual or any preferred manner. In the drawings, the rails are shown as having their joints supported in chairs 3 which fit around the bases of the meeting rails and against the webs thereof and are secured thereto by bolts 4 inserted through the chair and the web of the rail and equipped with fastening nuts 5.

In carrying out my invention, I provide between the track rails a block or plate 6 which is preferably of cast steel and of such a height that when it is in position upon the ties and between the rails its upper surface will be flush with the treads of the rails. In the upper surface of this block or plate I form a series of longitudinal grooves 7, and in the bases of some of the said grooves I form countersunk openings 8 which are extended through the plate or block and adapted to receive fastening screws 9 which are inserted through the plate into the ties, as will be readily understood. These longitudinal grooves provide means whereby the dirt which will tend to collect on the tread

surface of the plate or block may be collected and from which it may be easily swept, and also form receptacles in which melting snow or ice may collect, so that the formation of a slippery surface over the tread will be avoided in cold weather. In ordinary conditions the grooves will afford firm footing for any draft animals passing over the crossing so that the liability of a team being caught upon the crossing when a train is approaching is reduced to a minimum. In the side edges of the plate or block 6 at the bottom thereof I form recesses or notches 10 which accommodate the base flanges of the track rails and fit over the heads of the spikes by which the rails are secured to the ties. From the outer extremities of the upper walls of said notches the side edges of the plate or block are beveled inwardly and upwardly, as shown at 11, so that a space will be provided between the side edge of the plate and the tread of the rail to accommodate the flanges of the car wheels on passing trains. At the outer sides of the track rails I secure upon the ties, plates or blocks 12 which are likewise preferably of cast steel and have their upper surfaces inclined, as shown at 13, so as to extend gradually from the surface of the roadbed to the tread of the adjacent rail. The side plates 12 are provided with longitudinal grooves 14 in their upper surfaces and also have countersunk openings 15 in the bases of some of said grooves through which fastening screws 16 are inserted into the ties. The inner edges of the side plates are stepped to provide a lower notch 17 which will fit over the base flange of the rail and the heads of the spikes which secure the same to the ties, and above the said notch 17 a second notch 18 will be provided which will accommodate the bolts by which the chairs 3 and the fish plates of the rail joints are secured. Above the said notch 18 the edge of the side plate bears against the track rail, as clearly shown in Fig. 2, and it will be readily noted that inasmuch as the several plates are securely fastened to the ties and all the plates engage the track rails, spreading of the rails at the crossing will be positively prevented.

My improved crossing provides a tread which will effectually prevent slipping of draft animals crossing a track and which will facilitate the removal of snow and ice. The several tread plates may be readily se-

cured to the tie and, when secured, the heads of the fastening screws will be entirely below the tread surface so that they will not be apt to be loosened by passing vehicles.

5 Having described the invention, what I claim is:

10 A railroad crossing comprising a single block resting on the ties and extending between the track rails and having its side edges provided at its bottom with longitudinal recesses to engage over the base flanges of the track rails and beveled inwardly and upwardly from said notches, the upper surface of the block being provided
15 with a plurality of grooves parallel with the track rails and opening through the end edges of the block, a single block resting on the ties at the outer side of each track rail having its upper surface inclined down-

wardly from the tread of the rail to the surface of the ties and provided with grooves 20 parallel with the track rails and opening through the ends of the block, the longitudinal side wall of the block at its upper edge bearing against the side of the head of the 25 rail and being stepped below the same to engage over the track-securing bolts and the base flanges of the track rails, countersunk openings being formed through all the blocks in the bases of some of the grooves, and 30 headed fastenings inserted downwardly through said openings into the ties.

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

ROBERT BROWNE. [L. S.]

Witnesses:

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