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V. UEDELHOFEN.

RAIL JOINT.

APPLICATION FILED AUG. 30, 1906.

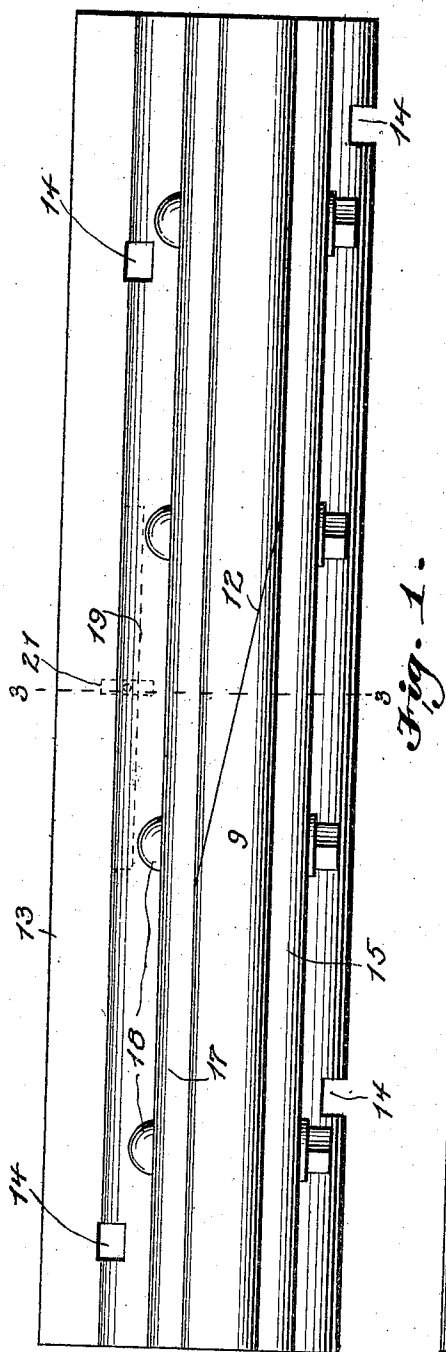


Fig. 1.

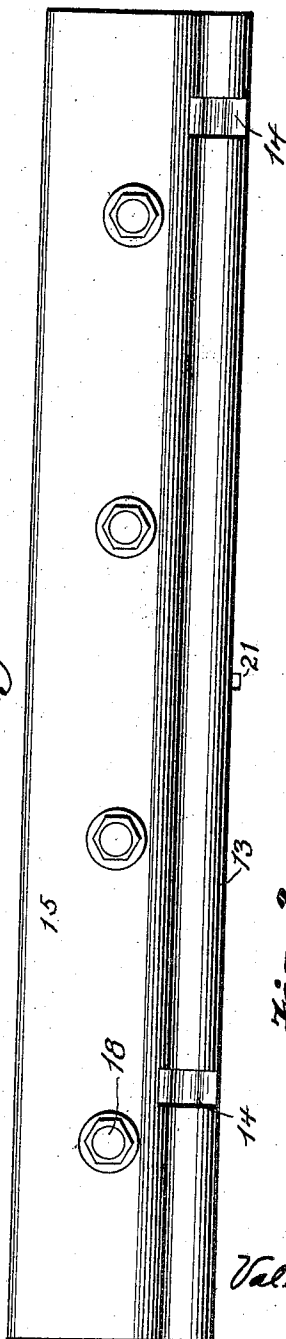


Fig. 2.

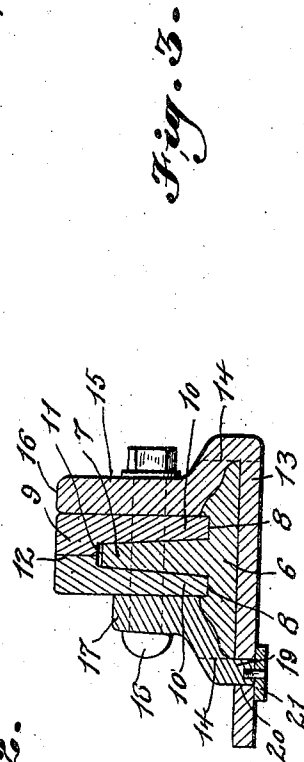


Fig. 3.

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VALENTIN UEDELHOFEN, OF LAKESIDE, ILLINOIS.

RAIL-JOINT.

No. 847,382.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed August 30, 1906. Serial No. 332,675.

To all whom it may concern:

Be it known that I, VALENTIN UEDELHOFEN, a citizen of the United States, residing at Lakeside, in the county of Cook and State of Illinois, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention is a rail structure for rail-ways, and has for its object to provide a new and improved joint which will prevent the pounding at the end of the rails.

A further object of the invention is to provide a capped rail, which cap can be removed and replaced without taking up the rail-base, and consequently without disturbing the spikes. The construction also allows a cap to be made of better steel than the base, so as to increase the life of the rail.

The structure includes an improved chair and plates for holding the parts of the rail together and serving to protect the ties and increase the life thereof.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the rail structure. Fig. 2 is a side view. Fig. 3 is a vertical cross-section.

Referring specifically to the drawings, 6 indicates the rail-base, having a central longitudinal upright web 7, beside which are depressions or seats 8 in the base.

The cap is indicated at 9, rolled in substantially inverted-U shape, so that the branches 10 receive therebetween the web 7 and rest at the bottom in the depressions 8, which extend lengthwise along the side of the web. The depth of the branches 10 is preferably such that a small space 11 is left between the top of the web and the cap, so that all the weight comes directly upon the base in the depressions 8. The ends of the cap are scarfed, as at 12, so that a wheel will run from one rail to the next without pounding.

The rail sets upon a chair or base-plate 13, which is provided at suitable intervals with holes or notches 14 to receive the spikes which enter the ties. The base-plate is rolled integral with an outside angle-plate 15, which overlies one side of the base and bears against the outer side of the cap and at its upper edge is flush therewith, as indicated at 16, so as to assist in carrying the wheels over

the joints without pounding. On the inner side the structure has an angle-plate 17, which rests at its lower edge upon the base-plate and fits over the base of the rail on that side and also against the inside of the cap-piece. All the parts are secured together by cross-bolts 18, arranged at suitable intervals apart—say six to a thirty-foot rail, with more at the joint.

To prevent creeping of the rail, the side plate 17 is provided with a tongue 19, which extends through a slot 20, formed in the base-plate 13 to receive it, and a turn-button 21 under the base-plate assists in holding the parts together. The tongue prevents the plate 17, and consequently the other parts of the rail, from creeping along the base-plate.

The structure as shown and described extends along the whole track, and all the parts are substantially permanent except the caps, and these can be removed and replaced as fast as they wear out by removing the bolts 18. The spikes do not have to be drawn nor the other parts disturbed. Furthermore, when the cap wears out on the inside edge it can be lifted and turned end for end, so as to give a new inside wearing-corner, and so gain several years' wear. The wide base-plate prevents cutting into the ties, so that soft ties can be used and the life of the ties lengthened. A very solid and heavy rail results from the structure, and notwithstanding a possible increase in first cost, as compared to ordinary rails a saving will result in the end, because nothing but the caps have to be renewed, and a great saving on ties will also result. Furthermore, the track will be attended with the advantages that there will be no pounding at the ends of the rails, and it will be practically impossible for the rails to spread or creep, and accordingly accidents due to defective rails will be avoided.

I claim—

1. A rail structure comprising a base-plate, a rail-base mounted thereon, side plates connected to the base-plate and overlying the rail-base, and a cap on the rail-base fitting between the upper parts of the side plates and removable without displacing the rail-base or side plates, the top of one of the said plates being flush with the top of the rail.

2. The combination with a base-plate having an opening therein, of a rail thereon, a side plate fastened to the rail and having a tongue extending through the opening, and
5 a turn-button on the tongue under the base-plate.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

VALENTIN UEDELHOFEN.

Witnesses:

NELLIE FELTSKOG,
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