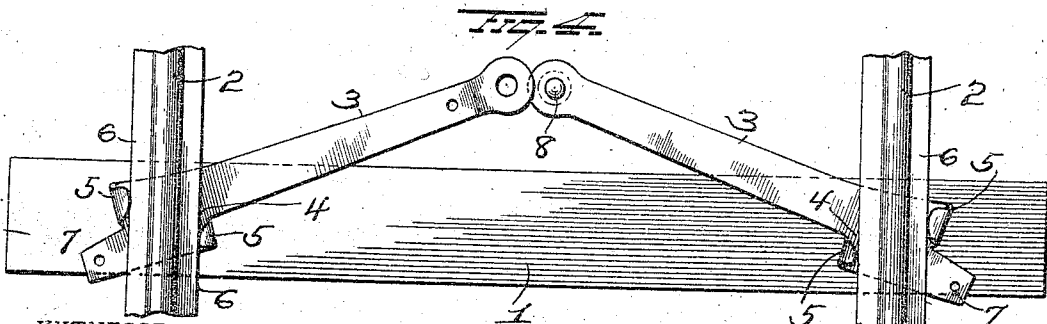
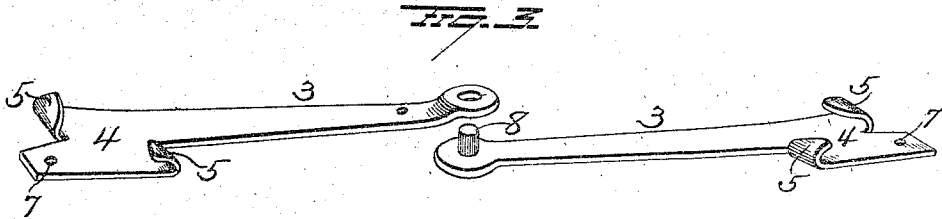
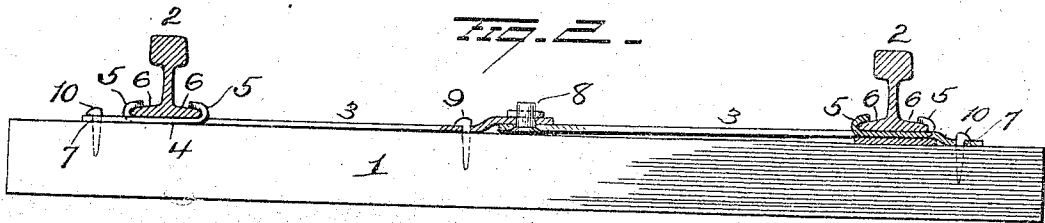
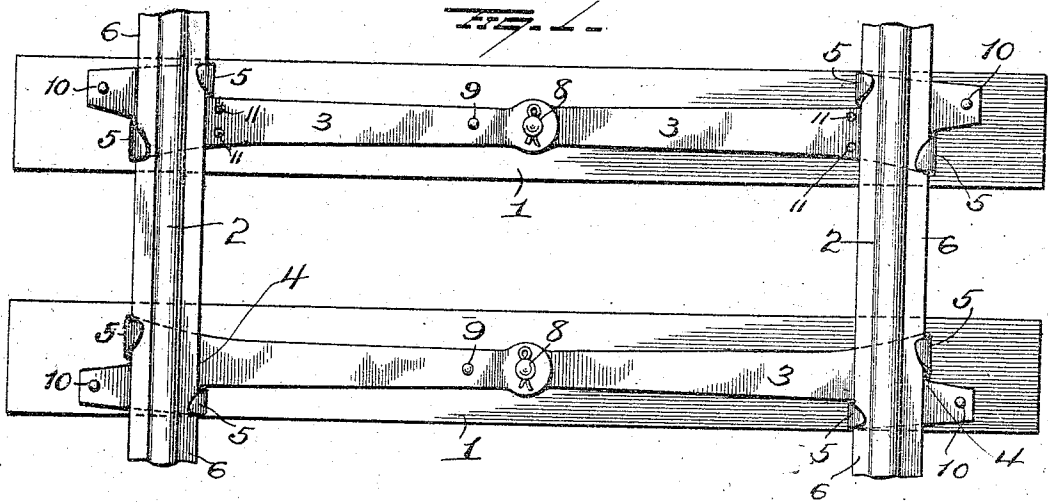


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 DEVICE FOR SECURING RAILROAD RAILS TO TIES.
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1,064,649.

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DEVICE FOR SECURING RAILROAD-RAILS TO TIES.

1,064,649.

Specification of Letters Patent.

Patented June 10, 1913.

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To all whom it may concern:

Be it known that I, ELMER HUDSON, of Golden, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Devices for Securing Railroad-Rails to Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in devices for securing rail road rails to ties, the object being to provide connected clamps with properly spaced means for engaging the flanges of the rails, whereby the latter will be held in proper alinement and gage, the said clamps engaging the tops of the tie only, whereby they can be elevated to any extent for the insertion of shims between them and the ties.

With these objects in view my invention consists in the parts and combination of parts, and in the details of construction, as will be more fully described and pointed out in the claims.

In the accompanying drawing Figure 1 is a view in plan of a section of track embodying my invention. Fig. 2 is a view in elevation of a tie, rail clamp, and rails and showing a shim in place under one rail. Fig. 3 is a view of one of the securing devices detached, and Fig. 4 is a view showing the method of placing the rails in the clamps.

1 represents the ties preferably of wood, which may be of any size and shape in cross section, and 2 are the rails which are secured to the ties by the clamps 3. Each clamp 3 is made of a flat metal strip widened laterally as at 4 near its outer end and provided at diagonally disposed corners of such widened portion, with integral bent lips 5 of a size and shape to receive and embrace the outer edges of the base flange 6 of the rails 2. The outer ends of the clamps are provided with a single spike hole 7, for the spikes 10, and their inner ends, which are somewhat narrowed, extend slightly beyond the center between the rails so that each laps the inner edge of its companion clamp. One clamp is provided at its inner end with an upwardly projecting pin 8, and the other

with a hole through which the pin passes, the pin being provided with a hole for the passage of a split pin which locks the two clamps together. The two connected clamps when in proper alinement correctly gage the parallel rails of the track, and when the rails are placed and properly clamped, each pair of clamps is locked against the possibility of displacement by a spike 9 driven through a hole in one clamp near the inner end thereof and into the tie. It will therefore be seen that when the rails are clamped and the clamps straightened out and connected, the rails will be properly gaged after which the rails may be put into correct alinement and locked by spiking the clamps to the ties.

In applying the rails to the clamps, the latter are turned obliquely to the rails as shown in Fig. 4, so as to permit the base flanges 6 of the rails to enter between the lips 5 of the clamps 3. By now turning the clamp to a position at right angles to the rail, the lips 5 will pass over the edges of the base flange of the rail and lock the latter to the clamp, after which the clamps of each pair are connected and spiked to the ties.

When the ties are frozen in the road bed, and cannot be moved, it is a comparatively easy and simple matter to correct any defect in alinement by removing the end spikes 10 thus leaving the rails free to be moved without affecting the gage, and the clamps free to be raised for the introduction of shims between them and the ties.

My improved clamps are secured to the ties by spikes passing into the top of the ties, hence may be used with ties of any size and shape, and as the rails are supported solely on the clamp, it will be seen that the latter can be used on worn ties that would be useless without additional rail supports.

While I prefer to use the clamps with wood ties, they may be used with metal ties having bolt or spike holes therein, or with concrete ties having means for locking the clamps to the top face of the same.

If desired, each clamp may have one or more spike holes 11 whereby they may be spiked to the ties intermediate the rails, and I prefer that the pin 8 shall be loose and removable and provided with a taper-

ing head, flat on its underside the clamp being countersunk on its underside to receive the head.

It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown and described, but

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

1. The combination of a pair of clamps, a pin carried by said clamps and pivotally connecting the inner ends of the latter, each clamp provided with a pair of diagonally disposed rail clamping lips and with a hole at its outer end for the passage of a spike for securing the clamps to the top face of the tie, whereby the clamp can be raised for the introduction of shims under the same

and means intermediate the rails for locking the clamps to the tie and for preventing them from turning.

2. The combination with a pair of clamps each having a pair of diagonally disposed clamping lips, a spike hole adjacent its outer end and a pin hole at its inner end, and one provided intermediate the rails with means for locking the same to the tie whereby pivotal movement of the clamps on the outer spikes will be prevented, and a pin passing through the meeting ends of the two clamps for pivotally connecting them, the construction being such that either or both clamps may be elevated for the insertion of shims between the clamps and tie.

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

ELMER HUDSON.

Witnesses:

J. J. EMMINGA,
F. E. SAHLAND.

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