No. 625,884. Patented May 30, 1899.

A. B. B. HARRIS.

RAILROAD TIE PLATE.

(Application filed May 12, 1898.)

(No Model.)

Fig. 1

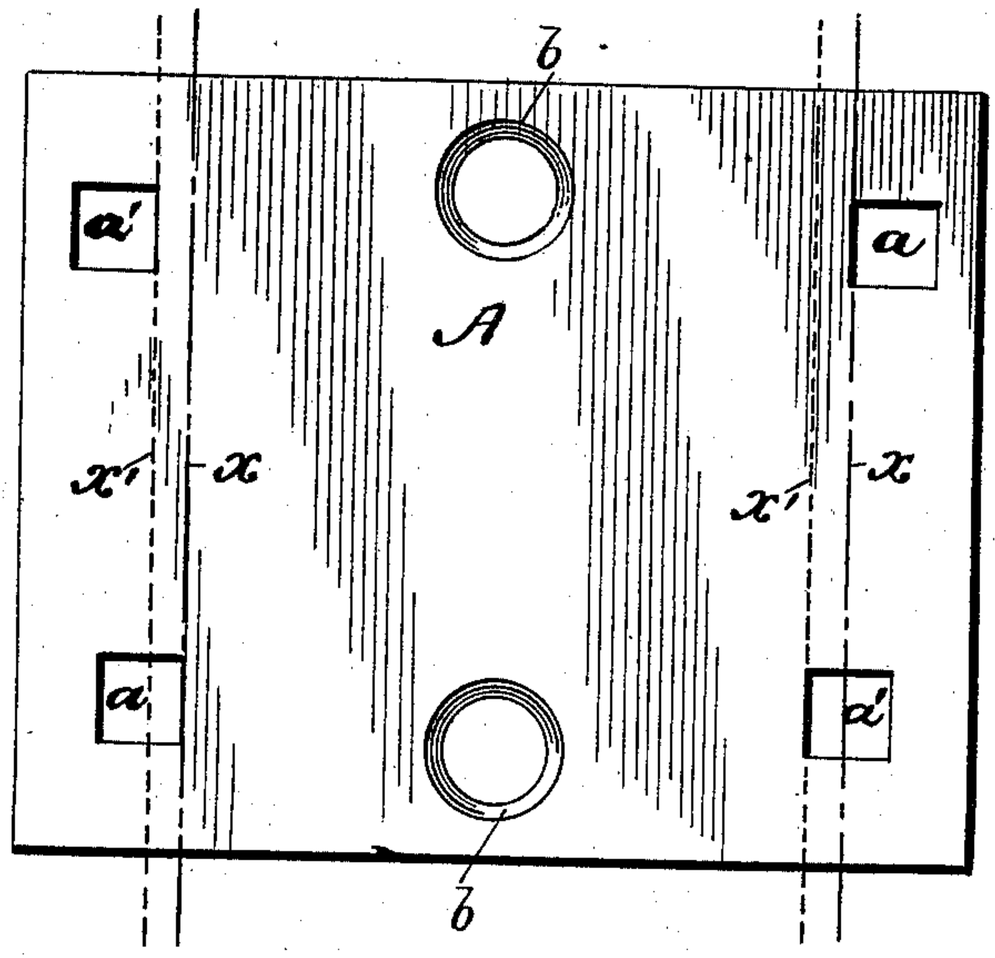

Fig. 2.

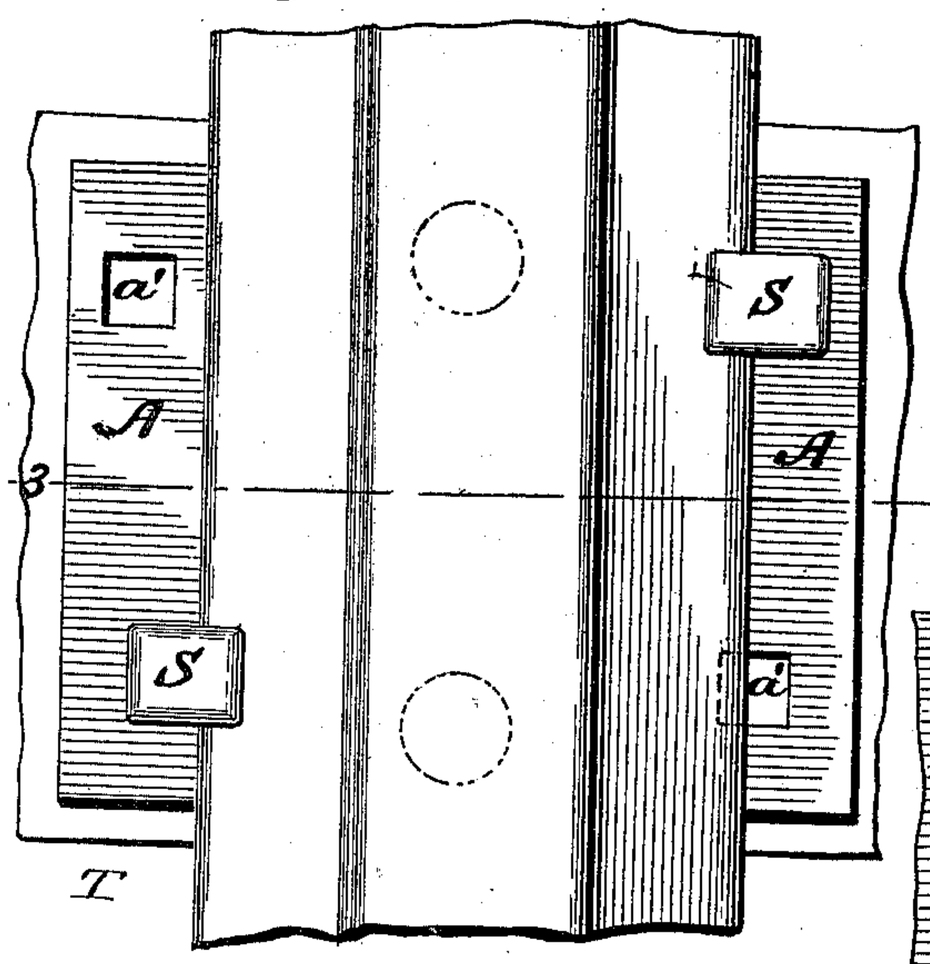

Fig. 3.

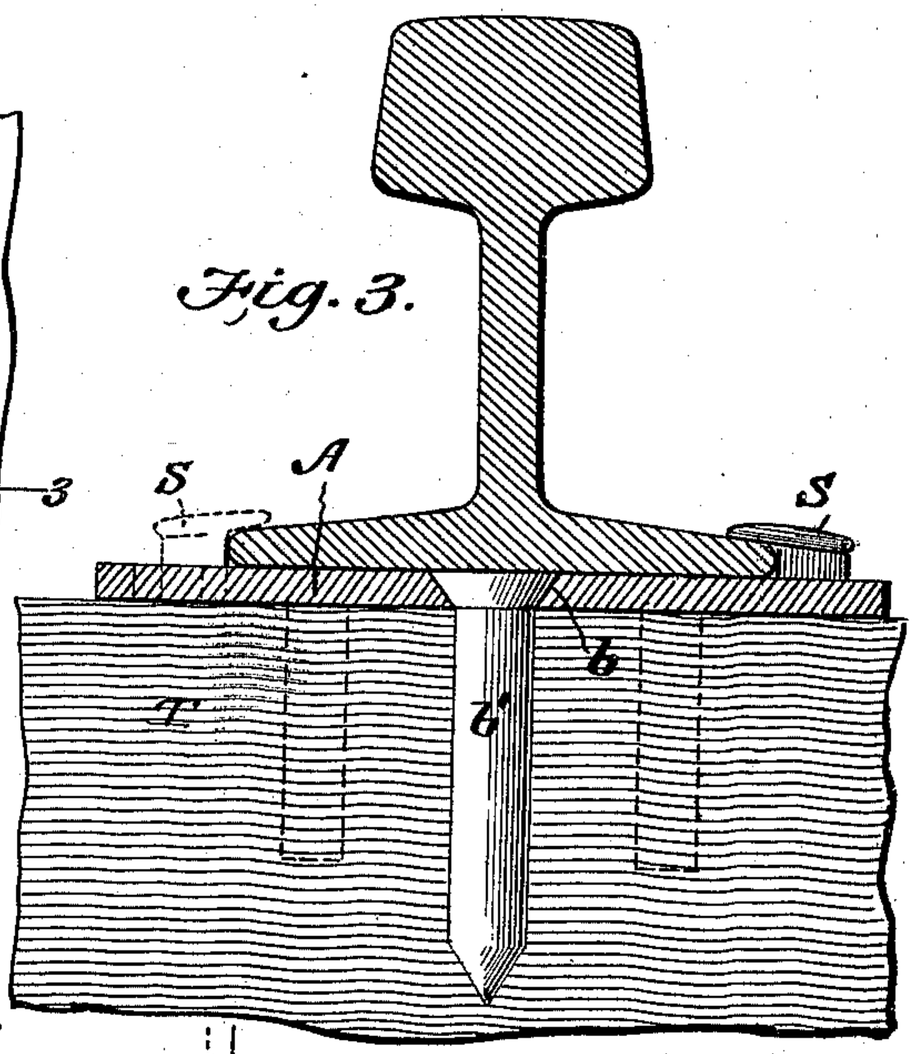

Fig. 4.

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ALEXANDER BUCHANAN BARRET HARRIS, OF BRISTOL, TENNESSEE.

RAILROAD-TIE PLATE.

SPECIFICATION forming part of Letters Patent No. 625,884, dated May 30, 1899.

Application filed May 12, 1898. Serial No. 680,500. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER BUCHANAN BARRET HARRIS, of Bristol, in the county of Sullivan and State of Tennessee, have invented a new and useful Improvement in Railroad-Tie Plates, of which the following is a specification.

My invention is in the nature of a very simple, cheap, and practical railroad-tie plate designed to be used between the railroad-tie and the base of the rail. Its object is to provide such a tie-plate as will permit the railroad-rails to be easily and quickly adjusted laterally to a new position on the tie to compensate for the wear on the inner side of the head of the rail, such as takes place from the grinding of the flange of the wheel thereagainst. This will in time involve too much increased space between the rails, or the rails themselves may spread apart from other causes. In either case they need to be adjusted closer together to bring them to the proper gage.

My invention consists in a tie-plate having four spike holes or seats arranged in pairs, one pair of which is offset from the alinement of the other pair and the plate provided with means for fixedly anchoring it to the tie, so that when the plate is thus anchored to the tie the rail may be adjusted laterally by drawing the spikes from one pair of holes, shifting the rail laterally, and then driving the spikes in the other or offset pair of holes, as hereinafter fully described.

Figure 1 is a plan view of the tie-plate. Fig. 2 is a plan view of the rail applied to the same. Fig. 3 is a cross-section on line 3 3 of Fig. 2. Fig. 4 is a plan view of a modified form of plate.

In the drawings, A represents the tie-plate, which is formed with four spike-holes arranged in the four corners, as two diagonal pairs a a and two diagonal pairs a' a'. The width of the space between the spike-holes a and a, as shown between the lines x and x, is just the width of the rail-base, and the width between the holes a' and a', as shown between lines x' x', is just the same; but the pair of holes a a is offset from the alinement of the pair a' a' a distance equal to the distance between the lines x and x'.

In the middle of each plate A or at any other desired place beneath the rail is one or more countersunk holes b, designed to receive a flat-headed spike b', as shown in Fig. 3, which anchors the plate to the tie beneath. Instead of a round spike b' flat ones may be used, in which case flat countersunk holes may be used, as shown at b^2 in Fig. 4. This spike b' has a perfectly-flat head which is flush with the top of the plate A and which is covered by the base of the rail when in place on the plate. When the plate is thus anchored to the tie by these spikes b' and the rail is laid thereupon and is secured by two spikes S, driven through one pair of holes a a, it will be seen that the rail will be firmly held with the side edges of its base in alinement with the lines x and x of Fig. 1. Now if the left-hand side of the rail of Fig. 2 be the inside which has become worn so that the gage is too wide the spikes S are pulled out of the holes a a, the rail shifted laterally to the left till the edges of its base coincide with the lines x' x', and then the spikes are driven in the other pair of holes a' a', and the rail is thus held in its new position without changing the position of the plate on the tie, which is held fixed by the central countersunk anchorage-spikes b', and thus an easy, simple, and quick readjustment of gage may be obtained.

I am aware that it is not new to place a countersunk spike in a plate beneath a rail, and I make no claim to this feature alone; but it will be perceived that this feature is correlated to the offsetting pairs of spike-holes in that in driving the spikes the second time it prevents the plate from shifting and maintains the rail in its new position of corrected alinement to gage.

As a modification of my invention I may make the plate A with subjacent integral spikes or pins, as shown by dotted lines in Fig. 3, in the place of the countersunk hole b and separate spike b'. I may also instead of making two pairs of holes employ on one side spike-seats, as shown in Fig. 4, in which the side edge of the plate itself is made to form a spike-seat, as shown by dotted lines S^2, coöperating with the spike-hole a, while a notch or open slot a^2 coöperates with the other spike-

holes a' in giving an offset alinement to the rail.

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

1. A railroad-tie plate having spike holes or seats arranged in two pairs, one pair offset to a different alinement from the other pair, and the holes or seats of each pair being separated a distance apart equal to the width of the base of the rail, said plate being also formed with means for fixedly anchoring it to the tie independently of the spikes in the paired holes or seats substantially as and for the purpose described.

2. A railroad-tie plate having spike holes or seats arranged in two pairs, one pair offset to a different alinement from the other pair, and one or more countersunk spike-holes centrally arranged to receive a spike under the rail-base substantially as and for the purpose described.

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