F. A. LESTER. RAIL FASTENING. APPLICATION FILED AUG. 10, 1914.

1,136,020.

Patented Apr. 20, 1915.



STATES PATENT OFFICE.

FREDERICK A. LESTER, OF CHICAGO, ILLINOIS.

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Specification of Letters Patent. Application filed August 10, 1914. Serial No. 856,001.

To all whom it may concern: Be it known that I, FREDERICK A. LESTER, a citizen of the United States, residing at Chicago, in the county of Cook and State

of Illinois, have invented certain new and useful Improvements in Rail-Fastenings, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

My invention relates generally to the class of rail fastenings, and has reference more 10 particularly to a sectional type of fastening capable of separation to accommodate re-placements of larger sizes of rail.

The invention has among its primary objects to produce a sectional rail fastening 15 which can be cheaply made and readily applied to the tie and rail at a minimum cost and by that class of unskilled labor com-20 monly employed in construction gangs. An-

- other object of my invention is the provi-sion of an improved rail fastening formed of sections which when brought together are capable of tightly clamping against the rail, 25 thereby rigidly securing the same to the tie
- and serving to effectually prevent any creeping of the rail relatively the tie. A further object is to produce an improved rail fastening composed of two component counterpart sections, whereby it is de-signed to simplify the construction of the 30
- fastening and at the same time reduce the cost of its manufacture over those of existing types.
- These, together with such other objects as may hereinafter appear, or are incident to my invention, I obtain by means of a con-35 struction illustrated in preferred form in
- the accompanying drawings, wherein— Figure 1 is a plan view, illustrating the application of my improved fastening to the 40

rail and tie. Figure 2 is a perspective of the same, with the rail removed.

Figure 3 represents a view in perspective of one of the sections composing the fasten-45

Figure 4 is a modification of the section ing

in Figure 3. Referring to the drawings, the numeral 10 indicates a standard wood tie, and 11 the 50 rail which is formed with the usual base 12. In carrying out my invention I provide a rail fastening composed of two sections A and B, having web portions 13 resting on the face of the tie and meeting edges as in-55

dicated at 14, from which latter the rail seat C extends on both sides to the lugs 15 formed to receive and engage the base 12 of the rail to hold the latter down on the said 60 seat.

In the preferred construction shown the two component sections are counterparts, and I aim to so construct them with a view as to reduce the cost of manufacture and to 65 produce a simple and efficient fastening. Each section has a portion of its web 13 cut and bent inwardly toward the rail to form the rail base engaging lug 15, as in Figure 3, or again it may be formed, if desired, from 70 that portion of the web lying within the rail seat C as shown at 15^a in Figure 4. At one side of the lug 15 the web is provided with a hole 16 to receive the spike 17, and at the other side of the lug is a depending 75 flange 18 formed with a hole 19 through which passes the transverse spike 20, the spikes 17 and 19 being disposed substantially at right angles to one another to clench the fastening, as will be readily understood. 80 In applying the fastening, the section A

is first positioned on the tie with its depending side flange resting up against one side thereof in readiness for the rail, which when placed has its base flange 12 engaged by 85 the lug 15, after which the section is spiked. Subsequently, the section B is reversed to have its side flange 18 secured to the other side of the tie by the spike 20, where-upon the web portion 13 is forced inwardly 90 against the section A to bring its lug into a tight engagement with the rail base flange, and is then spiked. In this way the rail is tightly and rigidly clamped to the tie and rail-creeping is effectually prevented. 95.

I contemplate the use of short sections to lessen the cost of production, and as it is necessary to have sufficient solid metal in the vicinity of the spike holes 16 for obvious reasons, the preferred arrangement of coun- 100 terpart sections is such that the lugs 15 are not only diagonally disposed to each other, but corresponding spike holes are similarly situated for the purpose of avoiding any tendency of the tie to split when the spikes 105 are driven home. The sections being counterparts, each may be easily and cheaply made from a single metal blank having its end bent down to form the side flange, and the lug 15 cut and pressed up, in practically 110 a single operation.

From the foregoing, the essential features,

elements and application of the device, together with its cheapness, strength, simplicity and other advantages thereof will be

readily apparent to those skilled in the art. Having thus described my invention, and illustrated its use, what I claim as new and desire to secure by Letters Patent, is the following:-

1. A tie plate section formed from a single 10 substantially rectangular blank and comprising a web portion and an attachable side flange bent down from said web portion, the inner edges of said web portion and flange lying in approximately the same vertical 15 plane, said web portion being formed with a rail base engaging lug and a spike receiving aperture disposed to one side of the lug and with reference thereto so that the spike engages the base of the rail at an appreciable 20 distance from the point of lug engagement, substantially as described.

2. A tie plate embodying two substantially counterpart and separable sections reversely positioned on the face of the tie and 25 having their meeting edges located centrally in the rail seat and longitudinally of the rail, each section comprising a web portion provided with a rail engaging lug and having a side flange disposed transversely 30 and to one side of its meeting edge, the lug and flange of the one section being diago-

nally disposed with reference to the lug and flange of the other, and horizontal and vertical fastenings for the side flange and web portion respectively, said sections being ca- 35 pable of slight angular movement when being brought together in the plane of the rail seat, substantially as described.

3. A rail fastening comprising two separable sections adapted to be reversely posi- 40 tioned on the face of the tie to have their meeting edges located in the rail seat longitudinally of the rail, the sections being formed from counterpart metal blanks of rectangular conformation and each having 45 a rail engaging lug and a side flange disposed transversely of and to one side of its meeting edge, and formed with spike receiving holes in its side flange and in its web adjacent the lug, the flanges, lugs and holes in 50 one section being diagonally disposed with reference to the flanges, lugs and holes in the other when the sections are brought together in the plane of the rail seat, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of the two subscribed witnesses. FREDERICK A. LESTER.

Witnesses: W. H. Fowkes, FRANK JAGER.

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

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