

(No Model.)

B. FERRISS.
RAIL FASTENER.

No. 591,750.

Patented Oct. 12, 1897.

Fig. 1.

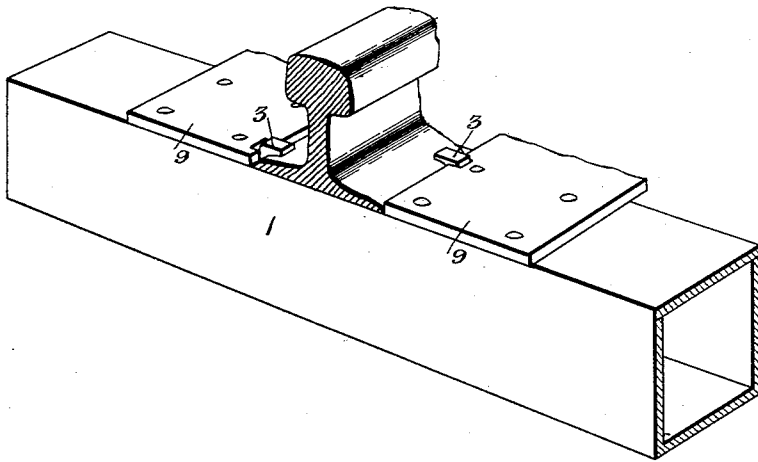


Fig. 2.

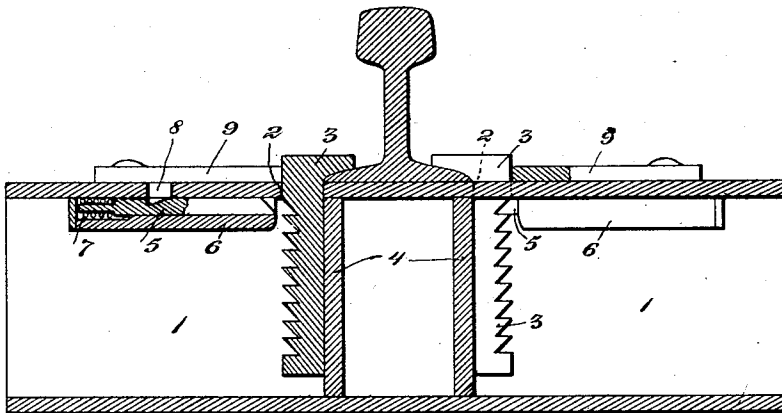
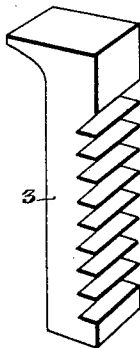


Fig. 3.



WITNESSES:

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RAIL-FASTENER.

SPECIFICATION forming part of Letters Patent No. 591,750, dated October 12, 1897.

Application filed May 5, 1897. Serial No. 635,236. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN FERRISS, of Deckertown, in the county of Sussex and State of New Jersey, have invented certain
5 new and useful Improvements in Rail-Fasteners; 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.

This invention relates to certain improvements in metallic ties or sleepers for railroad-rail joints, and also to a peculiar construction of fastening by which the rails are secured,
15 the object being to provide in a simple and inexpensive manner a fastening which shall be easily and quickly applied and which may be adjusted to block up the track in the winter time, rendering the whole much safer and
20 preventing the destruction of the spikes.

The invention comprises certain novel features of construction and arrangement of parts, whereby the above and other important advantages are attained and whereby it is
25 made simpler and otherwise better adapted for the purposes for which it is intended, as will be hereinafter fully described, and specifically defined in the appended claims.

In the accompanying drawings, Figure 1
30 represents a perspective view of a tie or sleeper constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section thereof. Fig. 3 is a detail perspective
35 view of the spike used in connection with my invention to secure the rail to the tie or sleeper.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

40 1 represents my improved metallic tie or sleeper, which is shown as a rectangular box arranged to lie transversely of the rail, being provided with openings 2 to receive within them spikes 3.

45 The box 1 is provided with transverse walls 4, which lie adjacent to the openings 2 and form a substantial bearing-surface for the spikes when in place therein, and the spikes are provided with a series of teeth, which extend along the opposite side thereof, to engage
50 with a spring-latch 5, arranged within a pocket 6, located at one side of the box 1.

The latch 5 is beveled at one end and engages the teeth of the spikes 3, and the opposite extremity is reduced to receive a spring
55 7, and which normally keeps the latch pressed forward into engagement with the teeth of the spike.

The box 1 is provided with an opening 8 directly above the pocket 6, and the purpose
60 of this opening is to permit of any convenient tool or other implement being inserted to engage a depression within the latch and thus withdraw it from engagement with the teeth of the spikes and admit of its ready removal.

65 In practice the boxes are arranged transversely of the rail and are securely embedded in the ballast, after which the rails are placed in their proper position thereon and the spikes inserted within the openings 2, whereupon the spring-latches engage with the teeth
70 thereof and securely hold the rails in place.

At curved sections of the tracks I prefer to use a plate 9, which I screw to the box 1
75 in such a manner that one edge of the said plate will bear against the flange of the rail and thus prevent a lateral movement thereof.

It will thus be seen that my invention provides in a simple and inexpensive manner a
80 railroad-rail joint which may be quickly and easily applied in securing the rails in place, which does away with the use of driven spikes, an operation difficult to accomplish in cold weather, and which permits of the easy and
85 quick blocking up of the track in winter time, as will be readily obvious to those skilled in the art.

Modifications may be made without departing from the essential features of my invention, and I do not wish to be understood as
90 limiting myself to the precise details of construction herein shown and described, but reserve the right to make such changes and alterations therein as may fairly fall within its spirit and scope.

95 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is as follows:

1. A railroad-rail tie comprising a box having openings arranged therein, spikes engaging the flanges of the rail and being provided
100 with a series of teeth, and spring-latches arranged in pockets beneath the tops of the boxes adapted to engage the teeth of said

spikes and prevent the removal thereof, substantially as described.

2. A railroad-rail tie comprising a box having transverse walls, openings and pockets
5 arranged therein, toothed spikes adapted to said openings, spring-latches to engage the teeth of said spikes and prevent the removal thereof, said latches being provided with depressions to receive a tool or other implement
10 to withdraw the latch from engagement with the teeth, substantially as described.

3. A railroad-rail tie comprising a box having transverse walls, openings and pockets arranged therein, toothed spikes adapted to
15 said openings, and latches arranged in said

pockets, one end being beveled to engage the teeth of the spikes, and the other end reduced to receive a spring, said latches being provided with depressions to receive a tool or other implement to withdraw the latch from
20 engagement with the teeth, substantially as described.

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

BENJAMIN FERRISS.

Witnesses:

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WINFIELD SCOTT MARTIN.