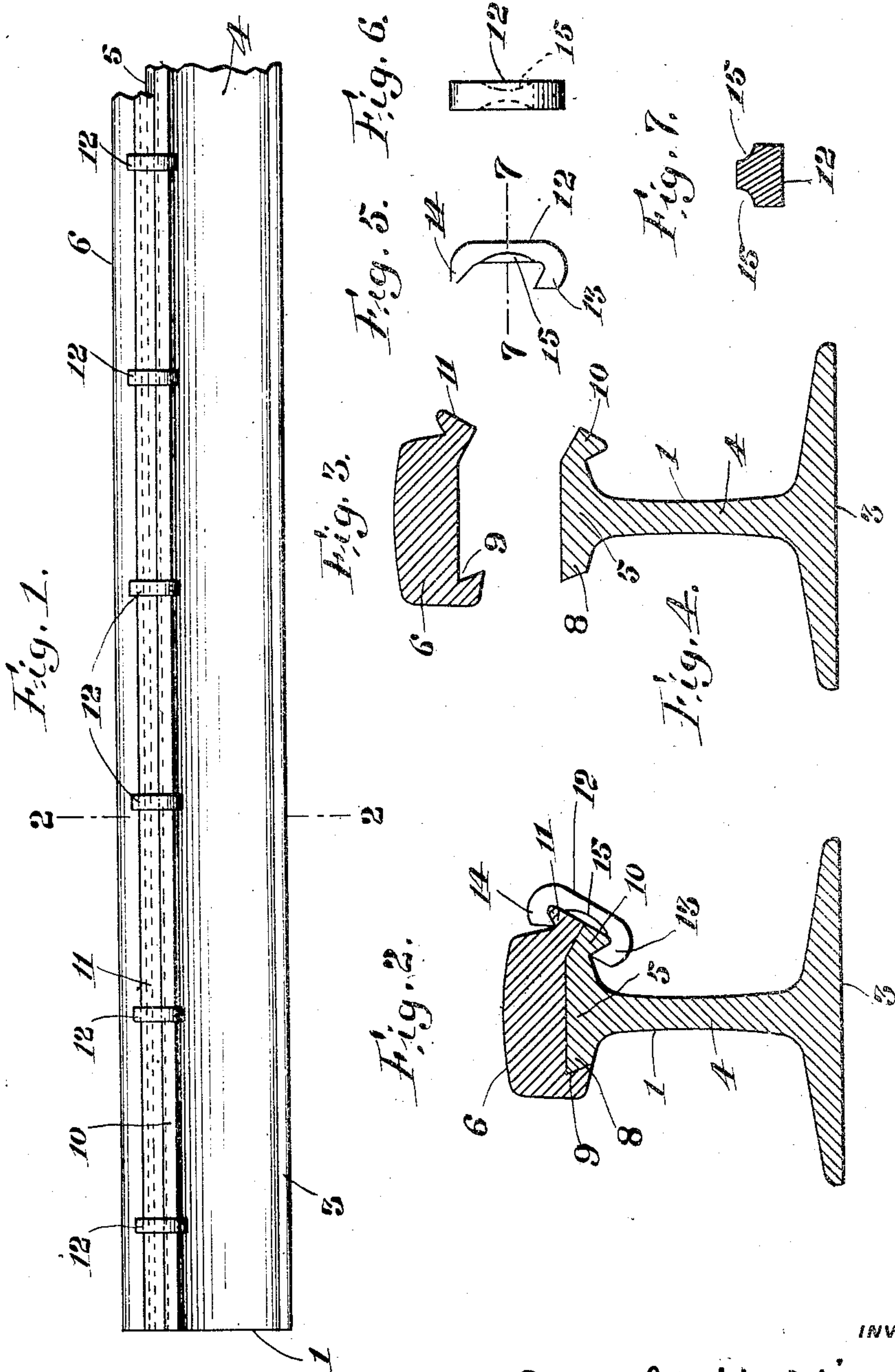


J. HUNTINGTON.
RAILROAD RAIL.
APPLICATION FILED SEPT. 24, 1909.

940,320.

Patented Nov. 16, 1909.



WITNESSES

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RAILROAD-RAIL.

940,320.

Specification of Letters Patent.

Patented Nov. 16, 1909.

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To all whom it may concern:

Be it known that I, JOSEPH HUNTINGTON, citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Rails, of which the following is a specification.

This invention relates to compound railroad rails, the object being to provide a novel, simple and efficient rail of such construction that when the tread portion of the rail has become worn said portion may be removed and a new tread portion substituted therefor without disturbing the body of the rail, as will be hereinafter fully described and particularly claimed.

In the drawings:—Figure 1 is a side elevation of a portion of a railroad rail section embodying my invention. Fig. 2 is a transverse vertical section thereof, enlarged, on line 2—2 of Fig. 1. Fig. 3 is a similar section of the removable tread portion, detached. Fig. 4 is a similar section of the body portion of the rail. Fig. 5 is an elevation of the securing member shown in Figs. 1 and 2. Fig. 6 is an elevation thereof, as seen at right angles to Fig. 5. Fig. 7 is a horizontal section on line 7—7 of Fig. 5, enlarged.

1 designates the main body portion of a railroad rail, which may be of any preferred type, comprising the base 3, vertical web 4 and head 5. Resting upon and fitted to the head 5 of the rail is a removable tread portion, preferably of harder steel than the body portion 1, which extends the full length of the rail and forms in effect a part thereof. One side of the head 5 is provided with a laterally-projecting rib 8 adapted to fit or interlock with a groove 9 formed in the bottom of the tread portion 6, the outer face of the rib 8 and the adjacent inner face of the groove 9 being beveled downwardly and inwardly, as shown, in order to prevent vertical displacement of the tread portion 6; and this being preferably the inner side of the rail, the tread portion 6 extends downwardly a sufficient distance to present a hard wearing surface to the flanges of passing wheels. The other side of the head 5 is provided with a downwardly-extending rib 10, and the lower portion of the corresponding side of the tread portion 6 is provided with an upwardly-extending rib 11.

Arranged at suitable intervals along the side of the rail, and holding the tread portion in place, is a series of securing members 12. Each member 12 consists of a substantially C-shaped strip of malleable metal, the inner face of which is fitted to the outer aligned faces of the ribs 10 and 11. The lower end of the member 12 extends upwardly and inwardly, as at 13, into engagement with the downwardly extending rib 10; and the upper end of the member 12 is bent downwardly and inwardly, as at 14, into engagement with the upwardly-extending rib 11.

The upper face of the rib 10 and the adjacent lower face of the rib 11 are beveled downwardly and outwardly, as shown, so that the union of the head 5 and tread portion 6 between the ribs 10 and 11, is below the union of the main body of the tread portion. This feature, in addition to assisting in preventing lateral displacement of the tread portion 6, enables the top of the securing member 12 to be arranged a sufficient distance below the level of the top of the tread portion to be below the path of travel of the false flanges of guttered wheels passing over the rail, not only in the initial state of the rail, but also after continued traffic has worn the tread portion 6 down to a lower level.

In Figs. 5 and 6 I have shown the securing member 12 before it is applied to the rail, in which condition the lower end of the member curves upwardly to fit the rib 10 of the rail head 5, and the upper end of the member is in position ready to be bent over, by a hammer or other suitable tool, into engagement with the rib 11 of the tread portion, after the parts have been assembled. In order to facilitate the removal of the member 12 from the rail in adjusting the parts or in substituting a new tread portion for one that is worn, I provide the sides of said members with undercut portions, indicated at 15, 15, affording spaces between the body of said member and the adjacent parts of the rail, into which spaces the jaws of pliers or another suitable tool may be inserted to obtain a hold or grip on the member in withdrawing or forcing it from its locking position upon the rail.

From the foregoing description it will be seen that a very efficient and economical rail structure is provided, which, in addition to the obvious advantages attendant upon the

employment of a removable and renewable tread portion, includes a simple means for quickly and rigidly securing the parts in place.

5 The invention, of course, is capable of various modifications. The number, size and location of the securing members, for example, may be altered to meet different requirements; and, if preferred, the mem-
10 bers may be made straight instead of C-shaped, and both ends bent into engagement with the ribs 10 and 11 after the parts have been assembled.

I claim:—

15 1. In a railroad rail, a base, a web, a head, a removable tread portion resting on the head, one side of said head and one side of said tread portion being provided with interlocking parts, the other side of said
20 head being provided with a downwardly-extending rib and the corresponding side of said tread portion being provided with an upwardly - extending rib, and a securing member having one end engaged with one
25 of said ribs and the other end bent into engagement with the other of said ribs.

2. In a railroad rail, a base, a web, a head, a removable tread portion resting on the head, one side of said head and one side of
30 said tread portion being provided with interlocking parts, the other side of said head being provided with a downwardly-extending rib and the corresponding side of said tread portion being provided with an up-
35 wardly-extending rib, and a securing member having one end engaged with one of said ribs and the other end bent into engagement with the other of said ribs, said member being provided with an undercut portion af-

fording a space between the body of said member and an adjacent part of the rail.

3. In a railroad rail, a base, a web, a head, a removable tread portion resting on the head, one side of said head being provided with a projecting rib and one side of said tread portion being provided with a groove
45 fitted to said rib, the other side of said head being provided with a downwardly-extending rib and the corresponding side of said tread portion being provided with an up-
50 wardly-extending rib, and a securing member having one end engaged with said downwardly-extending rib and the other end bent into engagement with said up-
55 wardly-extending rib.

4. In a railroad rail, a base, a web, a head, a removable tread portion resting on the head, one side of said head and one side of said tread portion being provided with in-
60 terlocking parts, the other side of said head being provided with a downwardly-extending rib and the corresponding side of said tread portion being provided with an up-
65 wardly-extending rib, the union of said head and said tread portion between said ribs being below the union of the main body of said head and the main body of said tread portion, and a securing member hav-
70 ing one end engaged with one of said ribs and the other end bent into engagement with the other of said ribs.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH HUNTINGTON.

Witnesses:

S. I. HARPER,
A. V. GROUPE.