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(54) Improvements relating to rail clamps.

(57) A device (40) for securing a rail (10) relative to a rail chair (14) for inhibiting creep of the rail through the chair comprises first and second members (42, 44) which cooperate to grip the rail. The second member (42) is a C-shaped member the free end of which grip over upper surfaces of lower flanges of the rail. The first member (44) has a wedge-shaped end portion which engages between the C-shaped member and the rail. The other end of the first member (44) abuts the rail chair such that any tendency of the rail to creep in one direction increases the frictional engagement between the C-shaped member and the wedge-shaped portion.

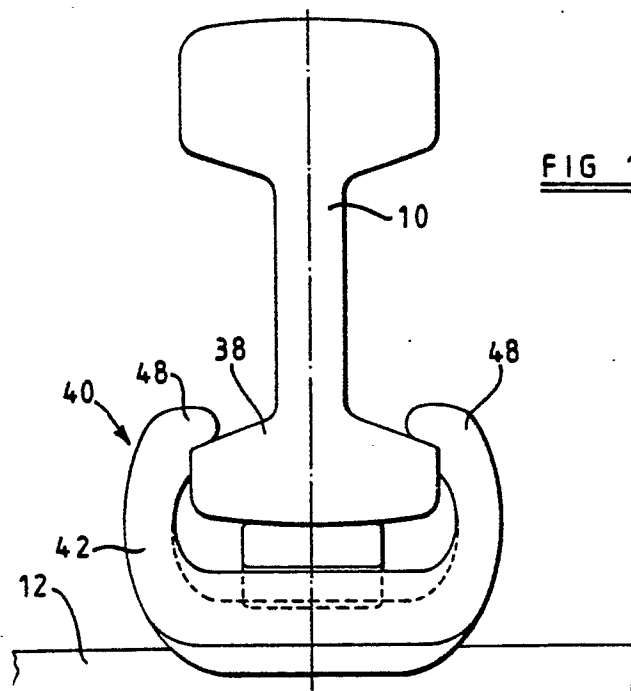


FIG 1

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Improvements relating to rail clamps

The present invention relates to devices for preventing creep of a rail of a railway track.

Accordingly, the present invention provides a device for securing a rail relative to a rail chair for inhibiting creep of said rail through said chair, the device comprising first and second members cooperable to grip securely said rail, and inhibit creep of said rail relative to said chair in a first direction axially of said rail.

The present invention is applicable to both bull head and flat-bottom rail tyres. In certain applications of flat-bottom rail, there is no chair present, the rail being secured directly to a sleeper. The present invention applies equally to such cases and any mention of a rail chair can also be taken to relate to the case where no chair is present and the rail is connected directly to a sleeper.

Preferably, the device includes securing means for securing said first and second members together and to said rail.

Advantageously, said device abuts said chair by way of a first of said members such that movement of said rail through said chair in a first direction increases frictional engagement of the second member with said rail to prevent said movement.

The present invention is further described hereinafter, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a front elevation of a railway rail having attached a first embodiment of a device according to the present invention; and

Figure 2 is a side elevation of the device of Figure 1.

Referring to the drawings, these show a rail 10 which is secured in position on a sleeper 12 by means of a rail chair 14. Also secured to the rail 10 and abutting one end edge of the rail chair 14 is a device 40 for preventing creep of the rail 10 relative to the chair 14 caused by the passage of rail traffic over the rail 10.

The device 40 comprises a generally "C" shaped member 42 with ends 48 and a second, elongate member 44 which is wedge-shaped in one end portion 46.

The free ends 48 of the C member are shaped to grip the respective upper surfaces of a lower flange 38 of the rail 10 and the member 42 is dimensioned such that when the ends 48 engage the flange 38 the base of the C member is spaced from the bottom of the rail 10 to receive the wedge-shaped end portion 46 of the member 44.

As can be seen from Figure 2, the wedge-shaped end portion 46 of the member 44 is driven between the rail 10 and the C member, the co-

operating surface of the latter being shaped to mate with the tapered surface of the end portion 46 of the member 44 so that engagement of the latter causes the member 42 to grip the rail 10 securely.

The device 40 is positioned such that the free end of the member 44 abuts the rail chair 14 to prevent it coming loose from the C member 42. A further device can be positioned at the other end of the rail chair to prevent creep in the opposite direction.

As will be appreciated, any tendency of the rail 10 to creep through the chair 14 in the direction of arrow A causes the C member to move with the rail and therefore only serves to increase the force exerted by the C member 42 on the rail and prevent such movement. A further device can be positioned at the other end of the rail chair to prevent creep in the opposite direction.

Claims

1. A device (40) for securing a rail (10) relative to a rail chair (14) for inhibiting creep of said rail through said chair, the device comprising first and second members (44,42) cooperable to grip securely said rail, and inhibit creep of said rail (10) relative to said chair (14) in a first direction axially of said rail.

2. A device as claimed in claim 1 wherein said members (44,42) are telescopically interconnectable.

3. A device as claimed in claim 1 or 2 wherein said device (40) is arranged to abut said chair (14) by way of a first (44) of said members such that movement of said rail (10) through said chair in a first direction increases frictional engagement of the second member (42) with said rail (10) to inhibit said movement.

4. A device as claimed in claim 3 wherein said second member (42) is substantially C-shaped, free ends (48) of which member are adapted to grip respective upper surfaces of lower flanges (38) of the rail (10), and said first member (44) has a wedge-shaped end portion frictionally engageable between said second member (42) and a lower face of said rail for engaging said free ends against said upper surfaces.

5. A device as claimed in claim 4 wherein said first member (44) is elongate and has an end opposite said wedge-shaped end portion for abutting said chair (14).

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FIG 1

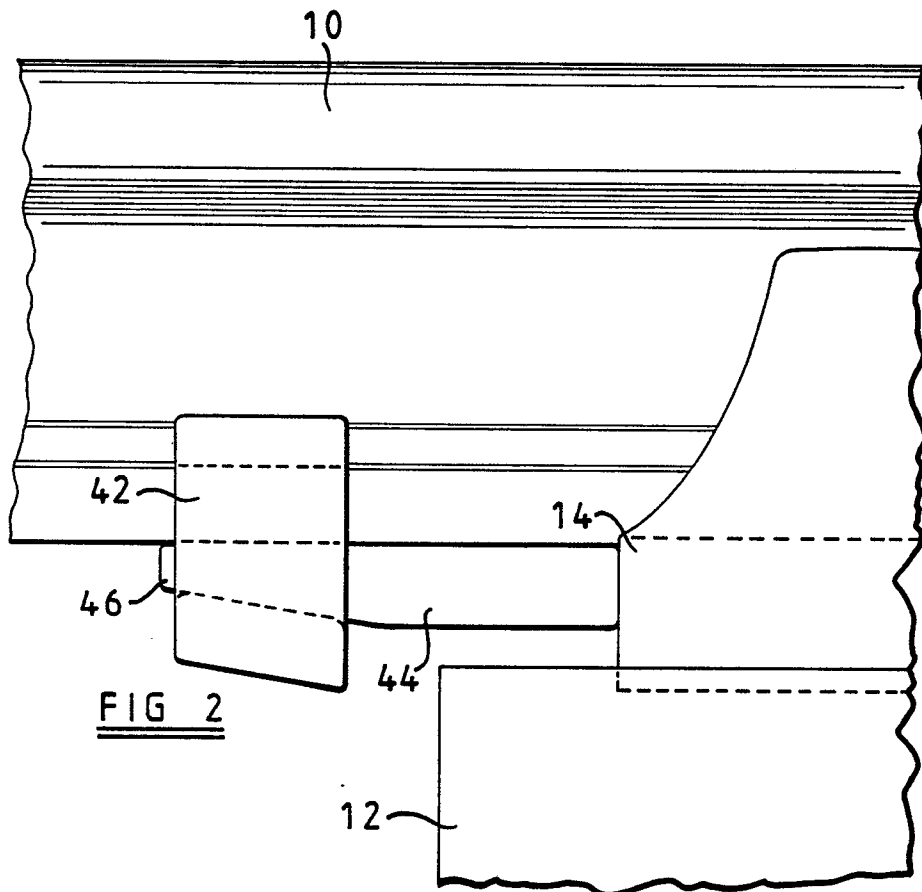
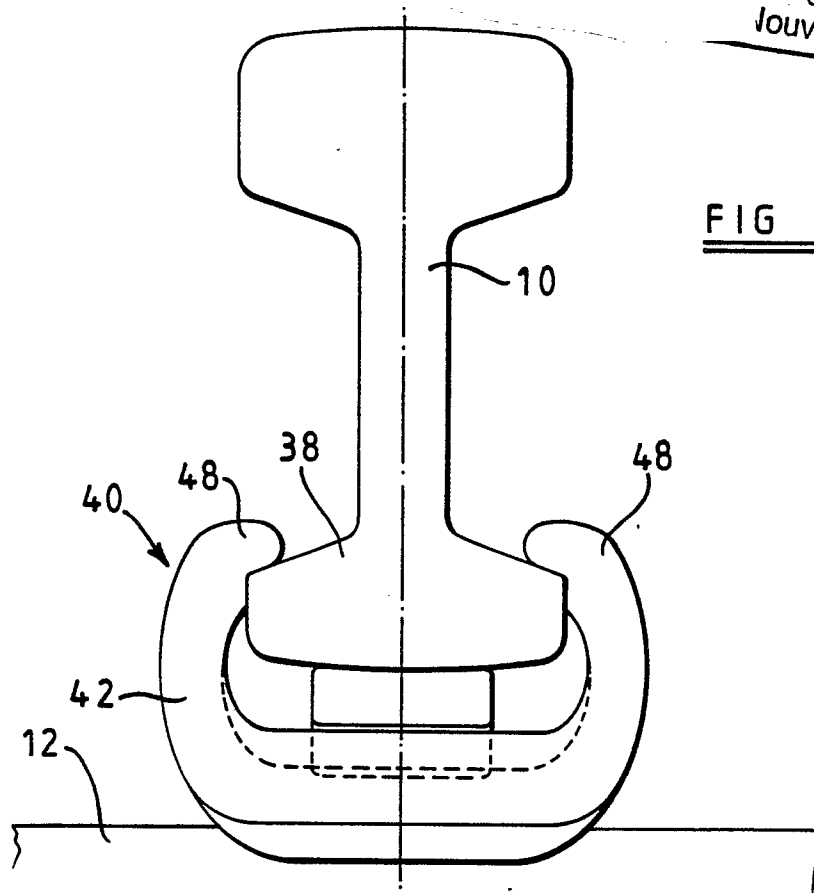


FIG 2