

J. SMITH.
RAIL BRACE.
APPLICATION FILED MAR. 16, 1911.

1,004,701.

Patented Oct. 3, 1911.

FIG. 1.

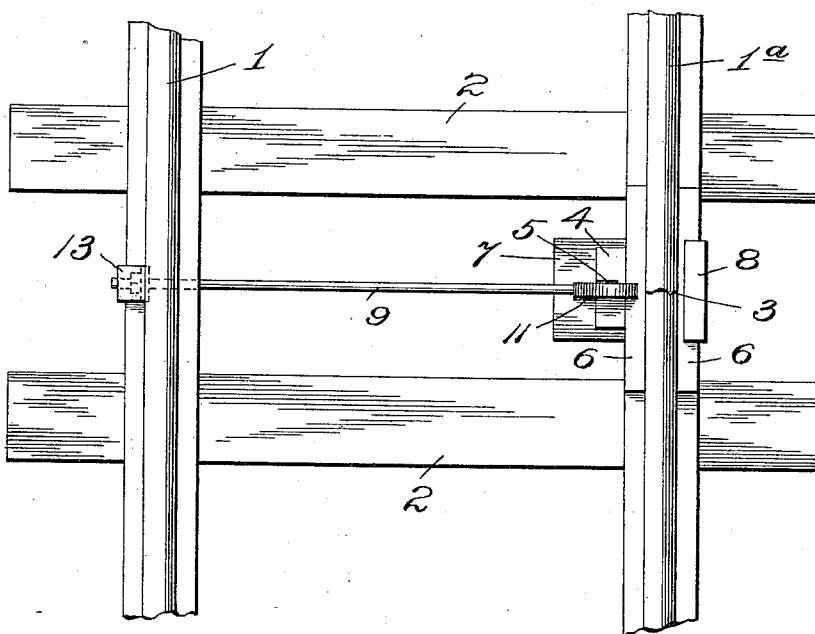
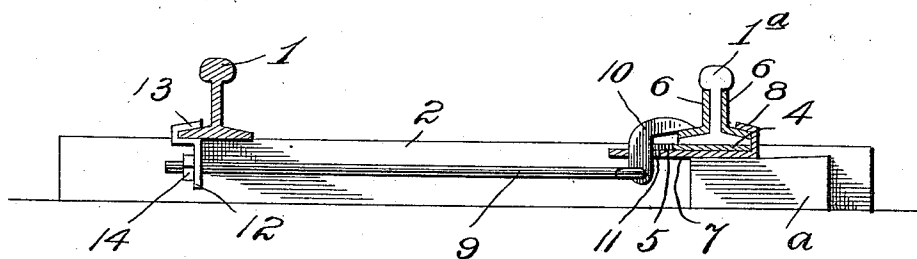


FIG. 2.



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Witnesses

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RAIL-BRACE.

1,004,701.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES SMITH, citizen of the United States, residing at Reliance, in the county of Lyman and State of South Dakota, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification.

This invention relates to emergency rail braces, and one of the principal objects of the invention is to provide simple, reliable and efficient means for repairing broken or misplaced rails and for bracing them the required distance apart and in proper alinement so that the rails may be used temporarily or permanently.

Another object of the invention is to provide a brace for railway rails for raising sunken rails and for holding them in proper alinement after they have become broken or misplaced in use.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which,

Figure 1 is a top plan view of a pair of railway rails having my emergency brace secured thereto; Fig. 2 is a vertical sectional view of the same.

Referring to the drawings, the numerals 1, 1^a, designate the railway rails and 2 are the ties. My emergency brace is designed for the purpose of mending or repairing rails and upon reference to Fig. 1 it will be seen that rail 1^a is broken as indicated at 3. In many instances where rails have broken, the ends are turned out of alinement and must be brought into proper alinement for use. Moreover, many times rails are sunken at the broken portions and require raising to proper alinement with the track. My rail brace comprises a supporting plate 4 designed to be placed under the base flange of the rail at the point where the break occurs. This plate is provided with a slot 5 at one end. Angle plates 6 are placed at opposite sides of the rail at the broken portion and the brace is then connected to the rails. The brace comprises a plate 7 provided with a hook 8 which en-

gages the base flange at the outer sides of the rails in line with the break, said hook engaging the angle plate 6. A truss rod 9 is pivotally connected to one end of a hook 10 which extends through a slot 11 in the plate 7, the bill of the hook 10 engaging the top of the base flange or the top of the base portion of one of the angle irons 6. The truss rod 9 is threaded at its outer end and extends through a clamp plate 12 provided with a hook 13 which engages the base flange of the rail 1. A nut 14 is applied to the end of the truss rod and when turned will pull upon the truss rod and will serve to hold the rails 1 and 1^a in proper alinement. When it is desired to raise the broken portion of the rail, a suitable wedge *a* may be driven underneath the broken portions between the two ties for holding the rails up in alinement.

The operation of my invention will be clearly understood from the foregoing description.

From the foregoing it will be obvious that a rail brace made in accordance with my invention can be quickly applied to a broken portion of a rail for holding the same in proper alinement for either temporary or permanent use.

I claim:—

1. A device for mending broken rails comprising a plate having a hook to engage the base flange of a rail, a truss rod, a hook pivoted to said truss rod and extending through the plate, said hook adapted to engage the base flange of the rail, a clamp plate connected to the opposite end of said truss rod and to the flange of the opposite rail, and a nut for adjusting the truss rod.

2. An emergency rail brace comprising a plate provided with a slot for supporting the ends of the rails, angle irons placed at the sides of the broken portions of the rails, a hook engaging the outer base flange of the rail, said plate having a slot therein, a hook extending through said slot and adapted to engage the inner base flange of the rail, a truss rod pivoted to said hook, a clamp

plate connected to the opposite rail, a truss rod extending through said clamp plate, and a nut for adjusting said truss rod.

3. In a device for repairing rails, the combination of a hook plate to engage the base flange of the rail, said hook plate being provided with a slot, a hook mounted in the slot to engage the inner flange of the rail, and a truss rod to which said hook is piv-

oted, said truss rod extending through a 10 clamp for the opposite rail and provided with a nut for adjusting the same.

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

JAMES SMITH.

Witnesses:

CHAS. B. DIRK,
JOHN W. PUGH.

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