(No Model.)

C. W. & O. P. PAGE.

COMBINED NUT LOCK, RAIL BRACE, AND TIE PLATE.

No. 524,809. Patented Aug. 21, 1894.

Fig. 1.

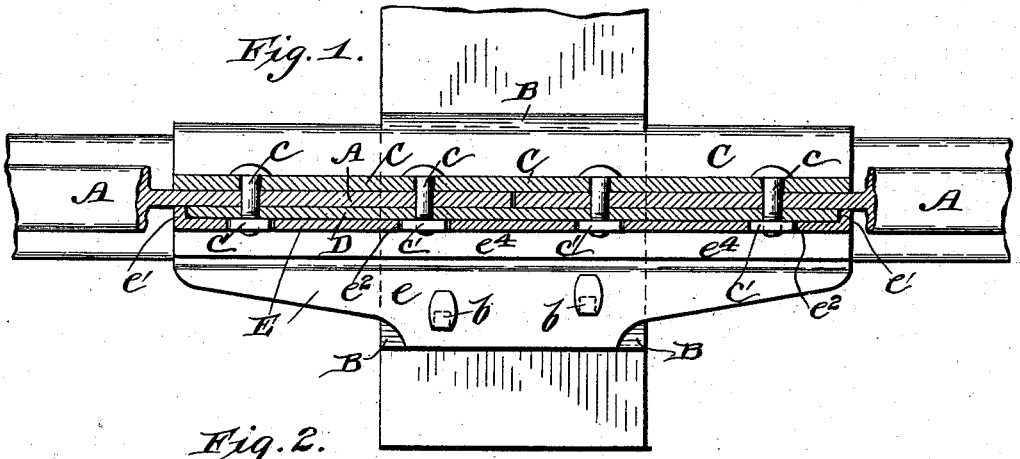


Fig. 2.

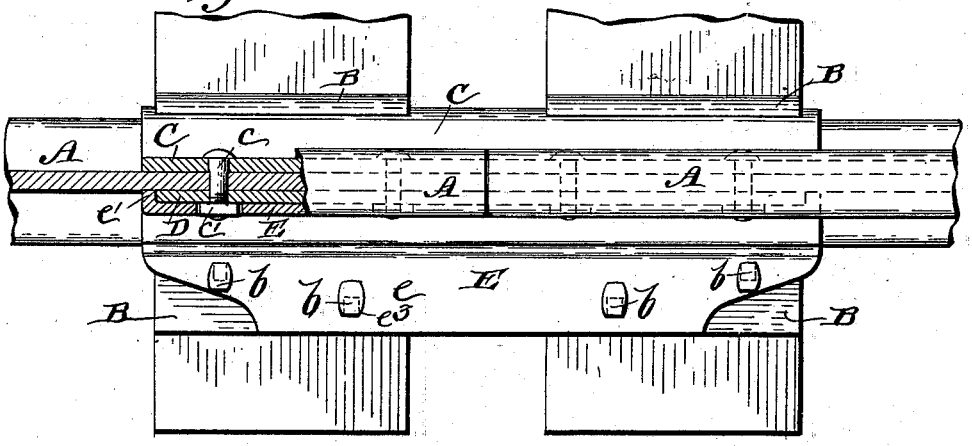


Fig. 3.

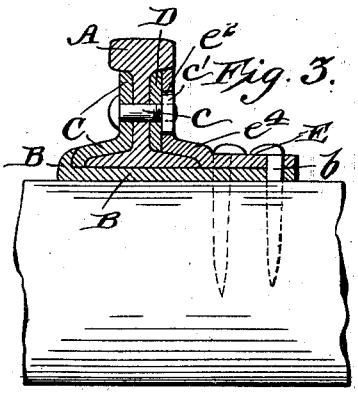
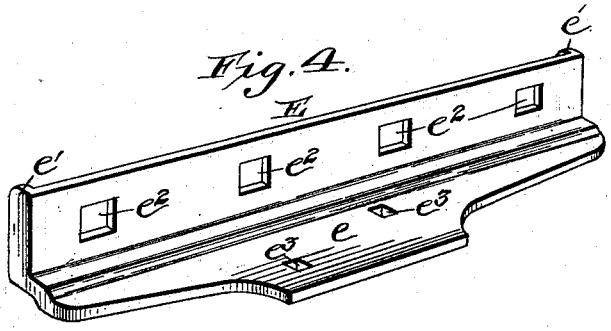


Fig. 4.



Witnesses
Severance
W. Harvey Muzzy

Inventor
Owen P. Page & Charles W. Page
by Munn, Fenwick & Lawrence
their Attorneys

UNITED STATES PATENT OFFICE.

CHARLES W. PAGE AND OWEN P. PAGE, OF MERIDIAN, MISSISSIPPI, ASSIGNORS OF TWO-THIRDS TO H. MARSHALL THREEFOOT, JOHN D. McINNIS, AND WINFIELD F. BUCHANAN, OF SAME PLACE, AND ANDREW J. KEETON, OF TOOMSUBA, MISSISSIPPI.

COMBINED NUT-LOCK, RAIL-BRACE, AND TIE-PLATE.

SPECIFICATION forming part of Letters Patent No. 524,809, dated August 21, 1894.

Application filed August 15, 1893. Renewed July 5, 1894. Serial No. 516,661. (No model.)

To all whom it may concern:

Be it known that we, CHARLES W. PAGE and OWEN P. PAGE, citizens of the United States, residing at Meridian, in the county of Lauderdale and State of Mississippi, have invented certain new and useful Improvements in a Combined Nut-Lock, Rail-Brace, and Tie-Plate; and we 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.

Our invention relates to a combined rail brace, nut lock and tie plate and consists in certain novel constructions, combinations and arrangements of parts as will be hereinafter described and claimed.

In the accompanying drawings Figure 1. is a plan view of a tie and a horizontal section through a portion of a railroad rail with our invention applied to the same. Fig. 2. is a similar view but showing the brace and lock applied to the meeting ends of two rails and two ties. Fig. 3 is a vertical transverse section through a rail showing our improved brace and lock applied to the same, and Fig. 4. is a detail perspective view of our improved nut lock.

A in the drawings represents an ordinary railroad rail which rests on a tie plate B as shown in Fig. 3. This plate consists of a broad flat horizontal base portion which is turned up on one of its edges to form a seat and stop to receive the lower edge of the fish plate C and prevent lateral movement of the rail and fastening means in one direction, while the other side of the tie plate is held down and prevented from moving laterally in the opposite direction by the spikes *b*.

D. represents another fish plate which is applied on the other side of the web of the rail and is secured in position on the same by bolts *c*. which pass through the fish plate C, the web of the rail A and through said fish plate D. The bolt passage through the rail may be slightly elongated to admit of expansion and contraction of said rail.

E. represents our improved nut lock which consists of a horizontal longitudinal plate formed with a laterally extending flange *e*. and end flanges or extensions e' all in one piece and provided with square or other suitably shaped passages e^2 for the reception of the nuts c' applied on the ends of the bolts *c*. The nut locking plate is also provided with one or more passages e^3 through which the spikes *b* are passed for securing the said plate in position. The nut locking plate is made of such a length as to receive the fish plate D snugly between the end flanges or extensions e' and it is placed up to and against the fish plate D so that the nuts c' on the bolts *c* will push into and be seated in the passages e^2 and thereby prevented from turning and the flanges or bent ends e' will prevent the said fish plate from having a longitudinal movement as the train passes over the track and thereby prevent wear and tear on the bolts and serve as an additional means for keeping the nuts from working loose. The nut locking plate is also formed with a step e^4 to receive one flange of the rail as shown in Fig. 3. By forming the nut locking plate with a lateral attaching flange and end flanges or extensions, all in one piece, a very effective, cheap, simple and durable nut locking device is produced which is much superior to a nut locking plate which is not formed with end retaining flanges or which has said flanges made separate from the body of the plate.

In Fig. 2 we have shown the meeting ends of two rails connected by means of our nut lock and the nut locking plate secured to two tie plates and two ties or sleepers.

What we claim is—

1. As an improved article of manufacture, a nut lock for rail road rails comprising in its construction a longitudinal plate formed with a lateral attaching flange and end retaining flanges extending rearwardly at right angles only to the plate and all constructed in one piece of metal, passages through the plate for the reception of nuts applied on the ends of the fastening bolts, substantially as described.

2. In a nut lock, rail brace and tie plate, the combination of a tie plate having one of its

edges turned up and its other edge adapted to be secured in position by suitable fastening means, fish plates applied on the web of the rail, bolts passed through the fish plates and through the web of the rail, nuts applied on the ends of the bolts, a nut locking plate of slightly greater length than one of the fish plates and formed with a lateral attaching flange and end retaining flanges, the plate, laterally extending flange and end flanges all constructed in one piece of metal, and passages through the said nut locking plate for the reception of the nuts, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES W. PAGE.
OWEN P. PAGE.

Witnesses:
B. J. CARTER,
W. E. BROACH.