

(No Model.)

2 Sheets—Sheet 1.

A. GROSS.

PREVENTING THE CREEPING OF RAILS ON RAILWAY TRACKS.

No. 512,817.

Patented Jan. 16, 1894.

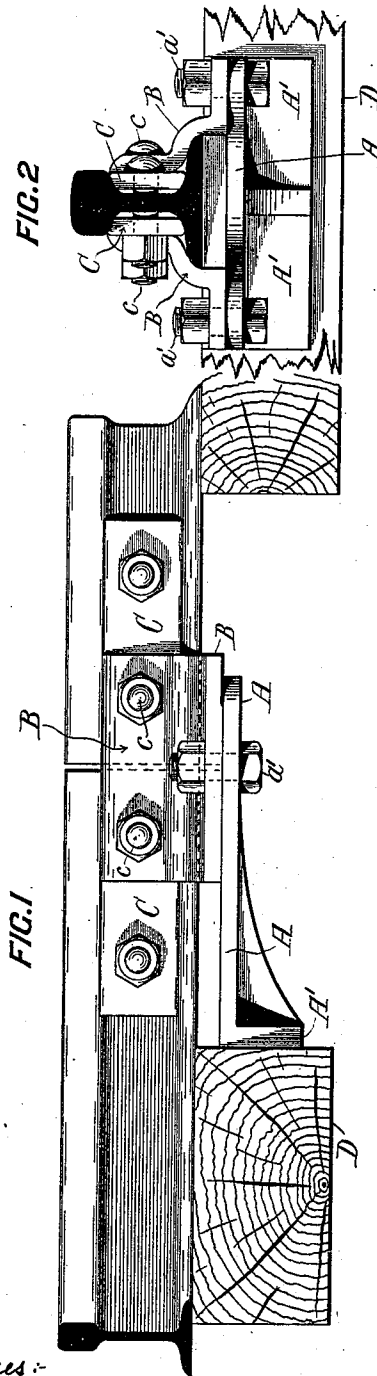


FIG. 1

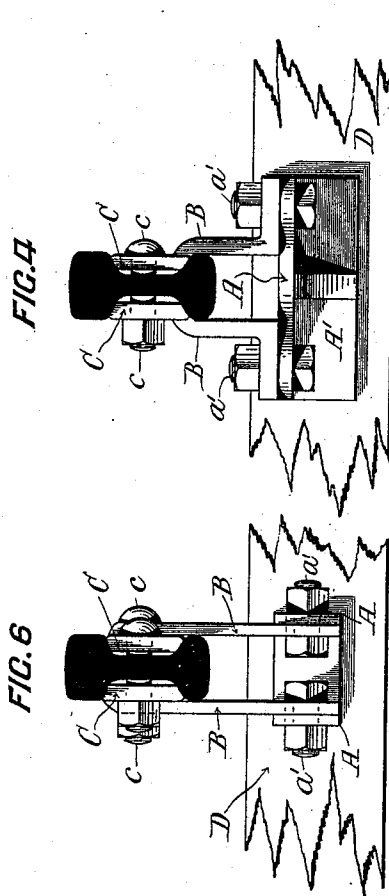
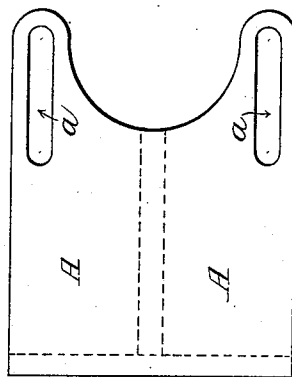


FIG. 2

FIG. 4

FIG. 6



Witnesses:
E. H. Sturtevant.
E. A. Scott.

Inventor:
Augustus Gross,

by *Richard A. [Signature]*
attorney

A. GROSS.

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FIG. 5

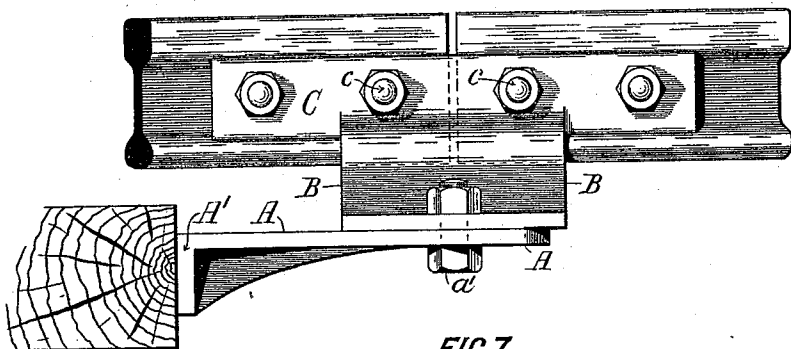


FIG. 7

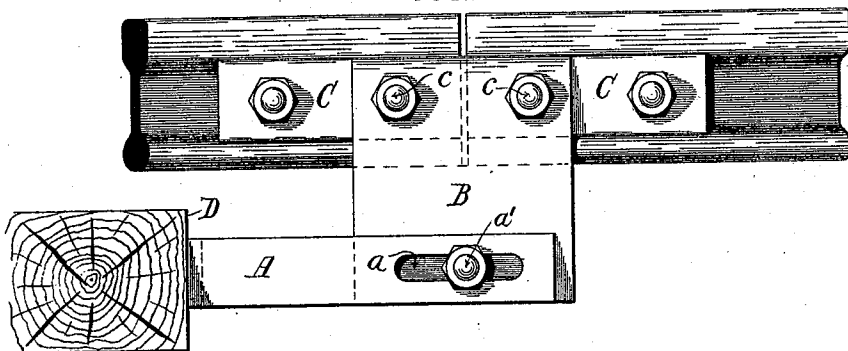


FIG. 8

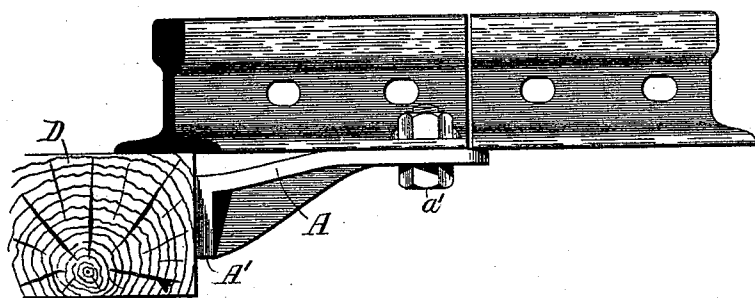
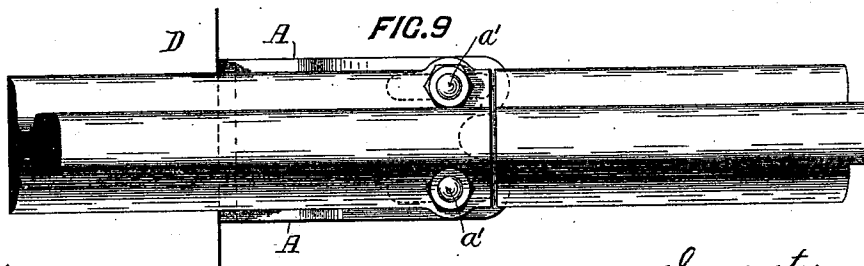


FIG. 9



Witnesses
E. H. Sturtevant
E. A. Scott.

Inventor
Augustus Gross.
by *Richardson*
Attorneys.

UNITED STATES PATENT OFFICE.

AUGUSTUS GROSS, OF SYDNEY, NEW SOUTH WALES.

PREVENTING THE CREEPING OF RAILS ON RAILWAY-TRACKS.

SPECIFICATION forming part of Letters Patent No. 512,817, dated January 16, 1894.

Application filed April 22, 1893. Serial No. 471,467. (No model.) Patented in New South Wales September 27, 1892, No. 4,005; in Victoria October 3, 1892, No. 10,009; in South Australia October 10, 1892, No. 5,823; in New Zealand October 10, 1892, No. 5,823; in Italy November 17, 1892, No. 33,005, and in Belgium November 18, 1892, No. 10,063.

To all whom it may concern:

Be it known that I, AUGUSTUS GROSS, a subject of the Queen of Great Britain and Ireland, and a resident of Sydney, in the Colony of New South Wales, have invented certain Improvements in Appliances or Apparatus for Preventing the Creeping of Rails on Railway-Tracks, (for which I have obtained a patent in New South Wales, No. 4,005, dated September 27, 1892; in Victoria, No. 10,009, dated October 3, 1892; in South Australia, No. 5,823, dated October 10, 1892; in New Zealand, No. 5,823, dated October 10, 1892; in Italy, No. 33,005, dated November 17, 1892, and in Belgium, No. 10,063, dated November 18, 1892,) of which the following is a specification.

This invention consists in providing an adjustable block or stop and securing the same to the under side of the rail, preferably at the joint, in such a manner that the block or stop shall abut against the sleeper and prevent the longitudinal movement or "creeping" of the rail.

In the accompanying drawings:—Figure 1 is a side elevation of the abutting ends of two adjacent T rails, and shows one mode of securing the block or stop to the rail. Fig. 2 is an end view of the same, looking toward the left, the rail being in cross section. Fig. 3 is a plan view of the block or stop.

A, is the block or stop itself, which is preferably provided with two slots *a a*. This stop A, is secured to the under side of the rail, in any suitable manner. In these figures in the drawings, it is shown bolted to two cheeks B B, that are in their turn secured to the rail outside the fish-plates C C, by means of two bolts *c c*. The block or stop A, has one end A' turned to form a flange, which flange shall abut against the sleeper D, in the direction in which the rail "creeps," and will thus prevent any longitudinal movement of the rail in that direction. The broadened end A', is specially intended to present a large bearing surface, and thereby the stop A will be prevented from burying itself in the sleeper D. By means of the slots *a a*, and securing bolts *a' a'*, the block or stop A, is rendered adjustable in position between the rail and

the sleeper, so as to permit of its being attached to a rail that has already "crept."

Figs. 4 and 5 are respectively, sectional end view and side elevation of the apparatus as applied to a double headed rail. In these views, the cheeks B B to which the stop A is secured, form part of and are downward continuations of the fish plates C C, and project considerably below the under side of the rail.

Figs. 6 and 7 are respectively, sectional end view and side elevation of another modification of the apparatus. In this case the cheeks B B, are bolted on, outside the fish plates C C and project below the rail. The shape of the stop is somewhat altered, but is identical in principle and operation to the forms previously shown and described, and consists of a U shaped bar, the arms of which are slotted, to permit of its adjustment to the rail relative to the sleeper.

Figs. 8 and 9 are side elevation and plan respectively of the abutting ends of two T rails. In this case the cheeks B B, are dispensed with and the stop A, bolted directly onto the flanges of the rail.

Instead of having the block or stop, rigidly secured to the fish plates, the latter may be provided with a downward extension in which is a socket, into which one end of the block or stop may be introduced while the other end of the stop would abut against the sleeper. In this way the stop would be prevented from falling, by its end that rested in the socket, and would at the same time be jammed between the projection of the fish plate and the sleeper, the projection on the fish plate receiving the thrust of the "creep." The socket end of the stop may be readily made adjustable in its socket by any suitable device so that the stop may be made to fit exactly the space between the projection below the rail and the side of the sleeper. This modification is not shown in the drawings.

By adopting the modifications shown in Figs. 1 and 7 the apparatus may be attached to an existing line of rails without any alteration being made to the fish-plates, to the rails, or to the permanent way.

Having now particularly described and as-

certained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A longitudinally adjustable block or stop 5 consisting of a metal plate, that is provided with a broadened end, and with adjustable means for securing it to and below a railway rail, so that, while one end of the stop is rigidly secured to the rail above it, the other or 10 broadened end shall abut against one of the transverse sleepers upon which the rails are laid, as herein set forth.

2. A block or stop that is placed longitudinally below and rigidly secured to a railway 15 rail, in such a way that while one end of the stop is secured directly or indirectly to the rail, the other end shall abut against the nearest transverse sleeper, so as to prevent the "creeping" of the rail in that direction, 20 the apparatus being provided with slots or other suitable devices whereby the stop may be rendered adjustable longitudinally as herein specified.

3. A longitudinally adjustable stop or block 25 that is so placed below the rail, that it shall abut at one end against the sleeper and at the other end against a projection on the fish-plates or other suitable attachment to the rail, the said stop being supported in position by 30 the same as herein specified.

4. The combination with downwardly projecting cheeks or other similar plates in connection with the joints of railway rails, of a longitudinally adjustable block or stop, one 35 end of which shall be held by the downwardly projecting cheeks, while the other end shall abut against the nearest transverse sleeper in the direction of the "creep" it is desired to prevent as herein set forth.

In witness whereof I have hereunto set my 40 hand in presence of two witnesses.

AUGUSTUS GROSS.

Witnesses:

J. S. WHITELOCKE,
P. FAREBROTHER.