

(No Model.)

A. J. & F. D. GOSNELL.
GUARD RAIL FOR RAILROADS.

No. 467,228.

Patented Jan. 19, 1892.

Fig. 1.

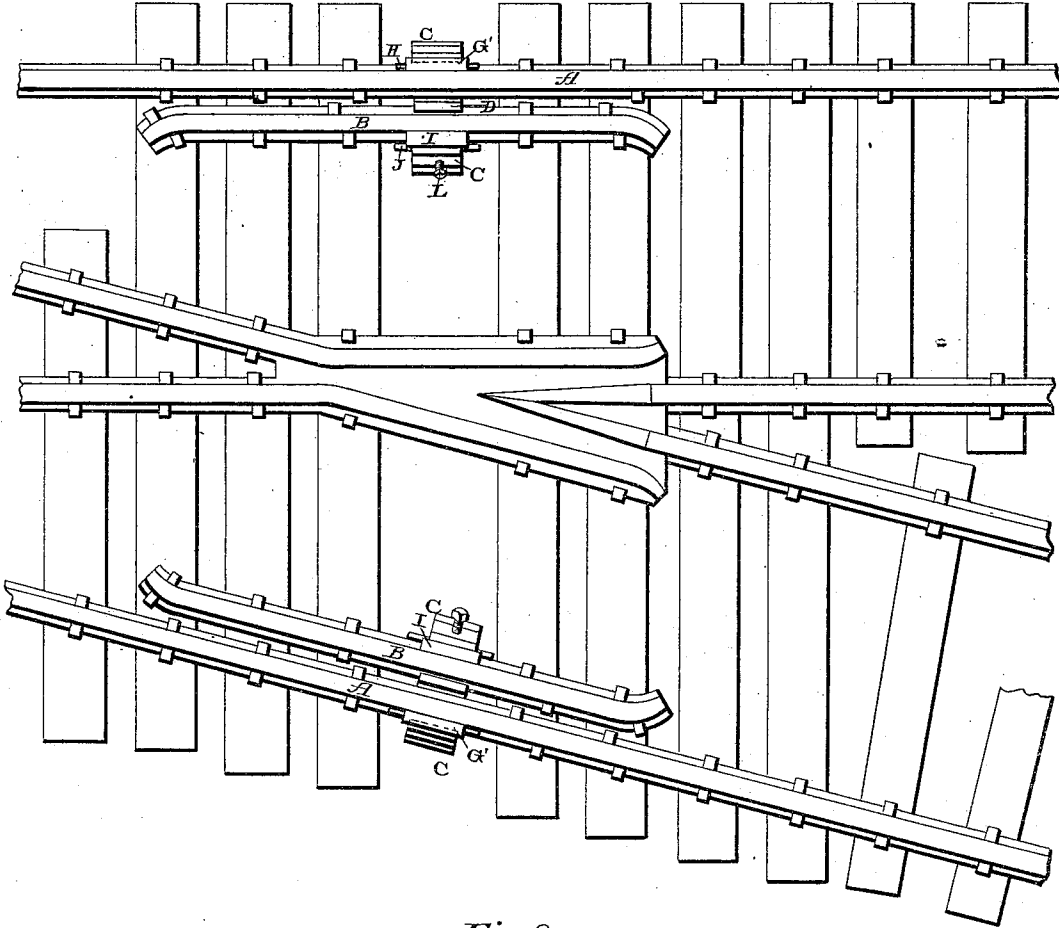


Fig. 2.

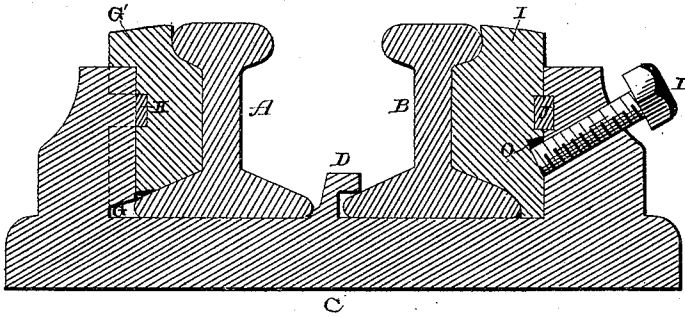
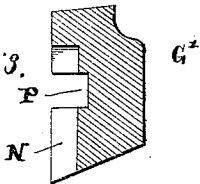


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

ANDREW J. GOSNELL AND FRANK D. GOSNELL, OF TERRE HAUTE, INDIANA.

GUARD-RAIL FOR RAILROADS.

SPECIFICATION forming part of Letters Patent No. 467,228, dated January 19, 1892.

Application filed February 3, 1891. Renewed December 22, 1891. Serial No. 415,902. (No model.)

To all whom it may concern:

Be it known that we, ANDREW J. GOSNELL and FRANK D. GOSNELL, of Terre Haute, in the county of Vigo and State of Indiana, have
5 invented certain new and useful Improvements in Guard-Rails for Railroads; 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
10 to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in guard-rails for railroads; and it consists in
15 the combination and construction of parts, which will be fully described hereinafter.

The object of our invention is to provide a clasp for securing the guard-rail in position
20 opposite the frog, so that no pressure of wheels can possibly displace the guard-rail and thus cause a wreck.

Figure 1 is a plan view of a portion of a railroad to which our invention is applied. Fig. 2 is a vertical section of the clasp and
25 the rails to which it is secured. Fig. 3 is a detached vertical section of the block G'.

A represents the main rail, and B the guard-rail, which is placed just opposite the frog, so that neither the wheels of the locomotive nor
30 cars can become displaced while switching. Heretofore this guard-rail has been secured to the ties by means of spikes, and frequently the spikes have given away because the spikes were not strong enough to hold the
35 guard-rail in position and have thus caused wrecks. In order to prevent any possibility of the guard-rails from becoming displaced, a clasp C is used, which is cast in one solid piece and extends under the lower edges of
40 the two rails A B, as shown, and which guard is provided at its center with a flange D, which extends up between the lower edges of the rails A B, and thus holds them rigidly in position. That end of the clasp C which
45 catches against the outer side of the rail A is provided with a groove G at its bottom to receive the flange upon the lower edge of the rail, but between the upper portion of the rail and the clasp there is placed the grooved
50 and recessed block G', which fills the space between the end of the clasp and the rail. In

order to prevent this block from becoming displaced endwise, it is provided with a recess N, so as to catch over the upper portion
of the end of the clasp, as shown, and through
55 the groove P, made in the block G', is passed a locking-key H, of any suitable description. This key takes up any play between the clasp and the block and holds the parts rigidly in position. The clasp extends across the under
60 sides of the two rails in between the ties, and the inner end of the clasp rises opposite the inner side of the guard-rail B, as shown. In between this inner end of the clasp and the
65 outer side of the guard-rail is placed a second grooved block I, which is shaped so as to fit both the side of the guard-rail and the end of the clasp, and which has an endwise movement when the block is left free to move. In
70 order to hold this block in position and to take up any wear, both the end of the clasp and the end of the block I are grooved, so as to receive a locking-key J, and this key will support the inner end of the clasp in position even when the set-screw L is not used.
75 In the outer side of the block I is formed a recess O, in which the inner end of the screw L catches, and which serves to prevent the block from being moved endwise a greater distance than the length of the groove or recess. After the parts have been adjusted in position the screw L is tightened, and then the guard-rail is secured at or near its center to the main rail and just opposite the center
80 of the frog, so that no pressure which can be brought to bear upon the guard-rail by the wheels can effect it.

This clasp can be applied to any of the guard-rails now in use without having to remove any other part, and binds the guard
90 and main rails together in such a manner that nothing but the breaking of the rail or the clasp can possibly affect either of the rails at this point.

Having thus described our invention, we
95 claim—

1. The combination of the main and guard rails with the clasp, which extends under the two rails; the block G', which is placed between the end of the guard and the outer
100 side of the main rail, and which is recessed so as to catch over the end of the clasp, the

block which catches between the end of the clasp and the outer side of the guard-rail B, and the screw, substantially as described.

2. The combination of the main and guard
5 rails, the clasp provided with upturned ends, and the flange D, the two blocks G' I, placed between the ends of the clasp and the outer sides of the rails, the locking-key, and the set-screw, the block I being provided with a

recess to receive the end of the screw, substantially as shown and described. 10

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

ANDREW J. GOSNELL.

FRANK D. GOSNELL.

Witnesses:

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