

A. R. CLINE.
RAILROAD RAIL.
APPLICATION FILED APR. 5, 1912.

1,042,201.

Patented Oct. 22, 1912.

Fig. 1.

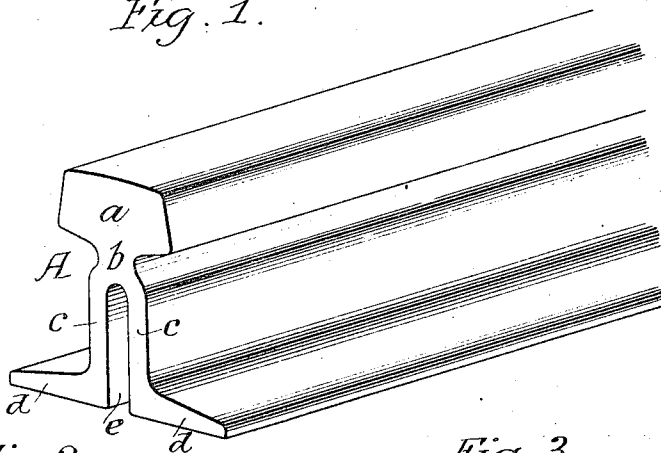


Fig. 2.

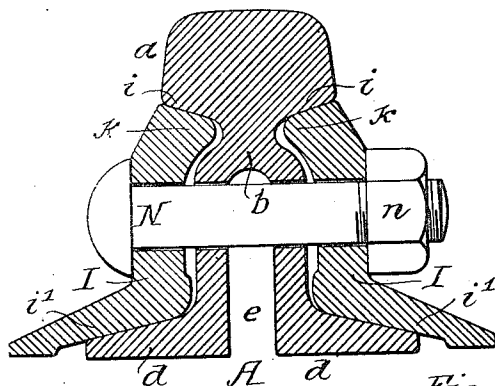


Fig. 3.

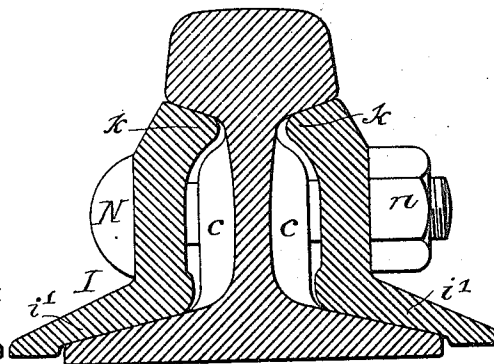


Fig. 4.

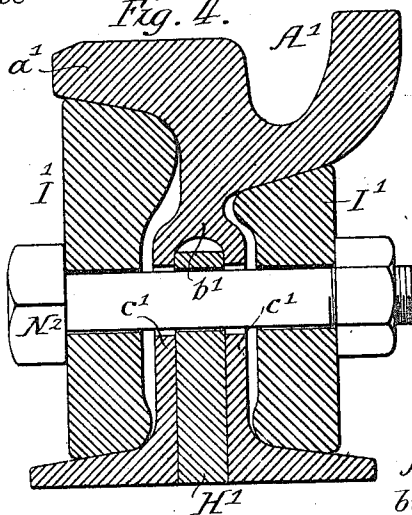


Fig. 5.

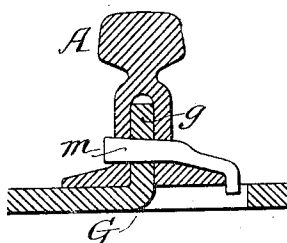
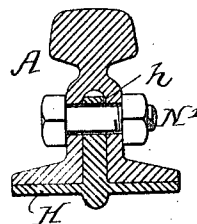


Fig. 6.



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RAILROAD-RAIL.

1,042,201.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed April 5, 1912. Serial No. 633,552.

To all whom it may concern:

Be it known that I, ALBERT R. CLINE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Railroad-Rails, of which the following is a specification.

The object of my invention is to improve the construction of railway rails, particularly for heavy traffic, by bifurcating the web of the rail some distance below the head so as to properly resist strains, at the same time allowing the rail to be coupled to a single web or T-rail by fish plates of the usual construction.

In the accompanying drawing:—Figure 1, is a perspective view of a railway rail made in accordance with my invention; Fig. 2, is a sectional view of a rail, showing the fish plates in position; Fig. 3, is a sectional view through the single web of a T-rail, with my improved rail in the distance, the section being also through the fish plates securing the two rails together; Fig. 4, is a sectional view, showing my invention applied to a girder rail; Fig. 5, is a sectional view, showing my improved rail secured to a tie of a special form; and Fig. 6, is a sectional view, showing my invention applied to a connecting plate having a flange extending into the space in the rail.

Referring to the drawing, A is the rail having a head *a* of the ordinary T-rail shape. Directly below the head is a neck *b*, which is of a width equal to the web of the ordinary T-rail. Below the neck the rail is bifurcated, forming two webs *c*, *c*, spaced apart as shown, and at the base of each web is a laterally extended foot *d*. The base of the rail is preferably the same width as the ordinary T-rail, but, in some instances, the base may be of a greater width if necessary. The height of the base flange is the same as that of an ordinary T-rail.

The object of making the rail in the manner above set forth is to allow the rail to be used in connection with the ordinary T-rails having single webs, and track structures which are designed to couple with the ordinary T-rails.

By my invention fish plates I, I can be used, as illustrated in Fig. 2, having a bearing *i* under the head and a bearing *j* on the base flange. This is the standard type of

fish plate and has projections *k* which extend toward the neck *b* of the rail so as to provide an extended bearing of the fish plate against the underside of the head of the rail. The fish plate can be secured to the rails by an ordinary bolt N having a nut *n*, or a wedge or other fastening can be used without departing from the essential features of the invention.

The recess *e* formed by bifurcating the web of the rail can be utilized, as illustrated in Fig. 5, for the reception of a tongue *g* of a cross tie G, which can be secured either by a wedge *m*, as shown in Fig. 5, or by an ordinary bolt, as shown in Fig. 2.

In Fig. 6, I have shown a connecting plate H having a flange *h* extending into the space *e* and secured to the rail by bolts N'. In this construction, the plate can be used as a fish plate or a supporting plate, instead of the construction illustrated in Fig. 2.

In Fig. 4, I have shown my invention as applied to a girder rail, in which A' is the rail and *a'* is the head. *b'* is the neck; *c'*, *c'* are the bifurcated portions and I', I' are the fish plates. H' is a plate which may be used as a joint filler, which adds materially to the strength of the coupling; the bolt N² passing through the fish plate, the rail and the filler plate H.

Thus it will be seen by the above construction, that I provide a rail which is of a greater strength for the same weight than the ordinary T-rail, or girder rail, and the rail can be readily coupled to the ordinary rails by the usual type of fish plate so that my improved rail can be used, if desired, at certain points in the track where a rail which will resist severe side strains is desirable.

The rails can be coupled together by outside fish plates, as illustrated in Fig. 2, or by inside fish plates, as illustrated in Fig. 6, or by a combination of the two.

I claim:—

1. A rail having a short neck directly under the head; a bifurcated web extending from the neck; the sections of the web being parallel with each other; the neck being of a greater width than the width of either of the webs; and a base flange extending laterally from each web.

2. A rail having a head; a neck directly under the head; a bifurcated web extending from the neck; the neck being greater in width than the width of either of the webs; and a base flange extending laterally from each web; the space between the webs being substantially equal to the width of the neck.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ALBERT R. CLINE.

Witnesses:

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