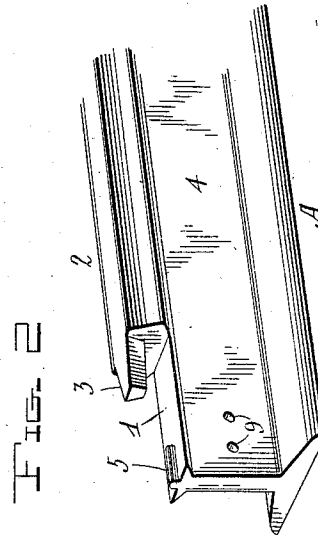
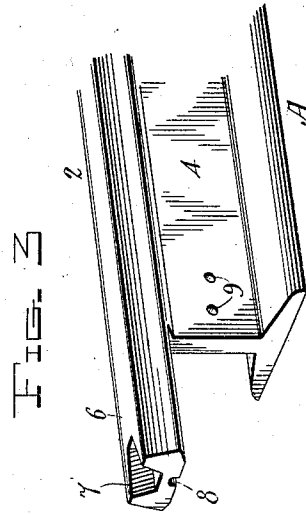
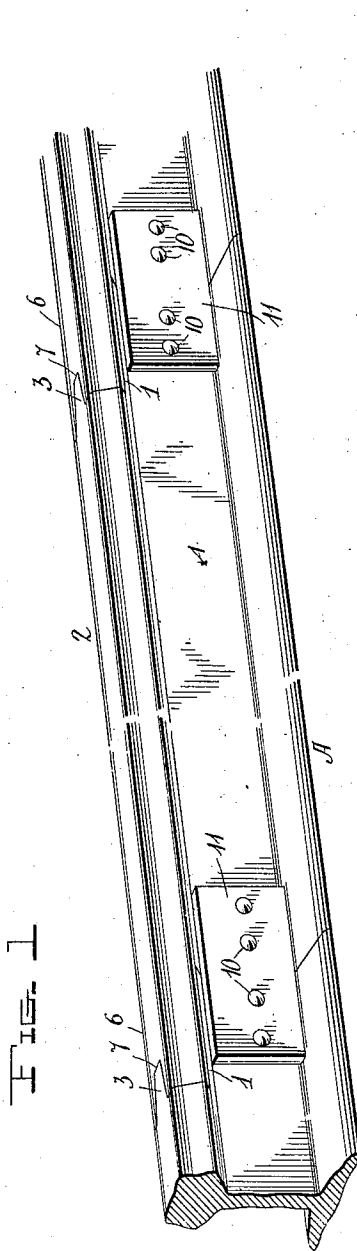


No. 888,988.

PATENTED MAY 26, 1908.

J. FRANCIS.
RAILROAD RAIL.
APPLICATION FILED AUG. 7, 1907.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

FIG. 4

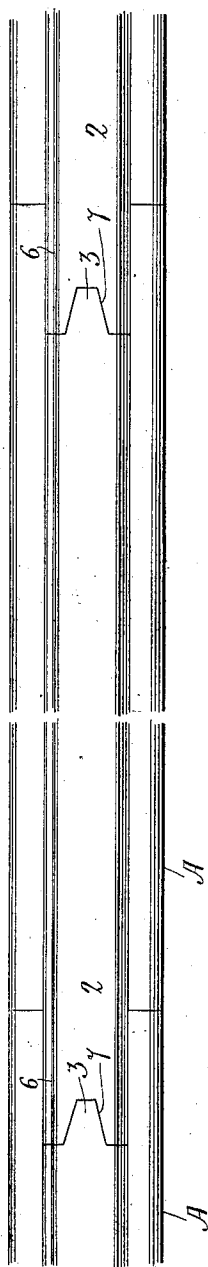


FIG. 5

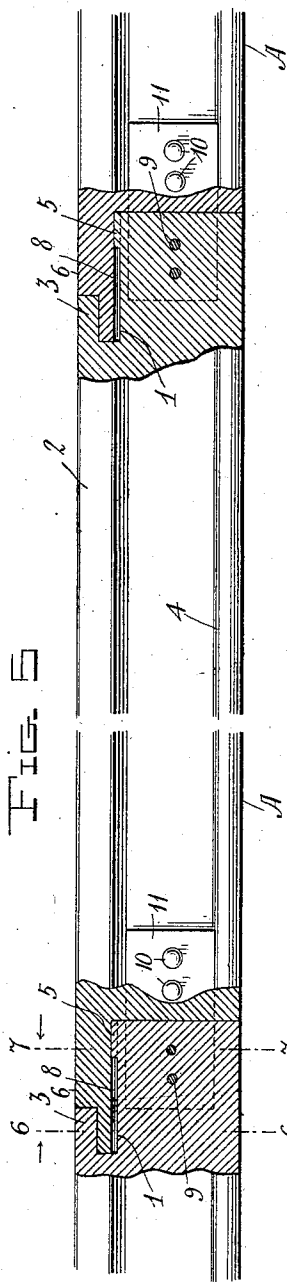


FIG. 7

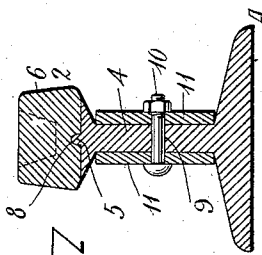
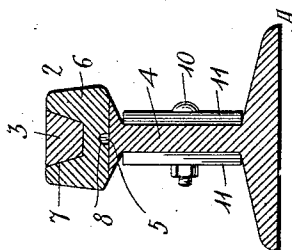


FIG. 6



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JOSEPH FRANCIS, OF MORRISTOWN, NEW JERSEY.

RAILROAD-RAIL.

No. 888,988.

Specification of Letters Patent.

Patented May 26, 1908.

Application filed August 7, 1907. Serial No. 387,514.

To all whom it may concern:

Be it known that I, JOSEPH FRANCIS, a citizen of the United States of America, residing at Morristown, in the county of Morris and State of New Jersey, have invented new and useful Improvements in Railroad-Rails, of which the following is a specification.

This invention relates to railroad rails; and it has for its objects to provide an improved rail having means, integral therewith adapted to facilitate the joining or connecting of said rail with an abutting rail of corresponding or mating construction.

A further object of the invention is to provide an improved rail having an overlapping head adapted to be partly supported upon the web of the abutting rail.

Further objects of the invention are to simplify and improve the construction and operation of this class of devices.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention; it being however understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawing: Figure 1 is a perspective view showing several rails constructed in accordance with the invention, the rails being connected to each other or joined together for operation. Fig. 2 is a perspective view showing one end of the improved rail. Fig. 3 is a perspective view showing the opposite end of the rail. Fig. 4 is a top plan view showing several rails joined together. Fig. 5 is a side elevation, partly in section, of the several rails shown in Fig. 2, the joints being shown in section. Fig. 6 is a transverse sectional view taken on the plane indicated by the line 6—6 in Fig. 5. Fig. 7 is a transverse sectional view taken on the plane indicated by the line 7—7 in Fig. 5.

Corresponding parts in the several figures are denoted by like characters of reference.

The improved rail, A is provided as one end with a recess 1, formed by removing a portion of the rail head 2; and the terminal end of the rail head thus produced is provided with a projecting tapering lug 3 extending in the direction of the end of the rail, and overhanging the web 4 or the portion of said web from which the head has been removed. The web 4 is provided adjacent to the end of the rail, with a longitudinal flange 5 that projects upwardly into the recess 1. The opposite end of the rail, or the mating end of an adjacent or abutting rail has an extended head portion 6 which is adapted to fill the recess 1; said head portion being provided with a recess 7 in the upper side thereof for the reception and accommodation of the lug 3, and in its under side with a longitudinal groove 8 for the reception of the flange 5.

The mating rail ends are provided with apertures 9 extending transversely through the webs thereof for the passage of bolts whereby fish plates 11 of ordinary construction are secured for the purpose of joining the rail ends together.

The operation and advantages of the invention will be readily understood from the foregoing description, when taken in connection with the drawings hereto annexed.

When the mating rail ends are joined together, the projecting head portion 6 of one rail will be supported directly upon the web 4 of the abutting rail, thus making it absolutely impossible for the rail ends to be moved out of alinement vertically by any cause short of actual breakage; the interengaging lug 3 and recess 7, and the flange 5 and groove 8 will, in like manner, operate to prevent lateral displacement of the rail ends with relation to each other, and the fish plates and connecting bolts will practically be relieved from all strain; their only function being to secure the rails against longitudinal displacement, and to couple the rail ends together in proper relation.

I claim:

The combination of a pair of rail sections, each consisting of a base, web and head, one section having its head projected longitudinally at one end and provided with a longitudinal groove in its under surface and a central recess in its upper surface and extending inwardly from the end thereof, the other section having its head cut away to accommo-

date the extending portion of the head of the adjacent section and provided with a tongue for fitting in the said recess, and a vertically-extending longitudinal rib for fitting in the
5 said groove, said rib being located at the extremity of the rail section, fish-plates arranged on opposite sides of the rail sections, and fastenings passing through the fish-

plates and sections for securing the parts together.

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

JOSEPH FRANCIS.

Witnesses:

JOHN M. MILLS,
JAMES A. COLLINS.