

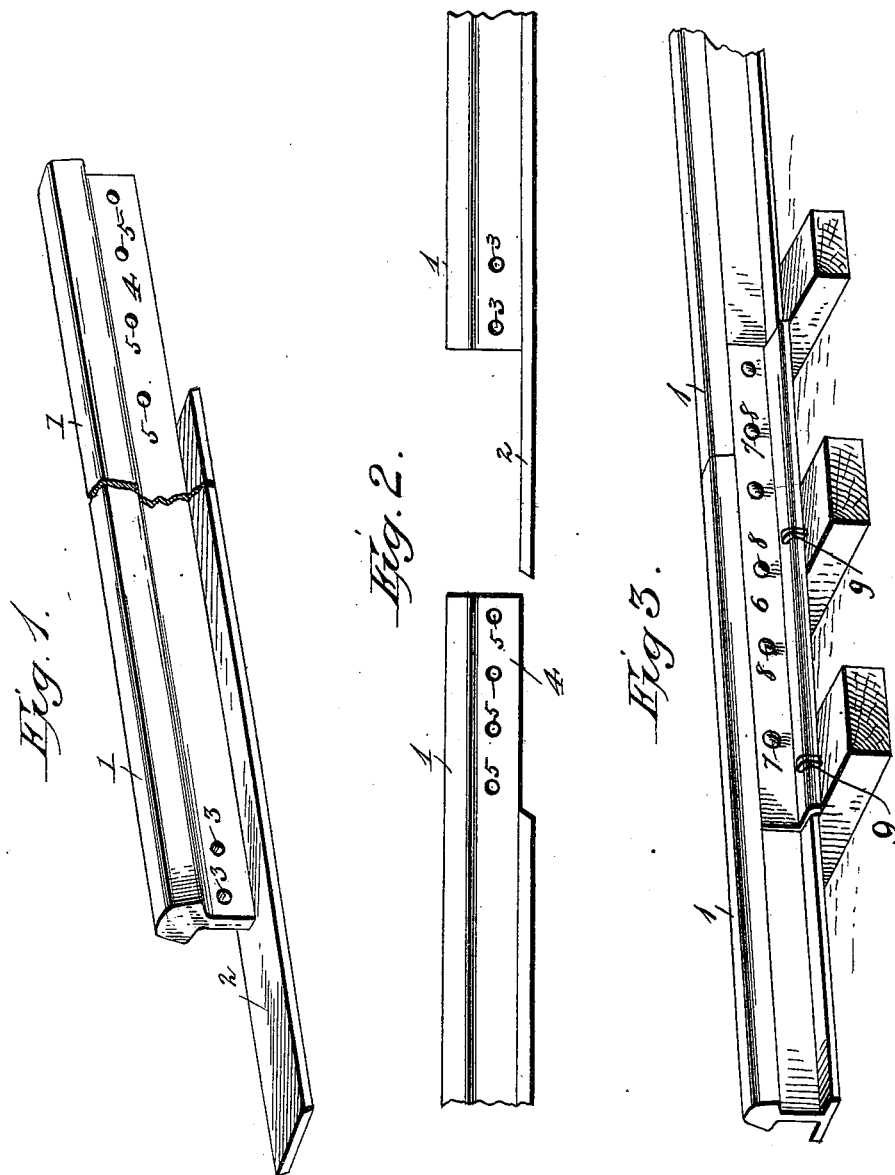
No. 645,852.

Patented Mar. 20, 1900.

S. M. HOPPING.
RAILROAD RAIL JOINT.

(Application filed Sept. 19, 1899.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL MILLER HOPPING, OF GALVESTON, TEXAS.

RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 645,852, dated March 20, 1900.

Application filed September 19, 1899. Serial No. 730,985. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL MILLER HOPPING, a citizen of the United States, residing at Galveston, in the county of Galveston and State of Texas, have invented new and useful Improvements in Railroad-Rail Joints, of which the following is a specification.

My invention relates to railroad-rail joints; and its object is to provide an improved construction of the same whereby the ends of the rails will overlap each other, making a perfectly-smooth joint, so that there will be no jar upon the road-bed or locomotive or car passing over the same, thus making traveling more comfortable, preventing injury to passengers and freight carried by the cars, reducing the wear and tear upon the road-bed and cars, and otherwise possessing superior advantages with respect to efficiency in use.

The invention consists, essentially, in the combination, with the rails, each of which has the base at one end extended beyond the web and head, forming a projecting flange, and the web formed with bolt-holes, and the other end of the rail having the base or flange cut away a distance equal to said extension, forming a projecting head which overlaps said extended flange, and formed with bolt-holes, of the fish-plate formed with bolt-holes and the bolts passing therethrough and through the holes in the rails, as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a railroad-rail constructed in accordance with my invention. Fig. 2 is an elevation showing the ends of two adjoining rails, illustrating how they can overlap each other. Fig. 3 is a perspective view showing two rails the ends of which overlap and are connected together by a fish-plate.

In the said drawings the reference-numeral 1 designates the rails, each having the base at one end extended beyond the end of the rail for a distance preferably of about thirty-two inches, forming an integral flange 2. The web at this end of the rail is formed with two bolt-holes 3. The opposite end of the rail has its base cut away, forming a projecting head 4 of a length corresponding with said flange and which is adapted to overlap the same when the rails are placed in position on the ties or road-bed. This end of the rail is formed with four bolt-holes 5. The numeral 6 designates a fish-plate of a length somewhat greater

than the said flange and is formed with six bolt-holes 7, which when the fish-plate is placed in position will coincide with the holes in the rails. The numeral 8 designates the bolts for securing the fish-plate to the rails, and 9 spikes for securing it to the ties. It will be noticed that the flange 2 has a beveled end to form a scarf-joint with the similarly-beveled end of the flange of the contiguous rail. The fish-plate is provided with a downturned flange which bears on the ties and incloses the rail-joint.

In practice one of the rails is placed on the ties and spiked thereto, as usual, and the other rail is engaged therewith by passing the flange thereof under the projecting head of said first-mentioned rail, so that they will overlap each other, and then spiked to the ties. The fish-plate is then placed in position and bolted to the rails and also spiked to the ties. It will be seen that the said projecting flanges and heads being made integral with the rails there will be no decrease in the strength of the rails and that the joint will be perfectly smooth, so that the disagreeable and injurious jars incident to the ordinary rail-joints when cars are passing over the same will be obviated.

Having thus fully described my invention, what I claim is—

A rail having a plain, flat base-flange, of equal thickness from end to end thereof, said flange extending beyond one end of the rail, the opposite end of said rail having the base-flange omitted for a distance equal to the length of the extending flange, in combination with a companion rail of like construction, the joint between the two rails being formed by placing the extending flange on one rail under that end of the companion rail which has the flange omitted, and a fish-plate of equal thickness throughout secured to the sides of said rail by through-bolts, said fish-plate covering both the rail-joint and the flange-joint, and having a downwardly-extending flange, bearing on the ties, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SAMUEL MILLER HOPPING.

Witnesses:

S. M. PENLAND,
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