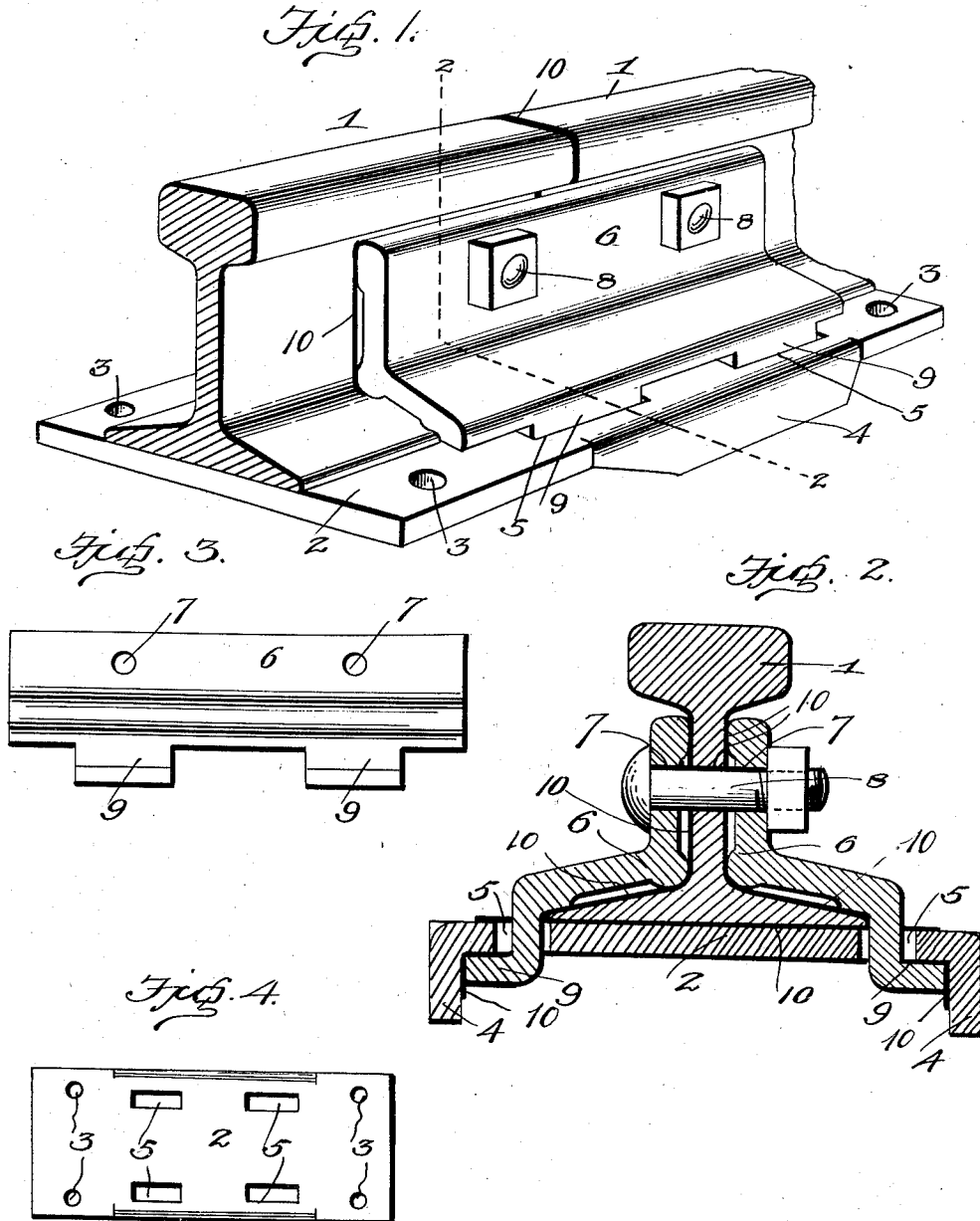


O. PAYZANT.
RAIL JOINT.

APPLICATION FILED FEB. 24, 1910.

977,040.

Patented Nov. 29, 1910.



Witnesses
C. Hunt.
C. F. Griebner.

Inventor
Octave Payzant
By *A. B. Wilson & Co*
Attorneys

UNITED STATES PATENT OFFICE

OCTAVE PAYZANT, OF NEW YORK, N. Y.

RAIL-JOINT.

977,040.

Specification of Letters Patent. Patented Nov. 29, 1910.

Application filed February 24, 1910. Serial No. 545,586.

To all whom it may concern:

Be it known that I, OCTAVE PAYZANT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Rail-Joints; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in base supporting rail joints.

One object of the invention is to provide a rail joint of this character having a full base bearing and means to resist the horizontal strain on the rails.

Another object is to provide a rail joint in which the number of rail fastening bolts is reduced to a minimum and in which the rails may be readily taken up without disturbing the fastenings of the ties.

Still another object is to provide a rail joint in which the ends of the rails may be readily insulated from each other.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of the meeting ends of two rails showing the application of the joint; Fig. 2 is a vertical cross sectional view of the same on the line 2—2 of Fig. 1; Fig. 3 is a side view of one of the joint splice bars; Fig. 4 is a top plan view of the base plate.

Referring more particularly to the drawings, 1 denotes the meeting ends of two rail sections, said ends being engaged with a base plate 2, which is of sufficient length to span the space between two ties. In the opposite ends of the plate 2 are formed spike holes 3, through which spikes are adapted to be driven to fasten the plate to the ties with which the ends of the plate are engaged. On the opposite side edges of the plate 2 are formed downwardly projecting stop flanges 4, and in the plate adjacent to the downwardly projecting flange 4 are formed pairs of locking slots 5, the purpose of which will be hereinafter described. Adapted to be engaged with the opposite sides of the rails are angle iron splice plates 6, in which are

formed bolt holes 7, corresponding to the bolt holes through the ends of the rails and with which are engaged the usual rail fastening bolts 8 of which in my improved joint, only one is required for each end of the rail. On the lower outer edges of the splice plates are formed downwardly and outwardly projecting hook-shaped locking lugs 9, which are adapted to be engaged with the slots 5 in the base plate and which have their outer edges abutting against the inner sides of the stop flanges 4, said splice bars and lugs thus forming braces for the opposite sides of the rails, whereby the latter are enabled to resist great lateral or horizontal pressure.

By constructing the splice plates as herein shown and described and forming a locking engagement therefor with the base plate 2, it will be readily seen that the rails are not only firmly clamped in place, but are also rigidly braced on both sides and held against separating or upsetting. It will also be seen that by means of my improved joint, the splice plates may be readily disengaged from the rails and the latter quickly and easily removed without disturbing the fastening spikes in the ties. When the ends of the rails are connected together by a joint such as is herein shown and described, said ends may be readily and efficiently insulated from each other as shown by the heavy lines 10 in the drawings.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

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

1. In a railway rail joint, a base plate having formed therein locking slots, angle iron splice bars engaged with the opposite sides of the rails, fastening bolts arranged through the rails and said splice bars, locking lugs formed on said splice bars and adapted to be engaged with the slots in said base plate, and means engaged by said locking lugs whereby said splice bars are adapted to brace the opposite sides of the rail.

2. In a railway rail joint, a base plate adapted to span the space between two ties, said plate having formed therein locking slots, stop flanges formed on said base plate, 5 angle iron splice bars bolted to the opposite sides of the rails, locking lugs formed on said splice bars and adapted to be engaged with the slots in said base plate and with the stop flanges thereon whereby said splice bars 10 serve to rigidly brace the opposite sides of the rail.

3. In a railway rail joint, a base plate adapted to span the space between two ties, said plate having formed in its opposite ends 15 spike holes whereby said ends are spiked to the ties and locking slots also formed in said plate, downwardly projecting stop flanges

formed on the opposite edges of the plate, angle iron splice bars bolted to the opposite sides of the rails, hook-shaped locking lugs 20 formed on the lower edges of said splice bars and adapted to be engaged with the slots and said stop flanges on the base plate, whereby said splice bars are caused to firmly clamp 25 the rails into engagement with the base plate and to rigidly brace said rails against lateral horizontal pressure.

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

OCTAVE PAYZANT.

Witnesses:

R. M. KEGGIE,
E. S. LYMAN.