

(No Model.)

M. SELLERS.  
BASE PLATE FOR RAILWAY RAIL JOINTS.

No. 605,520.

Patented June 14, 1898.

Fig. 1.

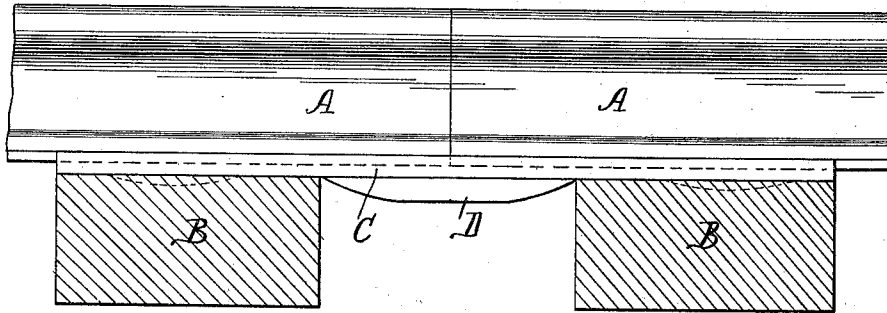


Fig. 2.

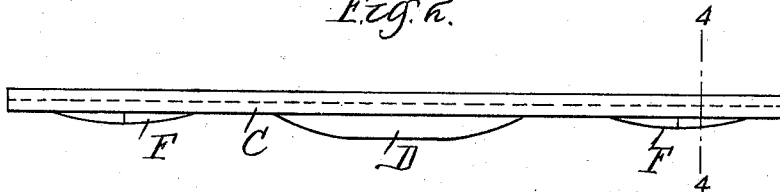


Fig. 3.

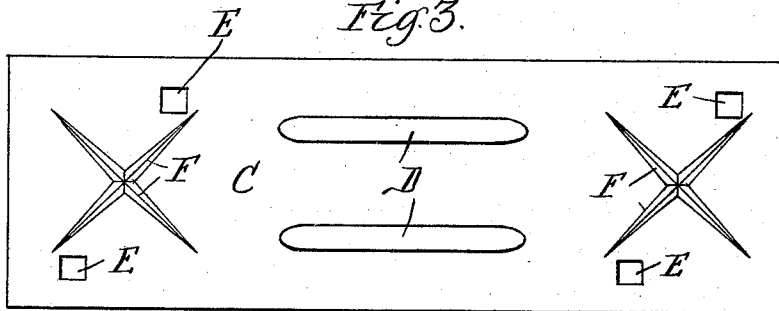
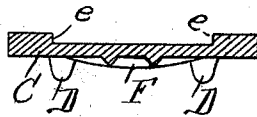


Fig. 4.



Witnesses.

Wm. D. Rheum

Wm. O. Bell

Inventor  
Morris Sellers

by Raymond W. Bushman  
Att'y's

# UNITED STATES PATENT OFFICE.

MORRIS SELLERS, OF CHICAGO, ILLINOIS.

## BASE-PLATE FOR RAILWAY-RAIL JOINTS.

SPECIFICATION forming part of Letters Patent No. 605,520, dated June 14, 1898.

Application filed April 6, 1896. Serial No. 586,290. (No model.)

*To all whom it may concern:*

Be it known that I, MORRIS SELLERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Base-Plates for Railway-Rail Joints, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to new and useful improvements in base-plates for railway-rail joints. Plates of this general character have been made in many different forms heretofore, some of them having flanges to constitute braces for that portion of the plate spanning the distance between the cross-ties and others having those flanges continued throughout the length of the plate and adapted to rest in channels or grooves provided for them in the cross-ties to secure the plate from lateral movement. The types mentioned, as well as all others now known to me, are objectionable for the reason that no provision is made to keep the plate in a stationary position on the cross-ties and thereby prevent the plate from creeping or getting out of place, or else flanges or ribs are provided on the plate to enter or be driven into the cross-ties, thereby destroying the fibers of the wood and making openings to receive water and other foreign matter, which soon rots and otherwise injures the tie. It is my aim to provide a base-plate which avoids these objectionable features and which will remain in its proper position on the ties without creeping, being also reinforced at the proper places by strengthening-braces, which prevent the plate from straining and bending.

With these and other ends in view the invention consists in the peculiar construction hereinafter described, and particularly shown in the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, showing the arrangement of my improved base-plate beneath a rail-joint. Fig. 2 is a side elevation of the base-plate. Fig. 3 is a bottom plan view of the base-plate, and Fig. 4 is a sectional view on the line 4 4 of Fig. 2.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the rails, and B two adjacent cross-ties, the said rails hav-

ing their meeting ends between the cross-ties. The base-plate C is provided with a channel c to receive the rails, and it is of sufficient length, preferably, to extend entirely across both of said ties, although the length of the plate may vary as desired. Between the ties, where it is subjected to the greatest strain, the plate is provided with one or more braces D, two of which are shown in Fig. 3. These braces are preferably of such length that they extend from one tie to the other, and they are rolled from the sheet of metal out of which the plate is formed without in any way impairing the strength of the plate itself.

Holes E are provided to receive spikes or other fastening devices and by means of which the plate may be secured to the ties. In order to prevent the base-plate from creeping and getting out of its proper position, I provide ribs on the under side of said plate, which are adapted to engage the fibers of the ties in all directions. In the particular form shown in the drawings the ribs F are arranged in pairs at each end of the plate, and the ribs of each pair cross each other at or about their middle. The ribs are not intended to distort or cut the ties, but simply to impress themselves in the face of the tie sufficiently to engage the fibers and prevent the plate from moving out of its proper position on the ties. For this reason the greatest depth of the ribs, which in the arrangement shown in Fig. 3 assume somewhat the form of a star, is at or about their middle, where they cross each other, and from this point the ribs taper to the ends, where they gradually merge into the face of the plate.

When my improved base-plate is arranged in position beneath the meeting ends of two railway-rails, the ribs F will rest upon the ties and engage the fibers thereof running in all directions, and the braces D, any number of which may be used, strengthen the plate between the ties and prevent it from sagging or becoming strained at this point. When pressure is placed upon the rails, the ribs F are forced against the fibers of the wood and are more or less pressed into the face of the ties; but they do not cut or otherwise destroy the fiber of the tie, like the flanges of other plates very commonly used at this time, which make openings in the tie and thereby permit

water to enter the tie and gradually rot and destroy the same.

I am aware that it is not broadly new to provide braces for base-plates of this character; but, so far as I am now informed, it is distinctly new to provide a base-plate with strengthening and reinforcing braces adapted to be arranged between two adjacent ties and ribs to engage the fibers of the tie in all directions on the under side of the plate and at each end thereof.

The particular arrangement of the ribs F may be varied; but it is desirable that they should have substantially the same configuration as that herein shown and described. The number and arrangement of the reinforcing-braces may also vary; but this of course is a matter of mechanical skill and selection.

The braces D are preferably rolled up with the plate without taking any metal away from the plate proper, and they therefore consti-

tute reinforces which materially strengthen the plate. The ribs F secure the plate in position on the ties and prevent creeping. They do not open the ties, but simply become impressed in the face of the ties sufficiently to secure a hold thereon.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

As a new article of manufacture, a base-plate for rail-joints, comprising a plate adapted to rest upon two adjacent cross-ties, having a longitudinal socket on its upper surface to receive the rail and provided on its bottom at the ends thereof with tapering cross-ribs adapted to engage the respective ties, substantially as described.

MORRIS SELLERS.

Witnesses:

WM. O. BELT,  
M. E. SHIELDS.