

UNITED STATES PATENT OFFICE.

BOYD J. FUNSCH, OF JACKPINE, MICHIGAN.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 738,024, dated September 1, 1903.

Application filed May 2, 1903. Serial No. 155,368. (No model.)

To all whom it may concern:

Be it known that I, BOYD J. FUNSCH, a citizen of the United States, residing at Jackpine, in the county of Crawford and State of Michigan, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to new and useful improvements in rail-joints, and relates more particularly to a splice-bar for securing together the adjoining ends of rails.

The object of the invention is to provide a bar of simple and durable construction adapted to receive the ends of the rails and securely fasten them together without necessitating the use of bolts or other similar fastening devices.

A further object is to provide a splice-bar which will support the ends of the rails and prevent sagging thereof and the resultant pounding of car-wheels passing thereover.

With the above and other objects in view the invention consists in providing a splice-bar comprising a base having parallel longitudinally-extending strips integral therewith and extending upward from the center thereof. These strips form a groove therebetween, the bottom of which is cut away at intervals to receive lugs formed upon the lower edges of the webs at the ends of the rails to be joined. The flanges of said rails are cut away at the ends, so as to permit the same to be readily inserted into the groove in the splice-bar.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view showing rails connected by means of my improved splice-bar. Fig. 2 is an elevation of said rails and showing the splice-bar in section. Fig. 3 is a perspective view of the splice-bar detached, a portion of one side of said bar being broken away; and Fig. 4 is a perspective view of one end of a rail.

Referring to the figures by numerals of reference, 1 is the base of the splice-bar, which conforms in shape with the flanges of the rails to be joined thereby, and extending upward

from this base, adjacent the center thereof, are parallel longitudinally-extending strips 2, which are integral with the base. These strips form a groove 3 therebetween, the bottom 4 of which is cut away at intervals to form slots 5. The flanges 6 of the rails to be joined are cut away at points adjacent the ends of the rails, and the webs 7 at said ends are provided with downwardly-extending lugs 8, which are so spaced apart as to fit within the slots 5, formed within the splice-bar. The central slot within said bar is preferably twice the size of the other slots, so as to accommodate the end lugs of the two rails to be joined.

When it is desired to join rails by means of the bar herein described, said bar is placed at the proper point upon the ties and the ends of the rails are lowered into the groove 3, so as to bring the lugs 8 thereof into the slots 5, as illustrated in Fig. 2. It is obvious that after the rails have been placed in these positions independent longitudinal movement thereof is prevented, and, moreover, the bottom 4 of the groove 3 serves to support the ends of the rails, and sagging thereof is therefore prevented. In order to hold the ends of the rails firmly within the splice-bar, I preferably employ bolts 9, which extend transversely through the flanges 2 and slots 10 in the ends of the rails. By forming slots within the bottom of the groove 3 accumulation of dirt, &c., beneath the lugs 8 is prevented, and therefore the rails can be properly seated within the bar without delay caused by the necessity of cleaning the interior of said bar.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a rail-joint, the combination with rails having base-flanges cut away at the ends and having downwardly-extending lugs integral with said ends; of a splice-bar comprising a base, upwardly-extending parallel flanges

- upon the base forming a groove therein for the reception of the ends of the rails, the bottom of said groove having slots extending therethrough for the reception of the lugs on the rails.
- 5 2. A splice-bar comprising a base, and parallel integral flanges thereon extending longitudinally thereof and forming a groove, the bottom of said groove having slots extending therethrough for the reception of lugs on the ends of rails.
- In testimony whereof I affix my signature in presence of two witnesses.
- BOYD J. FUNSCH.
- Witnesses:
SILAS C. BRIGGS,
CONRAD WELMES.