No. 840,368. PATENTED JAN. 1, 1907.

J. H. PRICE.

RAIL JOINT.

APPLICATION FILED MAY 31, 1906.

Fig. 2.

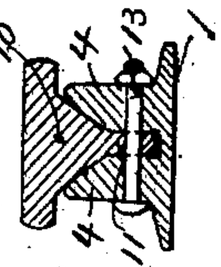

Fig. 5.

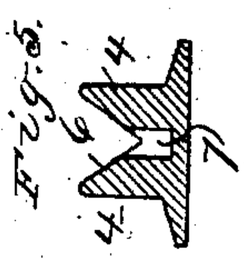

Fig. 6.

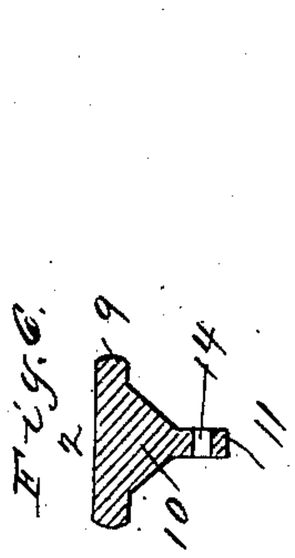

Fig. 7.

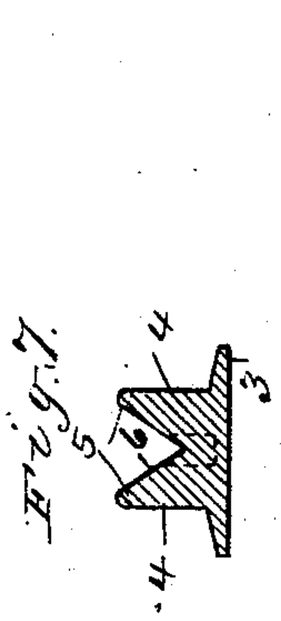

Fig. 1.

Fig. 3.

Fig. 4.

Fig. 9.

Fig. 8.

Witnesses

W. Rees Edelen

J. Thos. Downs

Inventor

J. H. Price.

By Shepherd & Parker

Attorneys

UNITED STATES PATENT OFFICE.

JOSHUA H. PRICE, OF CLEVELAND, IOWA.

RAIL-JOINT.

No. 840,368. Specification of Letters Patent. Patented Jan. 1, 1907.

Application filed May 31, 1906. Serial No. 319,572.

To all whom it may concern:

Be it known that I, JOSHUA H. PRICE, a citizen of the United States, residing at Cleveland, in the county of Lucas and State of Iowa, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to new and useful improvements in compound rails and to like structures adapted for use as rail-joints, &c.

The primary object of the present invention is to provide a rail of the above type having a detachable tread portion.

A further object resides in the provision of a tread portion that is capable of being reversed, so that when one side thereof becomes worn in the manner well known in railroading the other side may be used to bear against the flange of the wheel.

A further object resides in the provision of a rail that shall be self-bonding and in this function advantageously used on electric lines.

The detailed construction will appear in the course of the following description, in which reference is had to the accompanying drawings, forming a part of this specification, like numerals designating like parts through the several views, wherein—

Figure 1 is a central longitudinal section of a compound rail constructed in accordance with my invention. Fig. 2 is a transverse vertical section thereof. Fig. 3 is a central longitudinal section of the base of the rail. Fig. 4 is a side elevation of the tread of the rail. Figs. 5 and 6 are vertical transverse sections of the base and tread of the rail, taken through the engaging or locking portions thereof. Fig. 7 is a vertical transverse view through the enlarged portion of the tread of the rail; and Figs. 8 and 9 are perspective views illustrating, respectively, the end construction of the base and tread of the rail.

In the practical embodiment of my invention I employ a rail comprising a base portion 1 and a tread portion 2. The base portion 1 is formed with outstanding flanges 3, by which it is secured to the ties, and with vertical fish-plates 4, arranged in the same planes and provided with converging inner faces 5, which meet to form a longitudinal groove or recess 6 of substantially V shape. The base 1 is formed at its ends with downwardly-extending recesses 7, continuing for a short distance between the converging faces 5. Said base is also formed at regular intervals along its body portion with similarly-constructed recesses 8, preferably of twice as great length as the recesses 7. The tread 2 is formed with outstanding flanges 9 and with a depending central wall 10 of substantially V shape and designed to interfit the recess 6. Locking engagement between the base and the tread is had by lugs 11 and 12, carried by the wall 10 and possessing the same arrangement, contour, and dimensions as the recesses 7 and 8 and designed to interfit therein. In this relation the tread 2 and base 1 are positively locked by means of transverse bolts 13, passing through openings 14 in the recesses 7 and 8 and in the lugs 11 and 12.

In practical use the rail is assembled as shown in Fig. 1, in which the lugs 11, carried at the ends of the treads, abut against one another, and in this relation jointly interfit one of the recesses 8, and in which the recesses 7, formed at the ends of the base portion 1, confront one another and jointly receive a single lug 12, which, as above intimated, possesses substantially the same dimensions as one of the recesses 8 or two of the recesses 7. This method of arrangement is especially advantageous for the reason that it binds a rail together throughout its entire length as an integral structure without the employment of rail-joints, splice-bars, &c.

It will be readily apparent that owing to the novel construction and arrangement of parts the tread 2 may be reversed when one of the flanges 9 becomes worn and it is desired to present the other flange of the tread to the flange of the wheel.

While the elements herein shown and described are well adapted to serve the functions set forth, it is obvious that various minor changes may be made in the proportions, shape, and arrangement of the several elements without departing from the spirit and scope of my invention as defined in the appended claims.

Having fully described my invention, I claim—

1. A device of the type set forth comprising a base portion formed with a central longitudinal groove and with recesses arranged at regular intervals and extending downwardly from said groove and a tread portion formed with a depending wall interfitting said groove and with lugs carried by said wall and interfitting said recesses.

2. A compound rail comprising a base formed at regular intervals with longitudinal recesses, and a tread portion formed with depending lugs interfitting said recesses and forming a connection with said base.

3. A compound rail comprising a base provided with integral fish-plates, and formed with a longitudinal groove between said fish-plates, said base being further formed with recesses extending downwardly from said groove, and a tread portion formed with a depending wall interfitting said groove, and with lugs carried by said wall and interfitting said recesses.

4. A compound rail comprising a base formed with integral fish-plates and provided with recesses between said fish-plates, said recesses being arranged at the ends and at regular intervals in the body portion of said base, the recesses in the body portion of said base being twice the length of the recesses at the ends thereof, and a tread portion formed with depending lugs arranged at the ends thereof and at regular intervals between the ends and corresponding to the intervals of said recesses, said end lugs being half as long as the lugs therebetween, said end lugs interfitting in confronting relation the adjacent recess in the body portion of said base, and the lugs between said end lugs interfitting the recesses at the ends of said base portions in their confronting relation.

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

JOSHUA H. PRICE.

Witnesses:

LYMAN H. HAWKINS,

DANIEL DAVIS.