

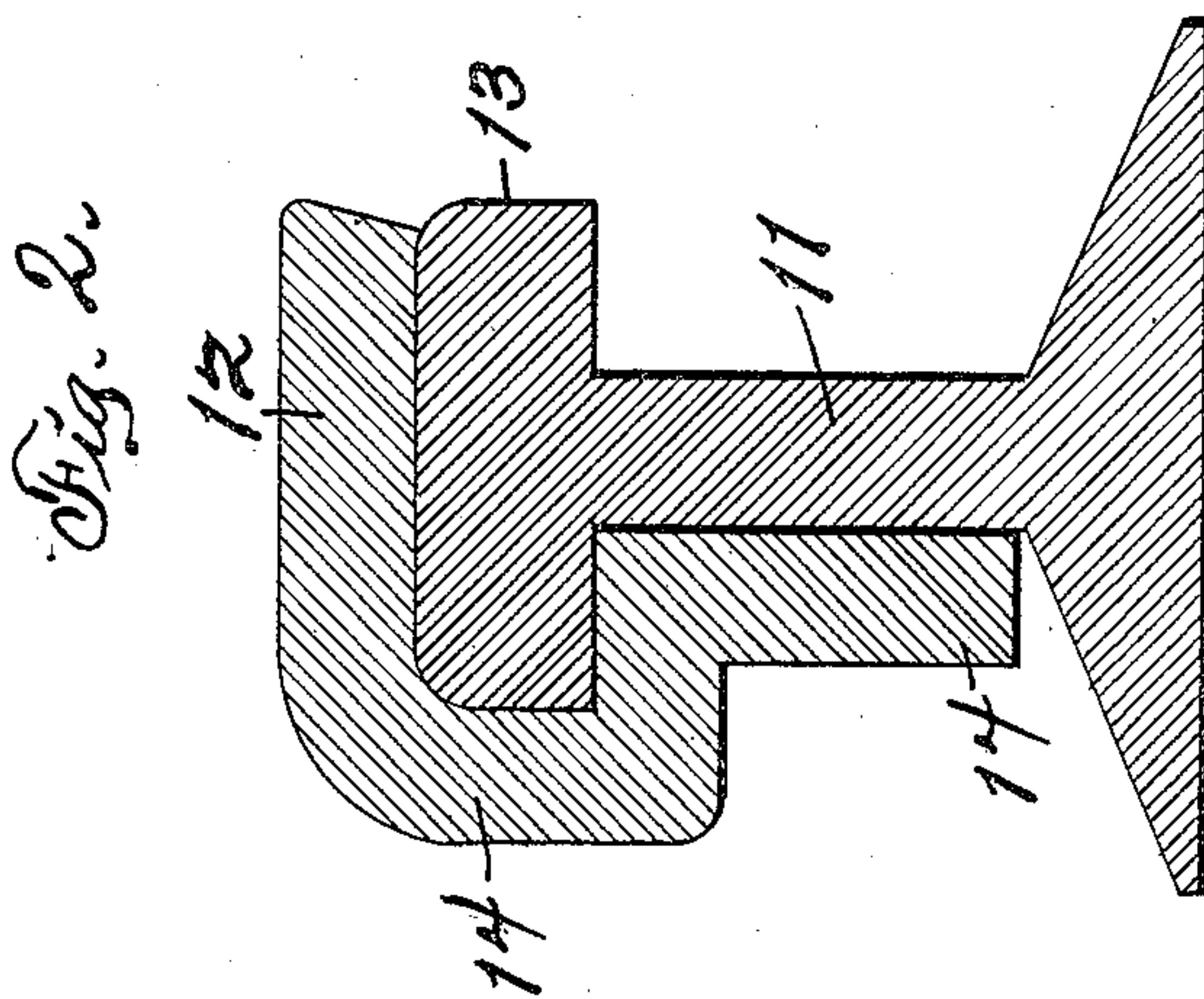
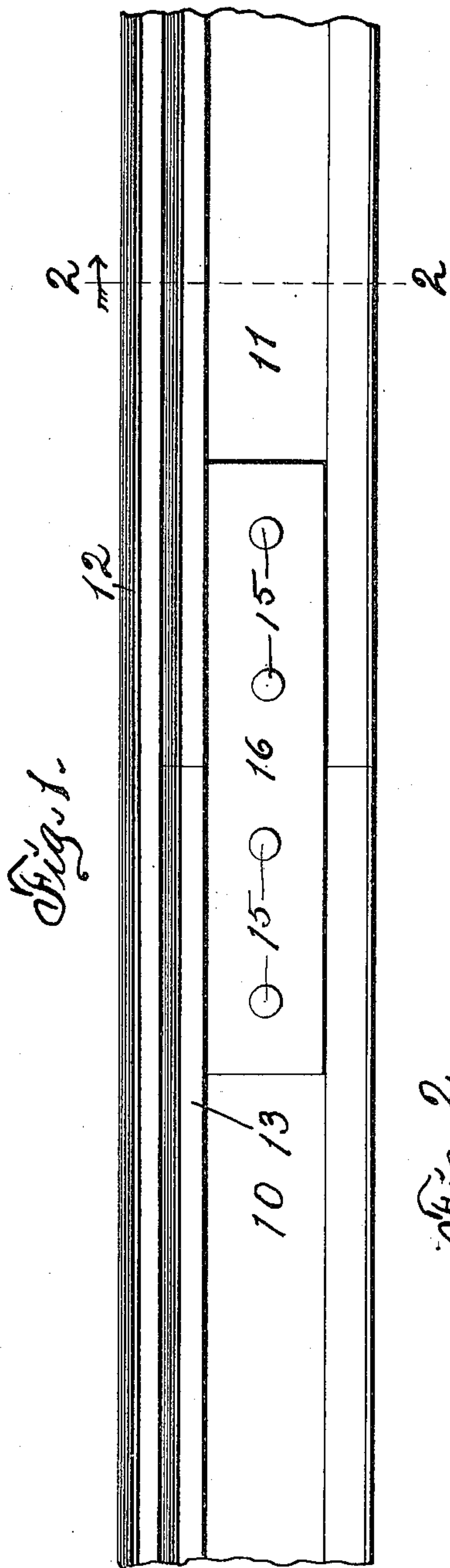
F. B. HUCKSTEP & E. P. HUDSON.

RAILWAY RAIL.

APPLICATION FILED APR. 10, 1911.

999,453.

Patented Aug. 1, 1911.



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# UNITED STATES PATENT OFFICE.

FRANCIS B. HUCKSTEP AND EDWIN P. HUDSON, OF DES MOINES, IOWA.

## RAILWAY-RAIL.

999,453.

Specification of Letters Patent.

Patented Aug. 1, 1911.

Application filed April 10, 1911. Serial No. 620,191.

*To all whom it may concern:*

Be it known that we, FRANCIS B. HUCKSTEP and EDWIN P. HUDSON, citizens of the United States of America, and residents of Des Moines, Polk county, Iowa, have invented a new and useful Railway-Rail, of which the following is a specification.

The object of this invention is to provide an improved construction for railway rails.

10 A further object of this invention is to provide an improved tread surface for railway rails.

15 A further object of this invention is to provide a removable and replaceable improved tread surface for railway rails.

A further object of this invention is to reduce the cost of constructing and increase the term of use of railway rails.

20 Our invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in our claims and illustrated by the accompanying drawing, in which—

25 Figure 1 is a side elevation, and Fig. 2 a cross-section on the line 2—2 of Fig. 1, illustrating one form of our improved construction.

30 In the construction of the device as shown the numerals, 10, 11 designate abutting end portions of T rails, which may be of any desired construction or proportion of parts or members, such as base, web and tread. In Figs. 1 and 2 the members 10, 11 are intended to represent old track rails already in position and in use.

35 The numeral 12 designates a supplementary tread, preferably formed of hard steel susceptible of resisting pressure and wear of railway trains traveling thereon. The tread 12 overlies, rests upon and covers the tread of the rails 10, 11 and one margin thereof is coincident with the inner margin 13 of the supporting rails. The tread 12 is formed with a downwardly extending flange 14 on its outer margin and said flange is shaped to the outer margin or projection of the tread of the rails 10, 11 and is fitted to and adapted to contact with the outer face of the webs of the rails 10, 11. The tread 12 and flange 14 overlap the joint between the rails 10, 11 and are held in place thereon and also assist in connecting said rails, by means of bolts 15 extending through the flange, the webs of the rails and a fish plate 16 of common form. The flange 14 may be

continuous through the length of the tread 12 or it may be broken as to continuity and have the form of ears or hooks of any desired length in the trend of the rails.

Constructed and mounted as illustrated 60 and described, the tread 12 forms a wearing surface to receive and support the wheels of a railway train or any part thereof and the flange 14, either continuously or broken, serves to connect said tread to the supporting rails. The tread as illustrated and described may be mounted on and secured to track rails already in use without changing the gage of said rails, inasmuch as the inner margins of the treads are coincident with the inner margins of the track rails and receive the wear of the wheel-flanges. When it is deemed advisable to change the gage of the track rails or in the laying of a new track, the relations of the treads to the rails may be reversed so that the flanges 14 cover the inner instead of the outer surfaces of the tread portions and web portions of the track rails and receive the wear of the wheel-flanges. In either event 80 the tread 12 may be employed to renew and extend the usefulness of worn railway rails or to increase the efficiency of railway rails of relatively lighter weight.

It will be observed that the construction 85 illustrated and above described will lessen and prevent the jar and vibration of abutting ends of rails when in use and supporting a moving train. Also that such construction will lessen and prevent the wear of the rolling stock heretofore caused by the jar and vibration of abutting ends of rails. Also such construction provides an improved means for uniting the rails in use and rendering the same practically continuous throughout the entire track inasmuch as the treads overlie and break joints with the abutting rails. Such construction also produces a stronger rail and one offering greater resistance to flexure and breakage 100 between its ends.

We claim as our invention—

1. A railway rail, comprising a T supporting rail, an auxiliary tread on the tread portion of the T supporting rail, and a flange 105 on one side only of said auxiliary tread, which flange is adapted to embrace a laterally projecting portion of the tread of the supporting rail, said flange adapted to be bolted to the web of the supporting rail, the 110



margin of the auxiliary tread opposite to the flange being flush with the free margin of the tread of the rail.

2. The combination of abutting T rails and flanged treads overlying said T rails, each flanged tread spanning a joint of the abutting supporting rails, the flanges of the treads adapted to be bolted to the webs of the abutting T rails, the flanges being on one side only of said treads, the opposite margins of the treads being flush with the free margins of the heads of the T rails.

3. The combination of railway rails and removable and replaceable overlying auxiliary treads mounted on the tread portions of the railway rails and breaking joints

therewith, said auxiliary treads formed with flanges on one side only, the opposite side margins of said auxiliary treads being flush with the adjacent margins of the railway rails, said flanges adapted to embrace and rigidly engage projections of the heads of the railway rails on one side only and also adapted to be bolted to the webs of said railway rails.

Signed by us at Des Moines, Iowa, this twentieth day of March, 1911.

FRANCIS B. HUCKSTEP.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."