

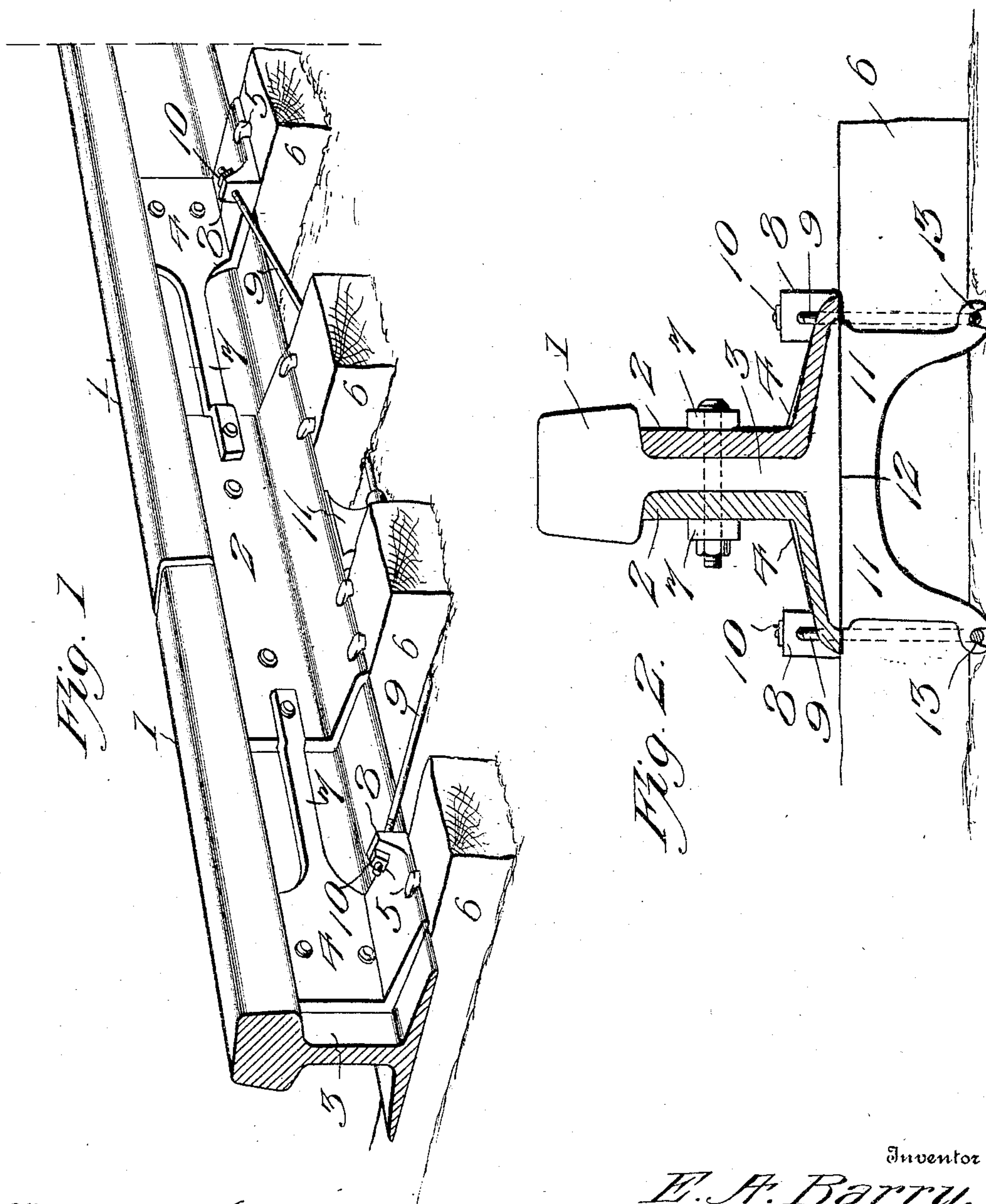
No. 774,642.

PATENTED NOV. 8, 1904.

E. A. BARRY.
RAIL JOINT.

APPLICATION FILED MAY 24, 1904.

NO MODEL.



Witnesses
Wm. North
Arthur D. Larson

Inventor
E. A. Barry

By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

EDWIN A. BARRY, OF SUTHERLAND, IOWA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 774,642, dated November 8, 1904.

Application filed May 24, 1904. Serial No. 209,460. (No model.)

To all whom it may concern:

Be it known that I, EDWIN A. BARRY, a citizen of the United States, residing at Sutherland, in the county of O'Brien and State of Iowa, 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 its object is to provide a combined tie support and joint which is of simple construction and which can be readily applied to ordinary rails.

A further object is to provide a device of this character which will prevent the adjoining ends of rails from sagging and which will rigidly support the ties adjoining the ends of the rails.

With the above and other objects in view the invention consists of oppositely-disposed holding-plates adapted to be bolted to the rails at points adjoining the ends thereof and to be secured to the ends of fish-plates, such as ordinarily employed for connecting the ends of rails. Each of these holding-plates has an ear thereon, and the ears of the holding-plates are connected by brace-rods which extend under the ties located beneath the ends of the rails and serve to support chairs which are fitted between the rods and the rail ends.

The invention also consists of 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 of rails having my improved joint thereon, and Fig. 2 is a transverse section through the joint.

Referring to the figures by numerals of reference, 1 1 are rails of ordinary construction having angular fish-plates 2 bolted thereon, so as to hold them securely connected. Bolted to opposite sides of the web 3 of each rail are holding-plates 4, which are angular in form and overlap the base-flanges of the rails. The spikes 5, utilized for securing the rails to the ties 6, also engage these holding-plates and assist the bolts in securing them in position. Arms 7 project from the holding-plates 4 to-

ward the fish-plates 2 and are bolted or otherwise secured thereto, and adjacent the lower edge of each holding-plate is an ear 8. The ears located on the outer sides of the rails 1 are connected by a rod 9, having threaded ends which extend through the ears and are retained within the ears by nuts 10. The ears located at the inner sides of the rails 1 are connected in the same manner by a rod 9, and these two rods project under the ties 6, which extend under the fish-plates 2. Chairs or blocks 11 are located under the abutting ends of rails 1 and contact at their inner edges, as shown at 12, and the lower edges of the chairs have longitudinally-extending grooves 13 therein which receive those portions of the rods 9 located between the ties 6, under which the rods extend. It will be seen that by turning the nuts 10 upon the rods 9 said rods will be tensioned and ties 6, arranged thereon, will be firmly supported and chairs 11 will be clamped against each other and against the lower faces of the rails 1, thereby producing a support therefor and preventing sagging and the resultant disadvantages.

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 device of the character described, the combination with fish-plates; of holding-plates secured to opposite ends of the plates, ears thereon, rods adjustably connected at their ends to the ears, and chairs detachably mounted upon the rods and contacting with each other.

2. The combination with rails having fish-plates at opposite sides of the abutting ends thereof; of holding-plates secured to the rails at opposite ends of the fish-plates, said holding-plates having arms secured to the fish-plates, ears upon the holding-plates, rods connecting the ears and adjustably secured there-

to, and chairs mounted upon the rods and bearing upon each other and upon the bases of the rails.

3. The combination with ties having abutting rails thereon, and fish-plates connected to said rails; of holding-plates secured to the rails adjacent the ends of the fish-plates, arms extending from the holding-plates and secured to the fish-plates, ears on the holding-plates, rods connecting the ears and adjustably secured thereto, said rods extending under the supporting-ties adjacent the fish-plates, and chairs detachably mounted upon the rods between the last-mentioned ties and contacting with each other and the bases of the rails.

4. In a device of the character described, the combination with fish-plates, and holding-plates at opposite ends thereof; of rail-supporting devices secured to the holding-plates,

and chairs mounted upon said devices for supporting the ends of rails.

5. In a device of the character described, the combination with fish-plates, and holding-plates at the ends thereof; of a rod adjustably connected at its ends to the holding-plates, and a chair detachably mounted upon the rod and adapted to support the ends of rails.

6. In a device of the character described, the combination with a fish-plate; of holding-plates secured to opposite ends of the fish-plate, ears thereon, a rod adjustably connected at its ends to the ears, and a chair mounted upon the rod for supporting the ends of rails.

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

EDWIN A. BARRY.

Witnesses:

WM. P. DAVIS,
S. B. CROSSER.