

No. 708,351.

Patented Sept. 2, 1902.

J. E. HAMMOND.
RAIL JOINT.

(Application filed Oct. 3, 1901.)

(No Model.)

Fig. 1.

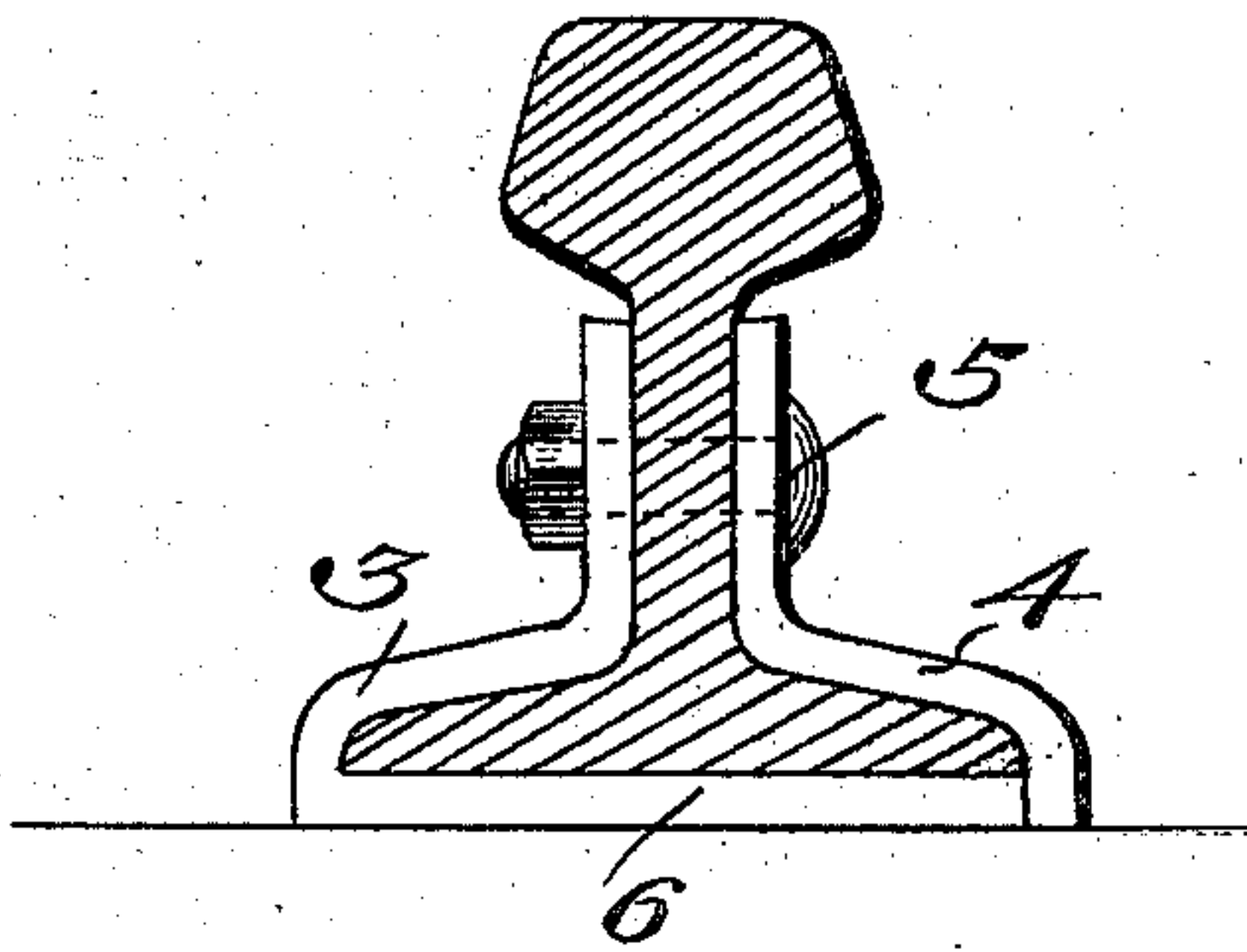
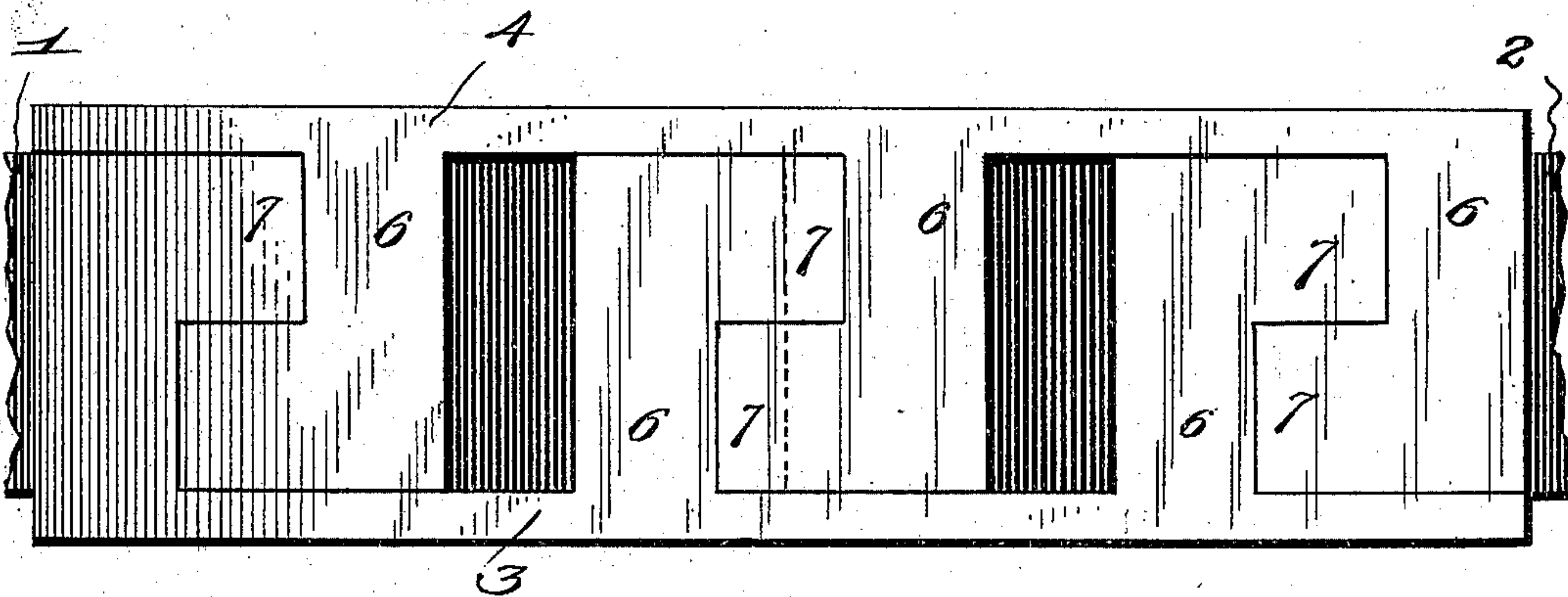


Fig. 2.



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JOHN E. HAMMOND, OF SULLIVAN, INDIANA, ASSIGNOR OF ONE-HALF TO
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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 708,351, dated September 2, 1902.

Application filed October 3, 1901. Serial No. 77,484. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. HAMMOND, a citizen of the United States, residing at Sullivan, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Rail-Joints; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make use the same.

This invention relates to improvements in rail-joints.

The object of the invention is to provide a rail-joint which is simple of construction and will effectually prevent the rails from spreading even in the event that the securing-bolts should become broken or forced out of place.

To this end the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a cross-section through one of the meeting rails, showing the fish-plates in end elevation. Fig. 2 is a bottom plan view.

Referring now more particularly to the drawings, the numerals 1 and 2 represent the meeting ends of two adjacent rails which are to be joined or coupled together, and 3 and 4 are fish-plates located upon opposite sides of the rails and united thereto by the transverse securing-bolts 5.

In accordance with my invention the fish-plates are provided upon their under sides with inwardly-projecting interlocking members which form supports for the rails, each of said interlocking members consisting of an arm or projection 6, having a right-angularly-extending lug 7. The interlocking members are arranged in pairs, with the lugs thereof projecting in alternately and reversely on opposite sides of the plates and are slidably connected together, so as to hold the two fish-plates from spreading and separating transversely or laterally of the rails. In addition the locking projections at the ends of the joint formed by the fish-plates are located one upon one fish-plate and the other upon the other fish-plate, and their lugs project upon opposite sides of the central line of the rails, thereby preventing the fish-plates and

rails from moving either longitudinally or laterally even in the event that the securing-bolts should become broken or unfastened, as the bolts which connect the fish-plates with the ties will prevent said plates from moving in unison in either direction. When the rails are mounted on the plates, the meeting ends thereof rest upon the central portions of the middle lugs of the plates, while the inwardly-projecting portions of the plates overlap the opposite sides of the upper surface portions of the base of the rails, the vertical terminal ends of said overlapping portions, made of the same length, so as to coact directly and independently with the opposite sides of the webs of the rails below the treads of the rails. When the base portions of the rails are mounted upon the plates, the meeting ends thereof rest upon the central portions of the middle lugs. The outer edge portions of the rails abut directly against the side walls of the plates, so as to be flush therewith, thereby preventing lateral displacement of the meeting ends of said rails, whereby the meeting ends of the tread of the rails are kept in a straight line with each other, so as to obviate wear on the outer edges of said meeting ends of said tread when the flanges of the car-wheels are passing over the same. The inwardly-projecting portions of the plates overlap the opposite sides of the upper surface of the base of the rails, the vertical terminal portions of said overlapping portions being constructed of the same length, so as to abut directly against the opposite sides of the web of the rails and permit of being secured thereto below the tread of the rails.

It will thus be seen that the invention provides a rail-joint which is simple of construction, being composed simply of two fish-plates, and that said plates are comparatively inexpensive of production and perform their stated functions in an effective manner.

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

In a rail-joint, the combination with the meeting ends of railroad-rails; of the fish-plates having pairs of arms with extensions at right angles therewith slidably connected one within the other so that the bases of the

meeting ends of the rails will rest centrally on the middle extensions of the plates, the sides of the plates being adapted to abut against the outer edges of the bases of the rails, said plates being also provided with inwardly-projecting portions which overlap and form flush joints with the opposite upper surfaces of the bases of the rails, and said inwardly-projecting portions extending vertically upward on opposite sides of the webs of the rails and secured flush therewith, whereby the bottoms, side edges and upper portions of the bases of the rails and the webs

thereof are wholly inclosed by the construction of said fish-plates, thereby forming a rigid joint and preventing the fish-plates and rails from moving either longitudinally or laterally, substantially as specified. 15

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 20

JOHN E. HAMMOND.

Witnesses:

W. S. BICKNELL,
WM. T. DENTHITT.