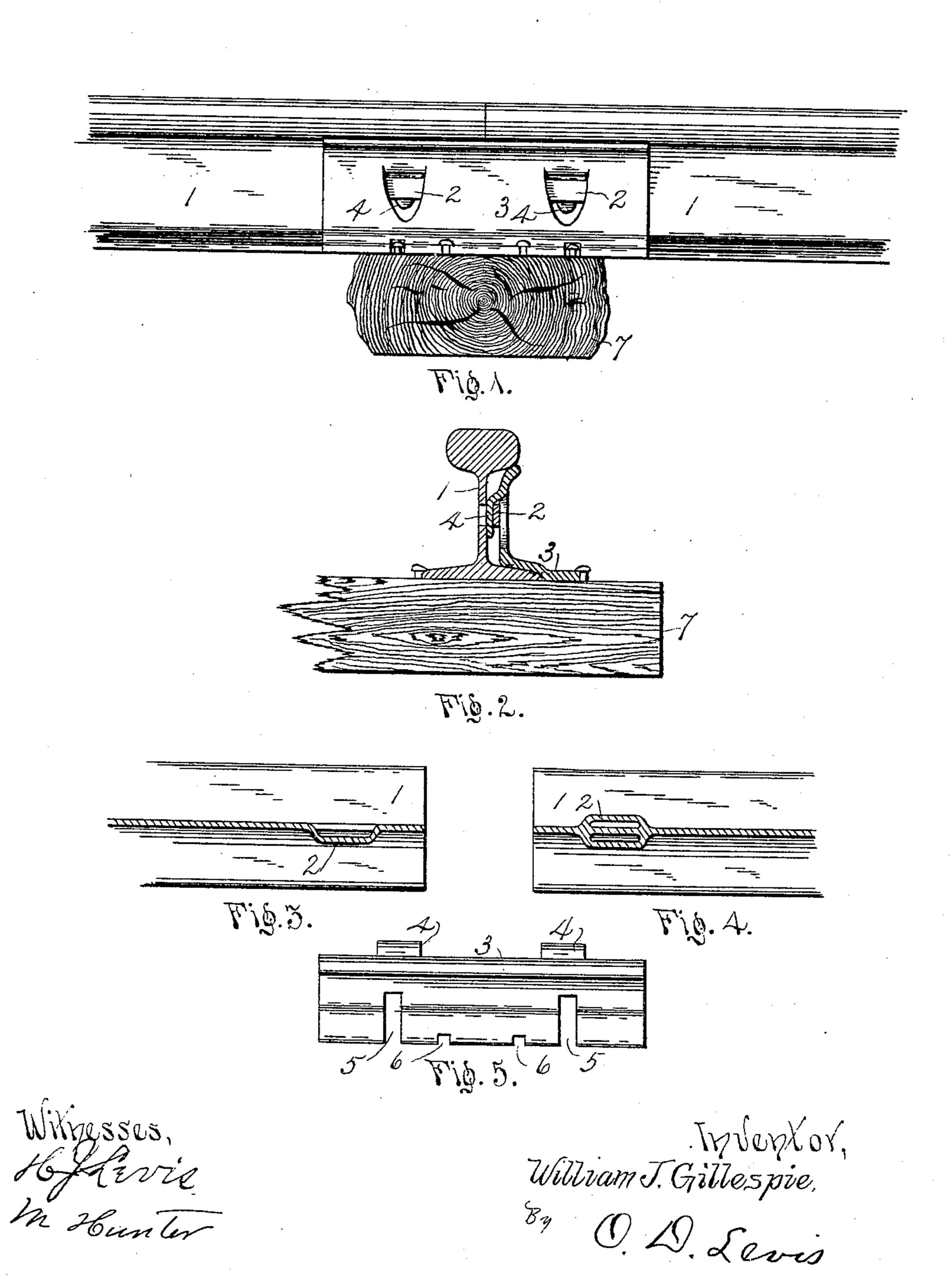
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## W. J. GILLESPIE.

RAIL JOINT.

APPLICATION FILED OUT. 26, 1903.

NO MODEL.



## United States Patent Office.

WILLIAM J. GILLESPIE, OF ALLEGHENY, PENNSYLVANIA.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 773,865, dated November 1, 1904.

Application filed October 26, 1903. Serial No. 178,529. (No model.)

To all whom it may concern:

Be it known that I, William J. Gillespie, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Rail-Joints, of which improvement the following is a specification.

My invention relates to rail-joints; and its object is to provide a rail-joint which shall object is dispense with bolts.

My invention consists of certain novel arrangements of details and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings like charac-

15 ters refer to like parts throughout.

Figure 1 is a side elevation of my device assembled. Fig. 2 is a section therethrough. Fig. 3 is a sectional view of a rail end. Fig. 4 is a modified form thereof. Fig. 5 is a detail of my fish-plate.

The numerals 1 indicate a pair of rail ends. Ears 2 are formed from the webs thereof, as shown. A fish-plate 3 is provided with tongues 4, adapted to fit down into the ears 2 and so 25 arranged as to size and shape as to nearly fill the openings in the ears in which they are inserted, and thus hold the rail ends in proper position, while allowing for the expansion and contraction of the same. The amount of move-3° ment allowed may of course be regulated by the relative proportions of the ears and the tongues on the fish-plate. The fish-plate is further cut away at 5 5 to permit the rail end being spiked down, if desired, and is further 35 provided with spike-notches 6 6 to prevent its movement on the tie (indicated by 7) in a direction longitudinal of the rail when spiked to said tie. In cross-section this fish-plate partially conforms to the shape of the rail cross-40 section, so as to provide a firm and secure bearing and joint.

In assembling my device it is only necessary to lay the two rail ends on the tie which is to be under the joints, hook the fish-plates in their position, and spike the whole down. 45

I thus provide a simple and efficient device of the kind described and for the purpose specified.

It is obvious that changes may be made in my device. For instance, the ears may be 50 formed on and not from the webs or the arrangement may vary. (See Fig. 4.) The number of ears and tongues may also be varied at will as found desirable. I do not, therefore, desire to confine myself to the exact form 55 herein shown and described, but wish to include all such as properly come within the scope of my invention.

Having thus described my invention, I claim—

1. In a rail-joint, a pair of rail ends, ears on the webs thereof, a fish-plate, and tongues formed thereon to engage said ears.

2. In a rail-joint, a pair of rail ends ears formed from the webs thereof by cut and 65 punched portions, a fish-plate having tongues formed thereon to engage said ears, notches in the edge thereof to permit the rail ends being spiked down and spike-notches, and spikes whereby the rail ends and fish-plates may be 70 held in their proper position, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

## WILLIAM J. GILLESPIE.

In presence of— M. Gillis, F. O. Henzi.