

(No Model.)

J. F. WHITAKER.
RAILROAD RAIL JOINT.

No. 549,084.

Patented Oct. 29, 1895.

Fig. 1.

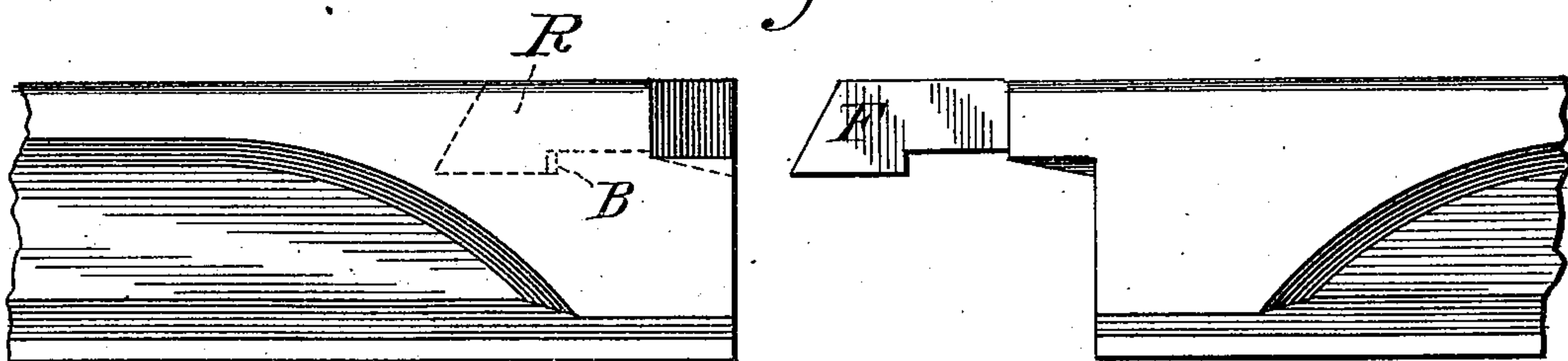


Fig. 2.

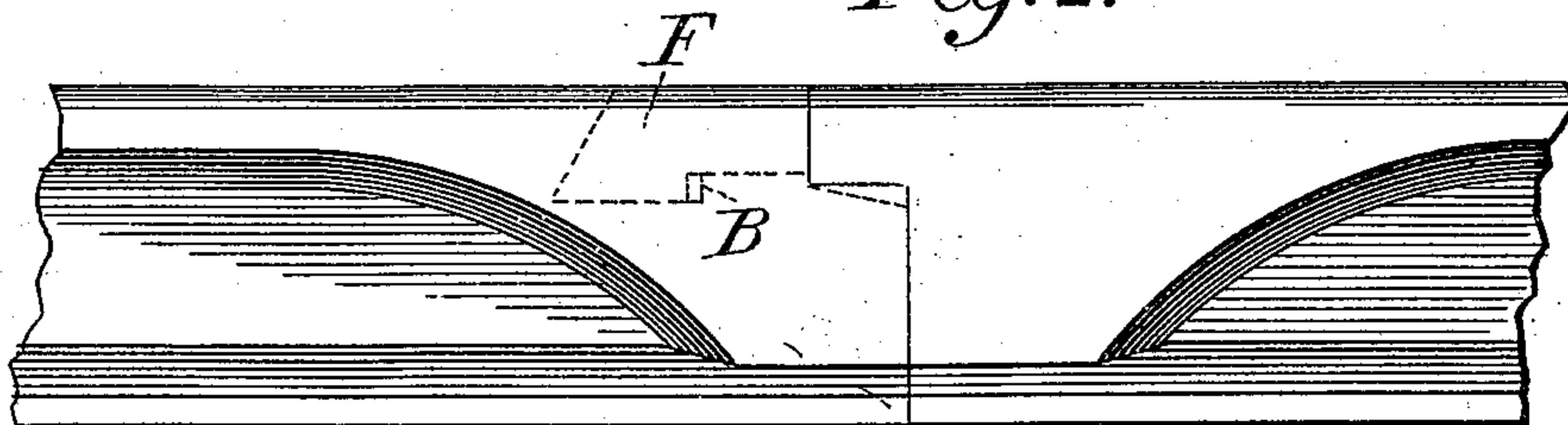


Fig. 3.

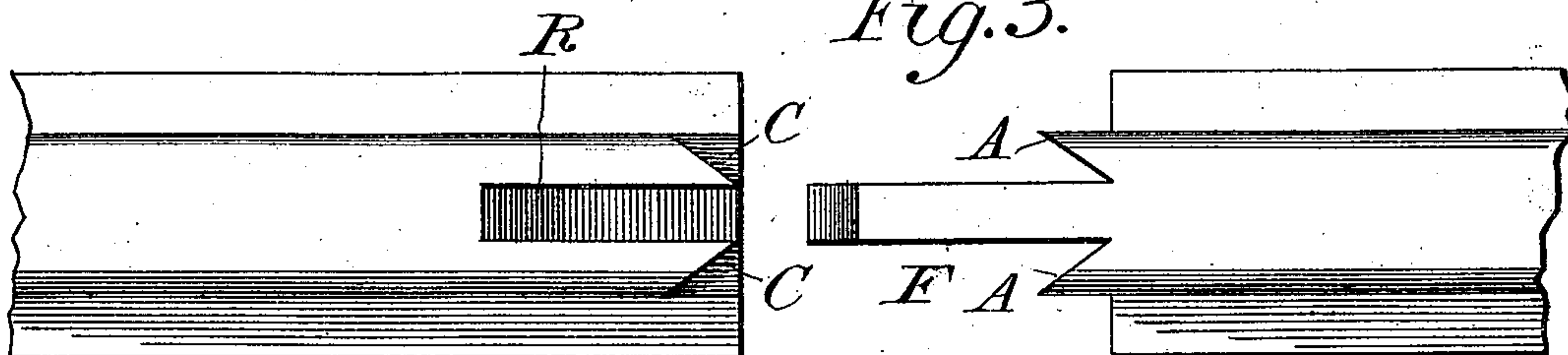
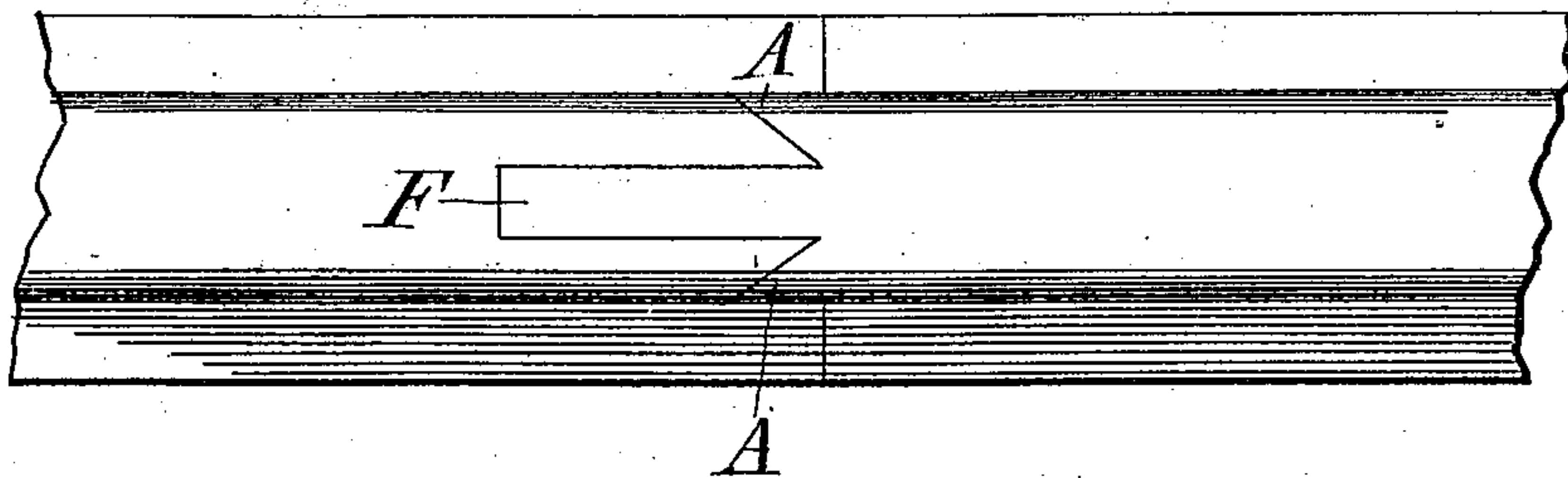


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN FRANCIS WHITAKER, OF CRYSTAL, ASSIGNOR OF ONE-HALF TO
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RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 549,084, dated October 29, 1895.

Application filed February 23, 1895. Serial No. 539,470. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRANCIS WHITAKER, a citizen of the United States, residing in the township of Crystal, in the county of Oceana and State of Michigan, have invented a certain new Improvement in Railroad-Rails and the Coupling of the Same, of which the following is a specification.

My invention relates to a new way of constructing railroad-rails so they can be coupled together without the use of the straps of iron now in common use, which are placed along the side of the rail to hold them in place and bolted together.

My invention constructs the ends of the rail by adding thereto a projecting tenon from four to ten inches long, according to the size of the rail, the end of which is slanted to an angle of sixty (60) degrees, and also two small triangular-shaped projections from the top of the rail. The other end is constructed with a groove, slot, and shoulders, into which and upon which the said tenons and triangular projections rest when coupled together.

To couple this invention together I place the rail containing the grooved end down first, then place the tenon of another rail in the slot and elevate the other end, then push them together, then drop the end to a level with first rail, and they are held securely in place by a shoulder on the other side of the tenon.

The ends of the rail are constructed full for about twelve inches from each end, in order to make it strong, as shown in model and drawings.

The slot in the groove is made longer than the shoulder on the under side of the tenon, in order to allow for the contraction and expansion of the rail.

The objects of my invention are, first, to construct the railroad-rails so they can be coupled without the extra expense of the side straps and bolts; second, to save the time of making the old-fashioned coupling, as above described; third, to obtain a solid union and preserve a smooth track. Where the rails are united in the old way the ends soon crush off and make a sag or rough place in the track. By the use of my invention this will never happen, or the sides of the rail are made full and will never crush off and make a rough spot.

Figure 1 shows a side view of the ends of the rail before they are coupled together. Fig. 2 represents a side view of the two ends of the rail coupled together. Fig. 3 shows a top view of the ends of the rail before they are coupled. Fig. 4 shows a top view of the rails coupled together and in use.

Similar letters refer to similar parts throughout the several views.

F represents the projecting tenon with the shoulder on the under side.

R represents the groove and slot into which the tenon and shoulder F is placed when coupled.

B represents the space in the slot in the bottom of the groove left to accommodate the contraction of the rails.

A represents the triangular-shaped projection on each side of the tenon F, which rests on the shoulder C when the rails are coupled and united together.

I claim as my invention and desire Letters Patent for—

1. A railroad rail with one end constructed with a projecting tenon with a shoulder on the under side thereof which is represented by F., in Fig. 1., the end of which is slanted to an angle of sixty degrees and also with two triangular shaped projections A A., in Fig. 3., from the top of the rail and the other end is constructed with a groove with a slot in the bottom, R., and two shoulders C C., upon which rest the two triangular shaped projections A A., when coupled together.

2. In a coupling for rails of any kind, a coupling having at one end a projecting tenon with a shoulder on the under side thereof, as at F, the outer end of said tenon being inclined at an angle of sixty degrees, and also having two triangular shaped projections as at A, A, the end of the adjoining rail, being provided with a groove having a slot as at R and with two recesses C C to receive the projections A, A, when coupled together, substantially as described.

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Witnesses:

JOSEPH EVANS,
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