

No. 713,913.

Patented Nov. 18, 1902.

J. W. NOWACK.

RAIL JOINT.

(Application filed Jan. 10, 1902.)

(No Model.)

Fig. 1

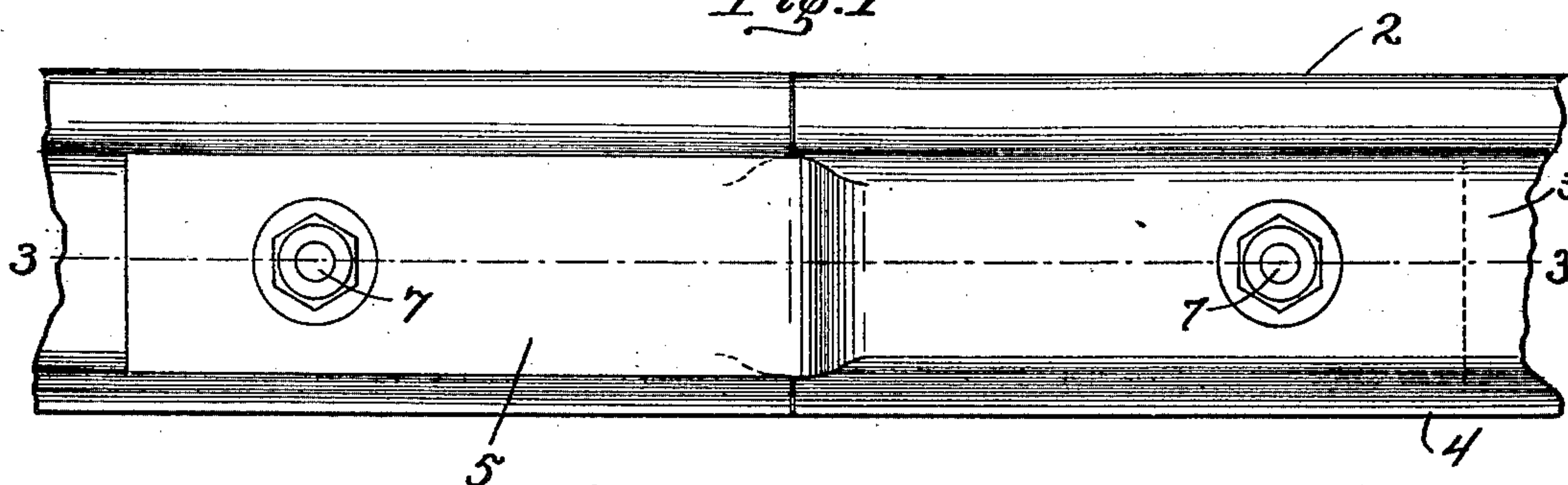


Fig. 2

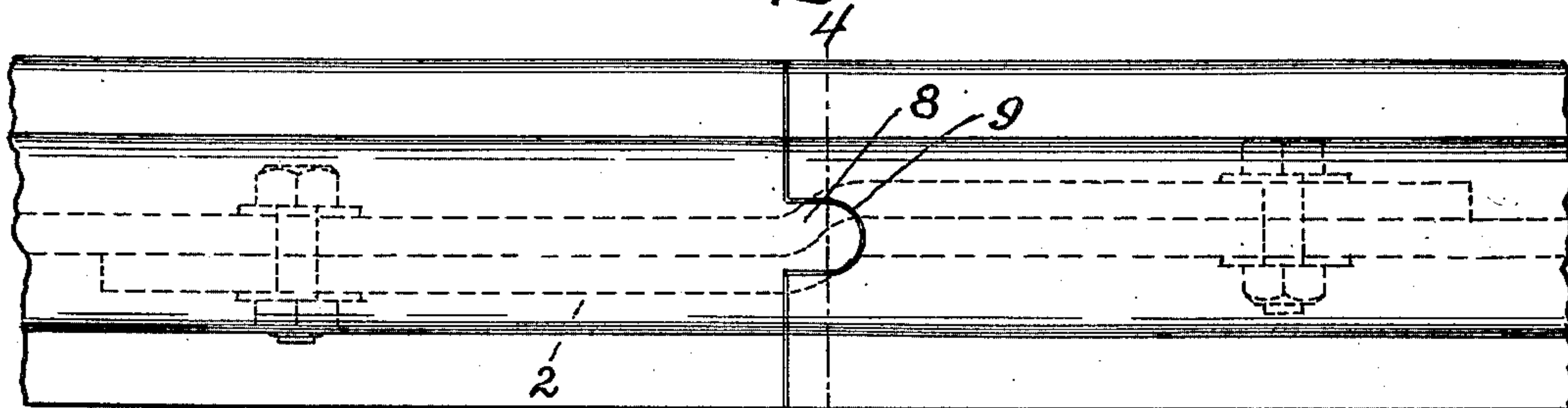


Fig. 3

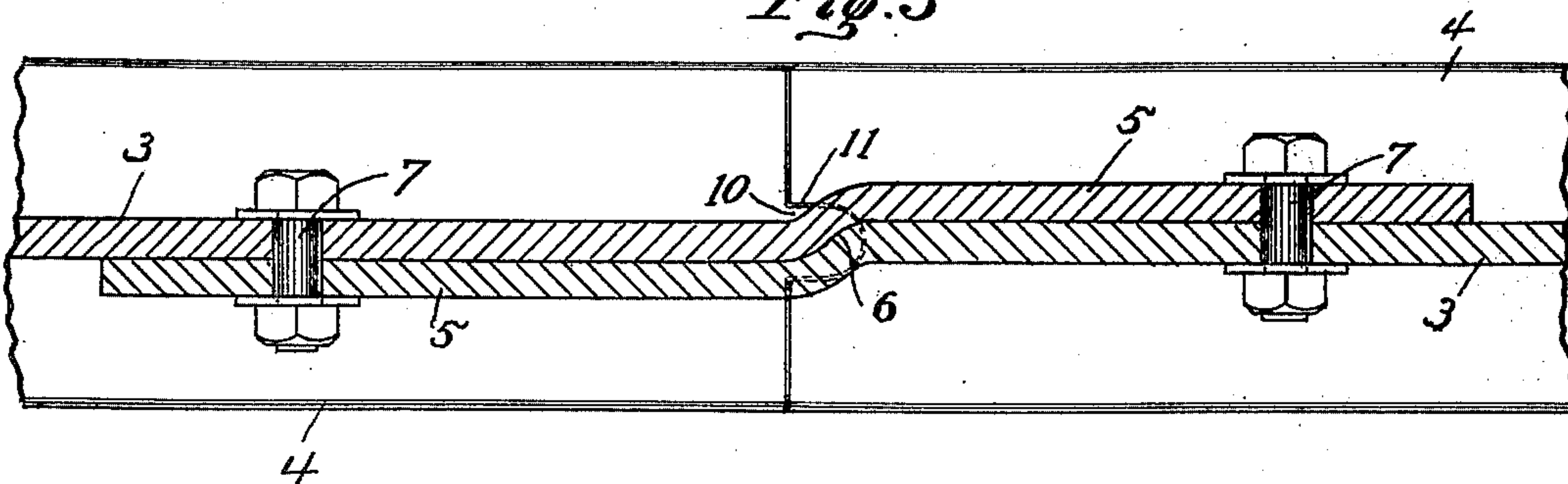
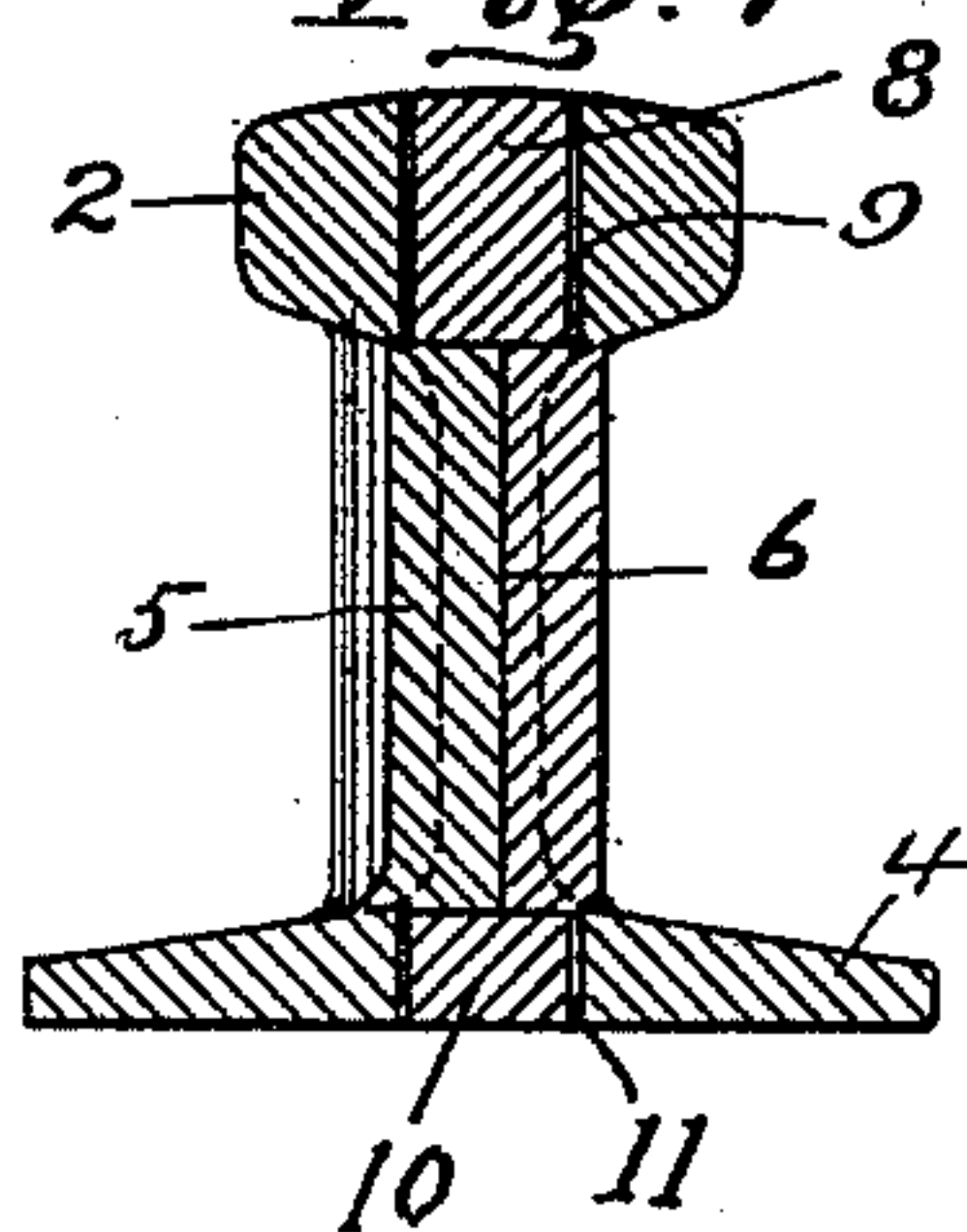


Fig. 4



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN W. NOWACK, OF PITTSBURG, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 713,913, dated November 18, 1902.

Application filed January 10, 1902. Serial No. 89,138 (No model.)

To all whom it may concern:

Be it known that I, JOHN W. NOWACK, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain improvements in joints for railroad-rails; and it consists, primarily, in providing the web or body of the rail with a longitudinal arm or extension which overlaps the web of the abutting rail, so that in joining two rails each is overlapped at the joint by the arm extending from the other, thus effecting a most substantial coupling without the use of fish-plates.

A further object is to interlock the abutting rail ends by forming them with complementary projections and depressions.

In the accompanying drawings, Figure 1 is a view in side elevation of my improved rail-joint. Fig. 2 is a plan view of the same. Fig. 3 is a sectional plan view taken on the line 3 3 of Fig. 1. Fig. 4 is a vertical cross-sectional view taken on line 4 4 of Fig. 2.

Referring to the drawings, 2 represents the rail-head, 3 the web or body, and 4 the oppositely-flanged base.

In Figs. 1, 2, and 3 of the drawings, wherein two rails are united, each rail is provided at its end with a longitudinally-extending arm or projection 5, which is preferably of the same depth or width as web 3, of which it is practically a continuation. Arm or extension 5 is laterally deflected the thickness of the web, as shown in Figs. 2 and 3, so as to bear flatly against the web of the abutting rail, and this deflection is preferably effected by the curved offset 6, the offsets of abutting rails exactly coinciding, as shown in Figs. 2 and 3. The overlapping arms or extensions 5 and rail-webs 3 are united by bolts 7, and by this means the usual coupling-bars or fish-plates are entirely dispensed with.

The heads 2 of abutting rails are formed, preferably, with coincident rounded projection 8 and rounded depression 9, and a corresponding projection 10 and depression 11

are formed at the juncture of the rail-bases, and by this means the rail heads and bases are interlocked and caused to resist lateral strain in a most effectual manner. The construction is preferably such that the head and base interlocking elements are in line vertically with the curved offset 6 of the longitudinal extensions 5.

While I prefer to interlock the rail heads and bases in conjunction with the overlapping longitudinal web extensions, yet the latter may be used alone without departing from the spirit of the invention, and the same is true if used alone of the interlocking head and base construction.

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

1. In a rail-joint, the combination of two rails having their heads and base portions terminating in vertical right-angle faces, the faces of the head and base portion of each rail being in line vertically whereby they are adapted to form transverse vertically-alining head and base portion joints, the web of each rail formed with a longitudinal laterally-deflected extension which overlaps the web of the adjacent rail, and securing means, substantially as described.

2. In a rail-joint, the combination of two rails having their heads and base portions terminating in vertical lines whereby they are adapted to form vertically-alining head and base portion joints, said head and base extremities formed with interlocking projections and depressions, the web of each rail formed with a longitudinal extension laterally deflected and adapted to overlap the web of the other rail, the deflections of said web extensions being between and in vertical line with the interlocking head and base portion extremities, and securing means, substantially as described.

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

JOHN W. NOWACK.

Witnesses:

J. M. NESBIT,
ALEX. S. MABON.