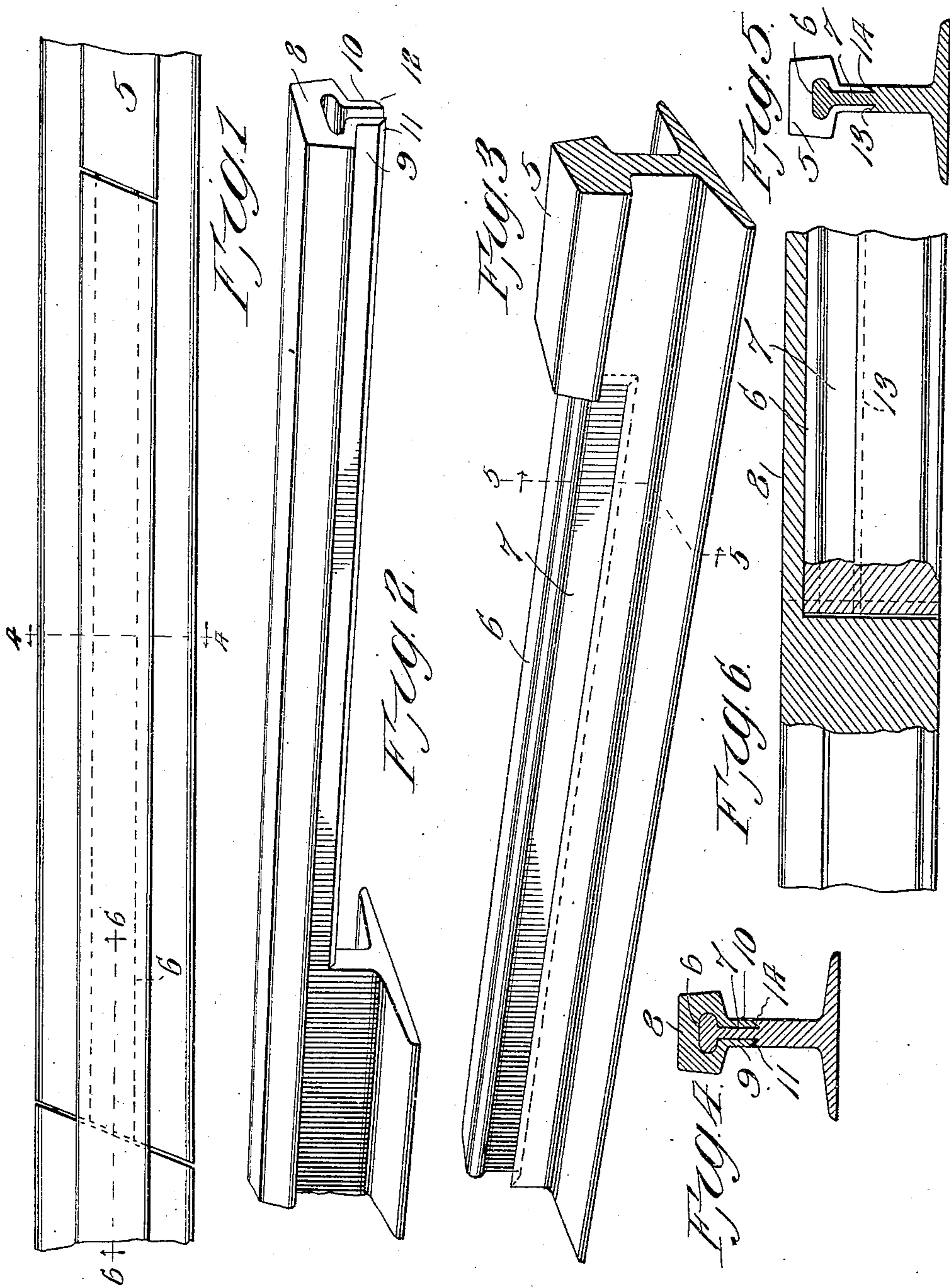


T. K. DIEHL.
RAIL JOINT.
APPLICATION FILED OCT. 28, 1908.

931,577.

Patented Aug. 17, 1909.



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UNITED STATES PATENT OFFICE.

THOMAS K. DIEHL, OF ALLENTOWN, PENNSYLVANIA.

RAIL-JOINT.

No. 931,577.

Specification of Letters Patent.

Patented Aug. 17, 1909.

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To all whom it may concern:

Be it known that I, THOMAS K. DIEHL, a citizen of the United States, residing at South Allentown, in the county of Lehigh and State of Pennsylvania, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to improvements in rail joints and has relation more particularly to that class thereunder known as scarfs.

The primary object of the invention is to provide a device of this character wherein both sections of the scarf are so formed as to dispense with the necessity of using bolts, splice bars and the like, for interlocking the different sections of the joint.

Another object of the invention is the provision of a rail joint comprising two sections, one of said sections having its web and tread portions cut away, forming a reduced head and web; while the other section is formed with a main channel head and also has a portion of its base and web cut away and permitting the two sections of the joint to be permanently interlocked.

A further object of the invention is to provide a device of this character whereby oppositely disposed longitudinal dovetailed recesses are formed at the base portion of the reduced web and adapted for the reception of the oppositely disposed chamfered or dovetail edges of the depending extensions of the channeled main head.

A still further object of the invention is the provision of a device of this character which is simple in construction, efficient in practice and which may be manufactured and sold at a comparatively low cost.

With the above and other objects in view the invention consists in the details of construction and in the combination and arrangement of parts which will hereinafter be more fully described and claimed.

In the accompanying drawing, Figure 1 is a plan view of my device, Fig. 2 is a detail perspective view of one of the wire sections having a portion of its web and face cut away, Fig. 3 is a detail perspective view of one of the wire sections having a portion of its tread and web cut away, Fig. 4 is a transverse sectional view taken on line 4—4 of Fig. 1, Fig. 5 is a transverse sectional view

taken on line 5—5 of Fig. 3, and Fig. 6 is a view taken on line 6—6 of Fig. 1, a portion thereof being shown in section.

Referring to the drawing for a more particular description of the same my improved scarf comprises two sections designated by the numerals 4 and 5. A portion of the tread and web of section 5 is cut away forming a reduced head 6 and a reduced web portion 7; while the other section 4 is provided with a channeled main head 8 formed with oppositely disposed depending extensions 9 and 10. The said channeled head and depending extensions are so constructed as to receive the reduced head and web portions of section 4. The oppositely disposed depending extensions are formed with longitudinal chamfered or dovetailed edges 11 and 12. The reduced web portion 7 has formed at its base portion oppositely disposed longitudinal dovetailed recesses 13 and 14 which are adapted to receive the said chamfered or dovetailed edges 11 and 12 thereby forming a tight interlocking joint and also dispensing with the use of bolts, splice bars and the like. When a car runs over a portion of the tread adjacent to the meeting ends of the rails, where these longitudinal dovetailed recesses are formed, the rails have a tendency to ride down these inclines or dovetailed recesses, thereby forcing the depending extensions to jam closer to the reduced web portion 7.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative and that such changes may be made when desired as are within the scope of the claim.

Having thus fully described the invention what is claimed as new is:—

A rail connection made up of meeting ends of railroad rails, one of said rail ends having its tread portion reduced in sectional dimensions and its web portion reduced in thick-

ness for a portion of its height, said reduced web portion having formed at its base portion oppositely disposed dovetailed recesses, the other rail end being formed in the tread
5 portion with an opening to receive and fit the reduced tread portion of the first rail end and having extensions depending from said tread portion, said depending extension being formed with dovetailed edges adapted to

fit in the said dovetailed recesses thereby forming a tight interlocking joint.

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

THOMAS K. DIEHL.

Witnesses:

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WM. H. HEIST.