(No Model.)

F. A. HUMME.

JOINT FOR RAILROAD RAILS.

No. 586,309 Patented July 13, 1897.

Fig. 1.

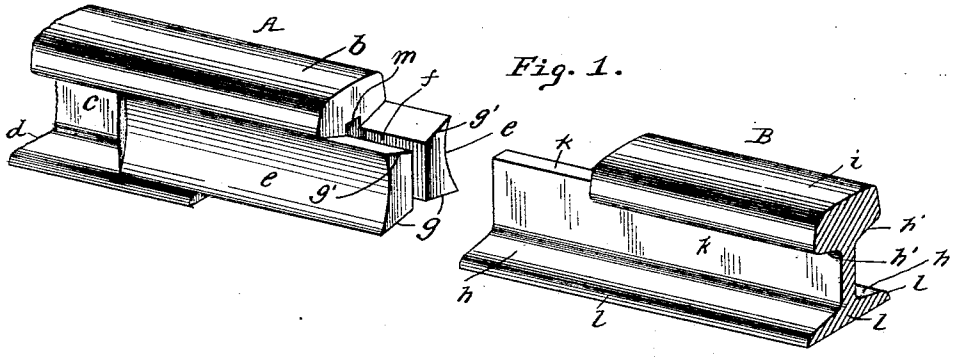


Fig. 2.

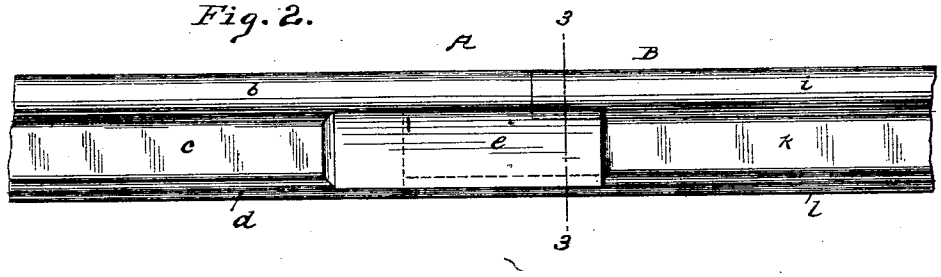
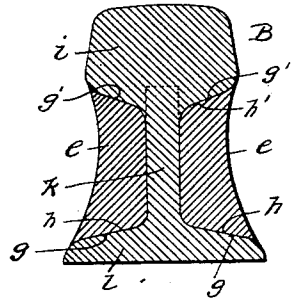


Fig. 3.



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UNITED STATES PATENT OFFICE.

FREDERICK A. HUMME, OF CHRISTY PARK, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO DAVID J. KREIMEIER, OF PITTSBURG, PENNSYLVANIA.

JOINT FOR RAILROAD-RAILS.

SPECIFICATION forming part of Letters Patent No. 586,309, dated July 13, 1897.

Application filed February 4, 1897. Serial No. 621,982. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. HUMME, a resident of Christy Park, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Joints for Railroad-Rails; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to joints for railway-rails.

The object of my invention is to provide a joint for railway-rails in which the use of fish-plates and bolts are dispensed with, the adjoining ends of the rails being so interlocked as to form of themselves a very secure connection, while at the same time the end of one rail will not rise or fall below the level of the end of the adjoining rail, whereby a smooth and even joint is insured.

My invention comprises, generally stated, a rail having a web at one end thereof with a seat formed therein, said web extending beyond the head and foot of the rail, and a rail having its web and foot extending beyond its head, the web of said last-mentioned rail entering said seat in the web of the first-mentioned rail, the heads and feet of the rails abutting and the enlarged web of the first-mentioned rail extending beyond the line dividing the heads of said rails and filling the space in said last-mentioned rail between its head and foot.

To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of the adjoining ends of rails constructed according to my invention ready to be connected. Fig. 2 is a side view of the rails connected. Fig. 3 is a cross-section on the line 3 3, Fig. 2.

Like letters indicate like parts in each of the figures.

The rail A may be an ordinary T-rail having the head *b*, web *c*, and the foot *d*. The web *c* is enlarged at the end of the rail, as at *e*. A seat or recess *f* is formed in the enlarged web *e*. This web *e* extends beyond the head *b* and foot *d* and has the beveled edges *g g'*, corresponding to beveled faces *h h'*, respectively, on the foot and head of the adjoining T-rail B. This rail B has the head *i*, web *k*, and foot *l*. The web *k* and foot *l* extend beyond the head *i*.

To make the joint, the web *k* of the rail B is inserted in the seat *f* of the web *e* of the rail A, said web *k* being adapted to fit snugly therein. In case the seat *f* is not of sufficient height to receive the web *k* a groove *m* may be formed in the head *b* of the rail A. The web *k* enters the seat *f* until the head *b* comes in contact with the head *i* and the foot *d* comes in contact with the foot *l*. With the parts of the rails in this position, as shown in Fig. 2, the web *e* will extend beyond the line dividing the heads *b* and *i*, and the beveled edges *g g'* of said web will be in contact with the beveled faces *h h'*, respectively, of the head and foot of the rail B. By this construction the ends of the rails are so interlocked that any tendency on the part of either of the adjoining ends to be raised or depressed by the action of the cars traveling thereon will be resisted by the other. This is due to the fact that the web *e* extends beyond the dividing-line of the rails. If there is any strain tending to raise the end of the rail A, adjoining the rail B, the web *e* being under the head of the rail B prevents any upward movement on the part of the rail A. Furthermore, the web *e* supports the head *i* of the rail B.

The beveled edges *g* engaging with the beveled faces *h* of the head of the rail B tend to hold said head against lateral movement and at the same time a more secure joint is obtained.

By my invention I provide a joint which is very secure and yet one in which the rails are free to expand or contract longitudinally. The heads of the rails where they meet present an even smooth surface which will prevent the severe jars and strains to which the rolling-stock of railways is subjected, due to the unevenness at the rail-joints.

What I claim as my invention, and desire to secure by Letters Patent, is—

A joint for railway-rails consisting of a rail

having a web extending beyond the head and foot thereof, said web having a seat formed therein, and a rail having its web and foot extending beyond the head, said web entering the seat in said first-mentioned rail, and the web of said first-mentioned rail extending beyond the line dividing the heads of said rails, substantially as set forth.

In testimony whereof I, the said FREDERICK A. HUMME, have hereunto set my hand.

FREDERICK A. HUMME.

Witnesses:
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