A. G. HEINLE. RAIL JOINT.

(Application filed May 16, 1900.)

(No Model.) Fig.T. 70 Fig. 3. Witnesses EW.Hark J. Neynoed 5. St. Evertle Eletorney 5

United States Patent Office.

ALBERT G. HEINLE, OF ESPLEN, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 663,894, dated December 18, 1900.

Application filed May 16, 1900. Serial No. 16,850. (No model.)

To all whom it may concern:
Be it known that I, Albert G. Heinle, a citizen of the United States of America, residing at Esplen, in the county of Allegheny 5 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 new and useful improvements in rail-joints, and has for one object the provision of novel means for connecting the meeting ends of a pair of rails in a quick, inexpensive, and substantial

15 manner.

The invention has for its further object to construct a rail-joint which will be extremely simple in construction, strong, durable, efficient when in use, and comparatively inex-20 pensive to manufacture.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference will be 25 employed to designate like parts through the

different views, in which-

Figure 1 is a perspective view of a pair of rails, showing my improved joint in position. Fig. 2 is a detail perspective view of the elon-30 gated washer, which is mounted on the fastening-bolts and carries an integral block for engagement in a recess provided therefor in the side of the rail-tread. Fig. 3 is an end view of the rails joined together in accord-35 ance with my invention. Fig. 4 is a detail perspective view of a part of one of the rails.

Referring to the drawings by referencenumerals, 1 and 2 indicate the rails, which may be of the ordinary shape or of especial 40 shape, if desired, and these rails are cut away at 3 on one side of their tread at the ends of the rails, so that when the ends of the rails are brought together a substantially V-shaped recess is formed at the side of the tread di-45 rectly opposite the joint between the two rails. The rails are provided with the usual bolt-

holes 5 to receive the fastening-bolts 6, held

by nuts 7. The fish-plates 8 may be provided with longitudinally-extending shoulders 9 on their inner face, or they may be of the ordi- 50 nary construction. These fish - plates are held in position by the bolts 6, and mounted upon these bolts between their nuts 7 and one of the fish-plates is an elongated washer 10, which has centrally arranged on its upper 55 edge an integral block 11 of substantially triangular shape that is adapted to fit in the substantially triangular recess in the side of the rail-tread and to have its upper face flush with the top of the tread of the rails.

This construction of rail-joint has been found to be an effectual, strong, and durable one, serving to keep the rails in alinement with each other, and permits of the usual expansion and contraction of the rails.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is-

1. In a rail-joint, the combination with a pair of rails provided with a suitable recess, 70 of a pair of fish-plates suitably secured thereto, a washer arranged at the side of one of said fish-plates, and a fastening-block carried by said washer and adapted to be seated within said recess, substantially as set forth.

2. The combination with the rails, which are cut away on corresponding sides of the tread at their meeting ends, of the fish-plates having shoulders to abut against the web of the rail, said fish-plates having their upper 80 edges abutting with the underneath faces of the rail-tread, the bolts for securing said fishplates to the rails, and an elongated washer mounted on said bolts, said washer carrying a block adapted to be seated within the re- 85 cess of the rails, substantially as shown and described.

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

ALBERT G. HEINLE.

Witnesses: JOHN NOLAND, N. L. BOGAN.