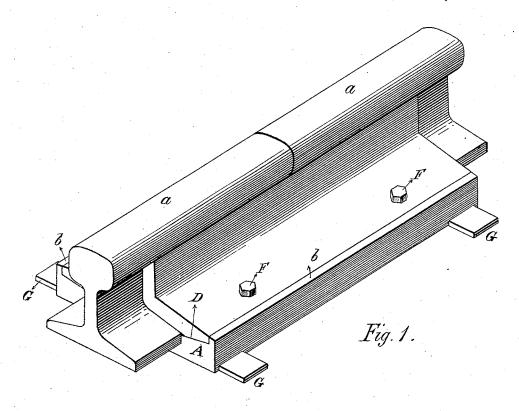
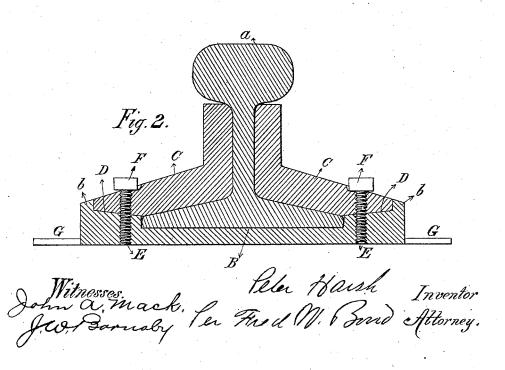
## P. HARSH.

## RAILWAY RAIL JOINT.

No. 306,076.

Patented Oct. 7, 1884.





## UNITED STATES PATENT OFFICE.

PETER HARSH, OF MALVERN, OHIO.

## RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 306,076, dated October 7, 1884.

Application filed April 15, 1884. (No model.)

To all whom it may concern:
Be it known that I, Peter Harsh, a citizen of the United States, residing at Malvern, in the county of Carroll and State of Ohio, 5 have invented certain new and useful Improvements in Railway-Rail Joints; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, 10 making a part of this specification, and to the letters and figures of reference marked thereon, in which-

Figure 1 is a perspective view. Fig. 2 is a

transverse section.

The present invention relates to that class of railway-rail joints in which the ends of railway-rails are held in proper position by means of a base-plate and angle-bars.

Similar letters of reference indicate corre-

20 sponding parts in the drawings.

In the accompanying drawings, A represents the base-plate, which is of the form shown in the drawings, and may be formed in long rails or pieces and cut into pieces of the de-25 sired length. This base plate is provided with a groove or recess, B, and is of a size to receive the base of the rail a. Flanges or ribs b are formed upon the sides of the base-plate A, and are so arranged that the outer edges of 30 the angle-bars C will fit against the inner sides of the flanges b, as seen in Fig. 2. The bottom or under side of the angle-bars C rest upon the shoulders D and the rail a. The top or upper part of the rail a rests upon the angle-bars C, 35 as seen in Fig. 2. The base-plate A is pro-

vided with threaded openings E, and are for the purpose of receiving the bolts F, said bolts being placed, as shown, so as not to interfere with the expansion and contraction of the rails a.

In use the base plate A is placed in the desired position, and the rails a placed in the position shown in Fig. 1, when the angle-bars C are slipped into proper position, and all of said parts firmly held by the bolts F, the base- 45 plate A being securely held to the cross-ties by spiking over the projections G.

It will be seen that by my peculiar arrangement I am enabled to form a joint that will be easily adjusted, and at the same time will 50 permit of the expansion and contraction of the railway-rails.

I am aware that railway-rail joints have heretofore been made using angle-bars, and hence do not claim broadly; but

What I do claim, and desire to secure by Let-

ters Patent, is-

The combination of the base-plate A, provided with the recess B, the flanges b, the shoulders D, the threaded openings E, the 60 bolts F, the projections G, and the angle-bars C, all arranged substantially as shown, and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in presence of 65

two witnesses.

PETER HARSH.

Witnesses:

GEO. GAMBEL, J. G. MURDOCK.