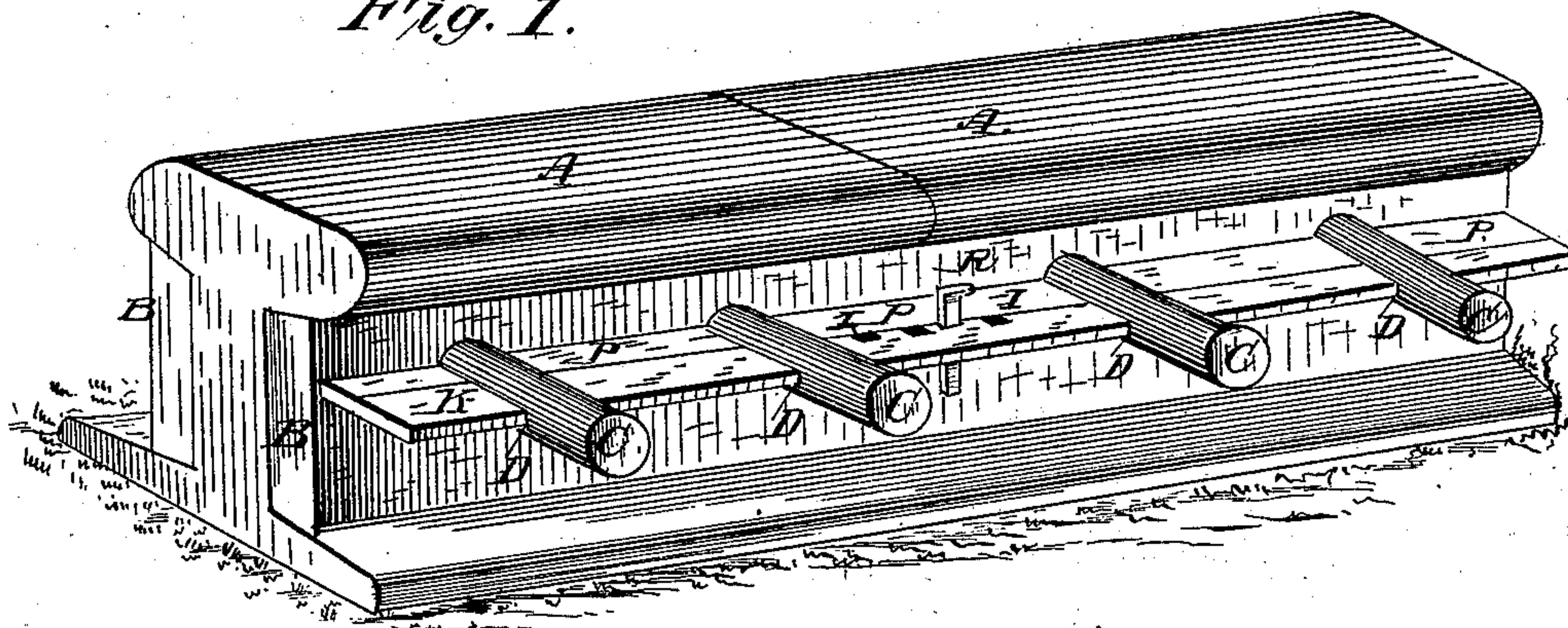


W. F. ASH.  
Rail-Joint.

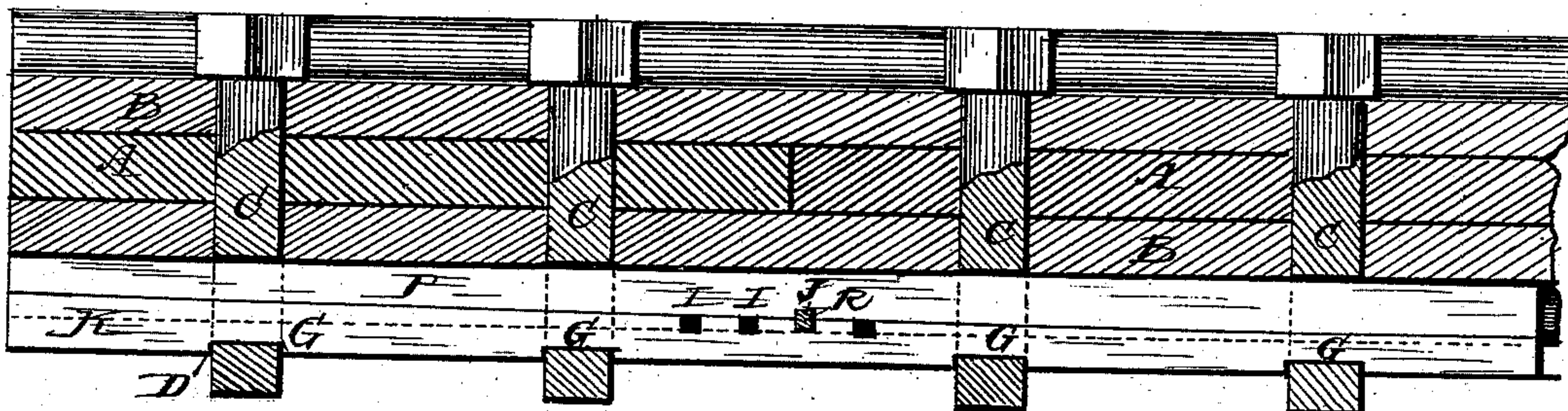
No. 225,266.

Patented Mar. 9, 1880.

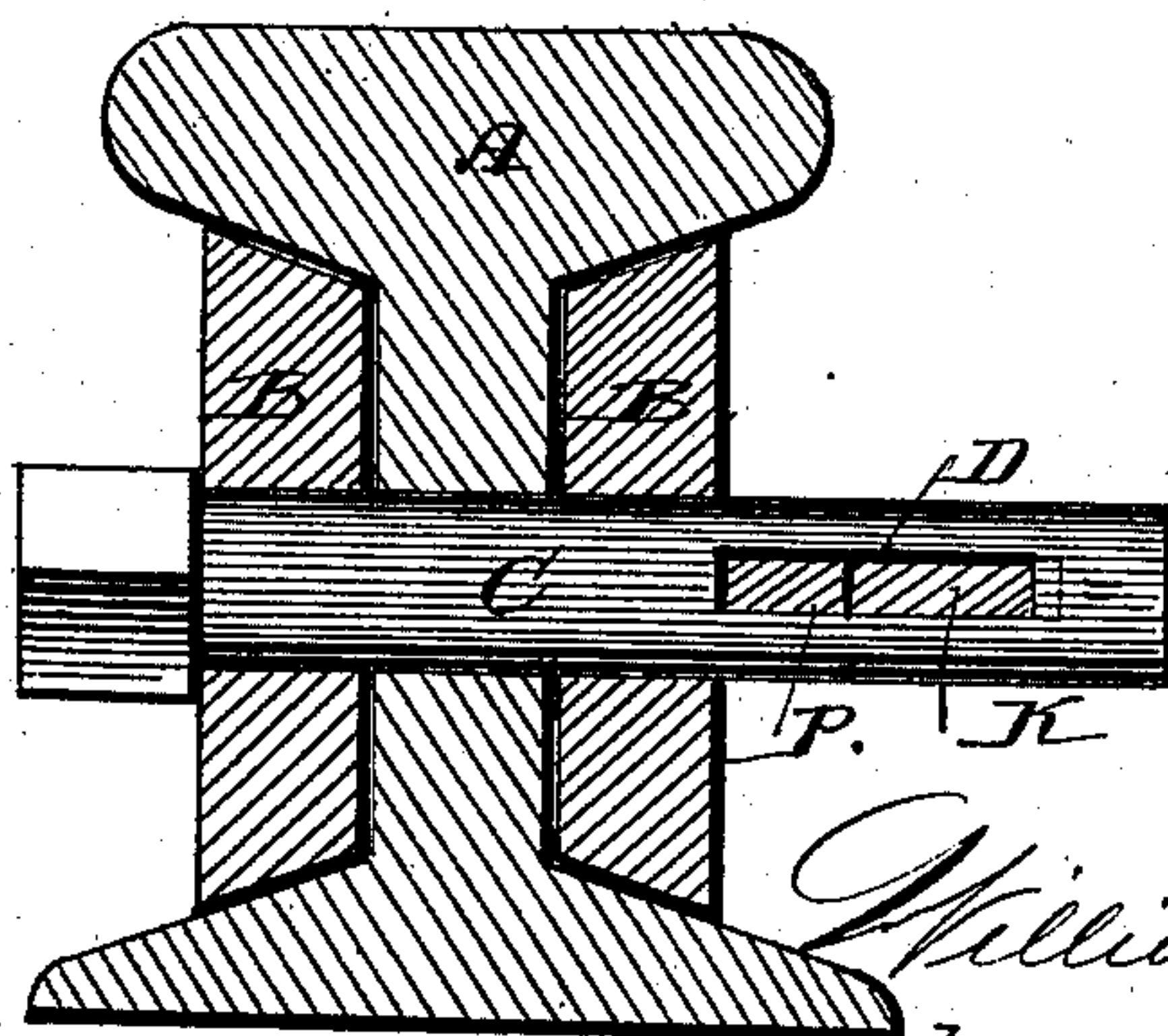
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
Fred. G. Dietrich  
J. R. Littell,

Inventor:  
William F. Ash,  
by C. A. Snow and Co.  
Attys.



# UNITED STATES PATENT OFFICE.

WILLIAM F. ASH, OF OSAGE MISSION, KANSAS.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 225,266, dated March 9, 1880.

Application filed December 23, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM F. ASH, of Osage Mission, in the county of Neosho and State of Kansas, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view. Fig. 2 is a horizontal sectional view; and Fig. 3 is a vertical cross-section.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to railroad-rail joints; and it consists in an improved construction and arrangement of parts, whereby threaded bolts and nuts are dispensed with, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the annexed drawings, A A represent the ends of two adjoining rails, and B B the fish-plates. The latter, as well as the rail ends, are provided with perforations to admit the bolts C C, which are not threaded, but provided near the ends with transverse slots D.

K is a plate, of iron or other metal, which passes through the slots D in bolts C, as shown, it being provided with notches G G, one for each bolt, which enable the said plate, after its insertion through slots D, to be moved outward, after which, the sides of the notches catching upon the sides of the bolts, it is prevented from moving laterally.

The narrow space between the rear edge of plate K and the fish-plate is filled by a wedge-shaped plate, P, which, when driven in tight, secures the plate K firmly and locks the bolts in position.

The rear edge of plate K is provided with a series of notches, I I, and the front edge of

plate P has one or more similar notches, J. When the latter plate has been driven home two of said notches should register, to admit of the insertion of a key, R, which may be an ordinary wrought nail, by which displacement of the plates K P, by the jarring caused by rolling-stock passing over the track, or from similar causes, is effectually prevented.

The operation and advantages of my invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. It is simple, safe, durable, easily adjusted without the use of wrenches or similar cumbersome tools, and the danger and annoyance experienced with the old-fashioned bolt-and-nut joints are wholly avoided.

I am aware of the patent to S. Vanstone, March 11, 1873, No. 136,683, and I claim nothing therein shown.

I am also aware that a fastening for rail-chairs consisting of beveled keys or wedges provided upon their adjoining sides with several notches, two of which may be made to register and receive a fastening-key, is not new, such being shown in the patent to Nicklin, No. 95,928, October 19, 1869.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

As an improvement in rail-joints, the combination of the rails A A, fish-plates B B, bolts C C, having transverse slots D D, plate K, having notches G G I I, wedge-shaped plate P, having notch J, and the key R, all arranged and operating substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM F. ASH.

Witnesses:

M. DEVINE,  
JAMES COSTELLO.