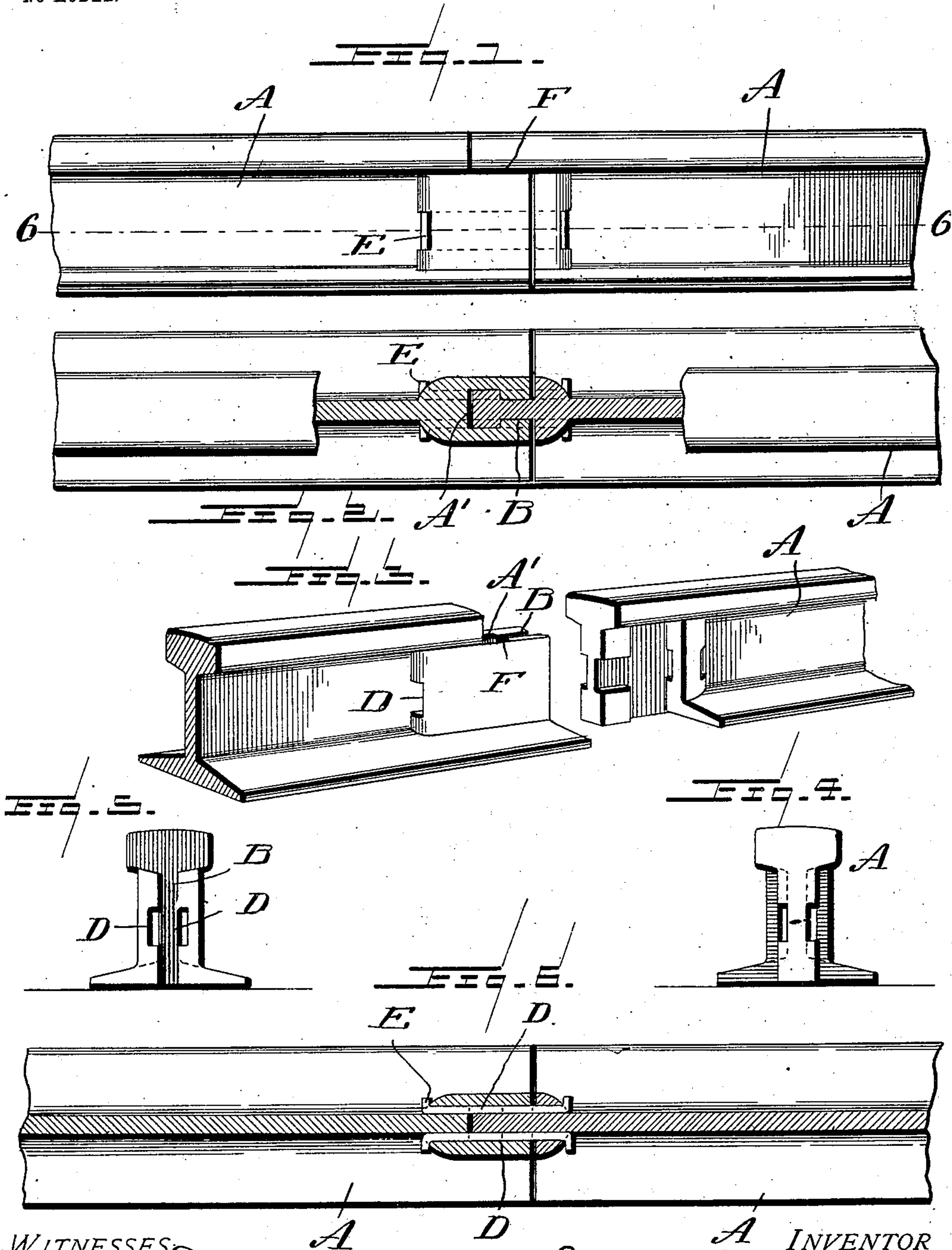


No. 723,543.

PATENTED MAR. 24, 1903.

D. R. PAGE.  
RAILWAY RAIL JOINT.  
APPLICATION FILED JAN. 19, 1903.

NO MODEL.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 723,543, dated March 24, 1903.

Application filed January 19, 1903. Serial No. 139,651. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL R. PAGE, a citizen of the United States, residing at Boardman, in the county of Columbus and State of North Carolina, have invented certain new and useful Improvements in Railway-Rail Joints; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in rail-joints, and particularly to the provision of means for interlocking the ends of the rails and securely holding the same against vertical or side movement, allowance being made for the expansion of the metal incident to the changes in the weather.

The invention consists, further, in the provision of a rail-joint in which a shouldered groove is formed in the end of one rail adapted to receive the flanged end of another rail and in the provision of keys which are designed to lock the ends of the rails to be connected together.

The invention consists, further, in details of construction and combinations of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts in the views, in which—

Figure 1 is a side elevation showing two rails connected together by my improved joint. Fig. 2 is a top plan view. Fig. 3 is a view showing the rails disconnected. Fig. 4 is an end view of the end of a rail. Fig. 5 is a view of the end of the rail having a socket therein, and Fig. 6 is a longitudinal transverse section on line 6 6 of Fig. 1.

Reference now being had to the details of the drawings by letter, A designates a rail, which has formed in one end a recess A', with

a contracted passage-way B leading therein from the end of the rail. Said recess extends the entire height of the rail and is provided with two longitudinal recesses D D, which are clearly shown in Figs. 5 and 6 of the drawings. Said recesses D are provided for the purpose of receiving a sliding key E to hold the two ends of a rail locked together. The end of the rail having the recess in the end, it will be observed, is cut away at F, and upon the cut-away portion of the rail the under face of the tread of the adjacent end of a rail is adapted to rest. After the two rails are connected together the keys, one on either side, are pushed through to assume the position shown in Fig. 1 of the drawings, in which the rails are held from vertical movement. There is a sufficient play between the ends of the rails to allow for expansion, and by reason of the projecting sides of the rails adjacent to the ends the connecting parts are entirely inclosed, preventing water or other foreign matter from coming between the interlocked ends.

If desired, I may dispense with the sliding keys, and hence with the recesses D, which are formed for their reception, as the rails when spiked to the ties would be securely held from vertical play.

While I have shown a particular construction of apparatus embodying my invention, it will be understood that I may make alterations in the detailed construction of the same without departing from the spirit of the invention.

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

1. A rail-joint comprising a rail having in one end a recess, a contracted passage-way leading thereto, and the tread of the rail being cut away adjacent to said recess, forming a shoulder, a meeting rail having a shouldered portion adapted to fit said recess, and its opposite faces grooved to enter said contracted passage-way, and sliding keys which are adapted to hold the two ends interlocked, as set forth.

2. A rail-joint comprising a rail having at one end a vertical recess with a narrow pas-

sage-way leading thereto, the walls of said narrow passage-way having opposite longitudinal recesses D formed therein, the other end of the rail having a shouldered end adapted to enter said recess, the under surface of the tread of said shouldered end adapted to rest upon a cut-away portion of the web of the recessed rail, and sliding keys mounted in registering recesses D, whereby the rails

are held from vertical movement, as shown in and described.

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

DANIEL R. <sup>his</sup> X PAGE.  
mark

Witnesses:

H. C. MOFFITT,  
L. W. STANLEY.