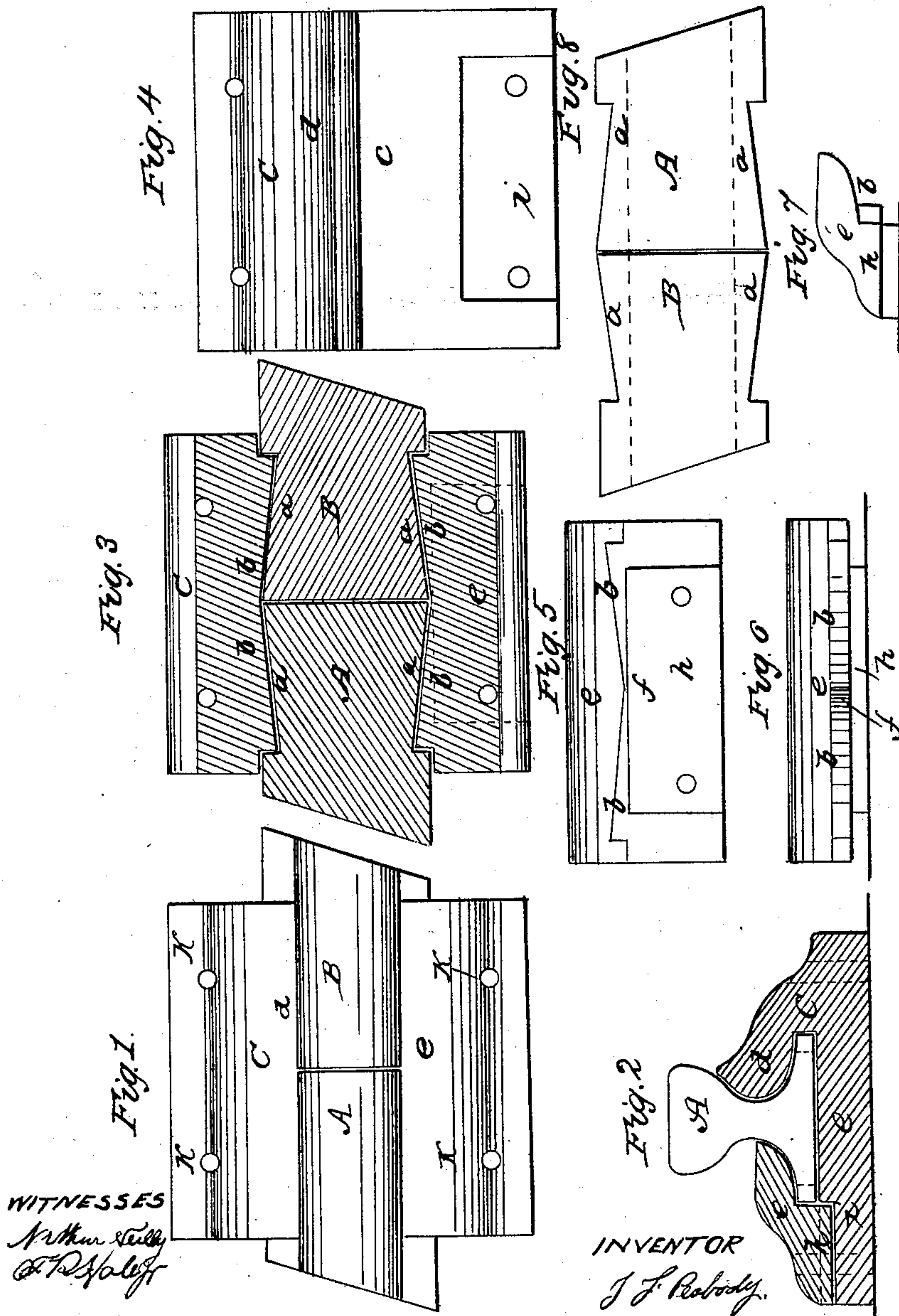


J. F. PEABODY.
Railroad Rail Joint.

No. 22,196.

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WITNESSES
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JNO. F. PEABODY, OF SALEM, MASSACHUSETTS.

SECURING THE ENDS OF RAILWAY-BARS.

Specification of Letters Patent No. 22,196, dated November 30, 1858.

To all whom it may concern:

Be it known that I, JOHN F. PEABODY, of Salem, in the county of Essex and State of Massachusetts, have invented an Improvement in Railways; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, is a top view of a portion of two rails and a chair constructed and applied together in accordance with my invention. Fig. 2, is a transverse of the same taken through the middle of the chair. Fig. 3, is a horizontal section of the same taken through the bearing flanges of the rails. Fig. 4, is a top view of the base plate and stationary lip, while Fig. 5, is an underside view of the movable flange cap, or lip. Fig. 6, is an inner side view of the said flange cap, while Fig. 7, is an end view of it. Fig. 8, is an underside view of the two rails.

It is well known, that a great difficulty is experienced in preventing rails from slipping longitudinally in their chairs, the same being caused by the action of the trains or railway carriages on the rails and particularly during the process of applying the brakes to the wheels of the carriages.

My invention is designed to overcome this difficulty.

In carrying it out I form each two of the abutting rails, A, B, with a dovetail *a*, in its base or flanches, the rail being of the usual T, or H, form. I also construct the chair C, on which such rails are to rest with two dovetailed recesses, *b*, *b*, arranged in reverse of one another and so as to be capable of receiving the dovetails of the two rails. In so constructing the chair, I make it with one stationary and one movable lip applied to its base plate, *c*, the former or stationary lip being shown at *d* while the movable lip or flange cap (as it may be termed) is represented at *e*, portions of the two dovetailed recesses being made within the flange cap as shown at *f*. The said lip and cap project over the flanches of the rails and serve to hold said rails down upon the base plate. Furthermore, the flanch cap is constructed with a rectangular projection or tenon, *h*, made to project down from it and to enter a corresponding mortise or recess *i*

found in the base plate, the said projection and recess serving to receive the longitudinal strain of the rails and thereby serving to relieve the confining spikes therefrom. The flanch cap is to be fastened down to the base plate by means of the spikes which serve to confine the chair to a sleeper of the road bed, it being understood, that suitable holes for reception of such spikes are to be made through the flanch cap and the base plate, as well as through other parts of the chair wherever such may be necessary; K, K, K, K, in Fig. 1, exhibiting the positions of such spike holes.

By the above described method of constructing the chair and the rails, the latter may be maintained in place or be prevented from endwise movement, except that which may result from the expansion or contraction of the rails due to changes of temperature. Generally speaking, the dovetailed recesses should be of sufficient size to admit of the movements of the rails due to such changes of temperature.

In consequence of the dovetails of the rails and chair being arranged in reverse directions as represented in the drawings each rail will be supported under an endwise movement by its dovetails, and the shoulders thereof.

I claim—

The improved mode of constructing the chair and rails, the same consisting in making the said chair with the two reverse dovetailed recesses, and the rails with dovetails to enter such recesses, the whole being arranged substantially as and for the purpose hereinbefore described.

2. I also claim constructing the dovetailed recessed flanch cap with a projection extending below it in connection with making the base plate of the chair with a recess to receive such projection, the same being in manner and for the purpose hereinbefore specified.

In testimony whereof I have hereunto set my signature.

J. F. PEABODY.

Witnesses:

R. H. EDDY,
F. R. HALE, JR.