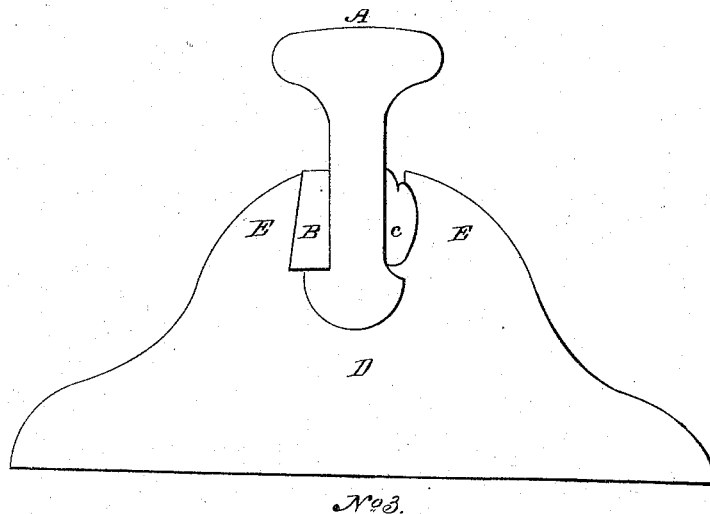
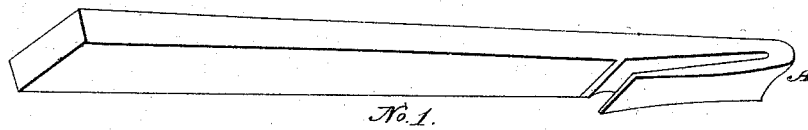
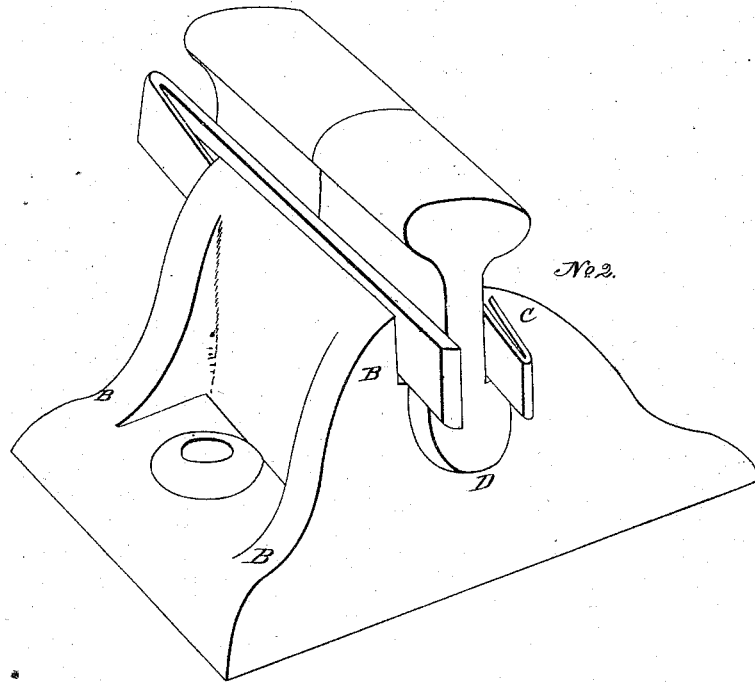


*B. Butterfield.*

*Railroad Chair.*

*N<sup>o</sup> 3, 7/2.*

*Patented Aug. 21, 1844.*



# UNITED STATES PATENT OFFICE.

BENJA. BUTTERFIELD, OF KENSINGTON, PENNSYLVANIA.

KEY FOR FASTENING THE RAILS OF RAILROADS TO THEIR CHAIRS.

Specification of Letters Patent No. 3,712, dated August 21, 1844.

*To all whom it may concern:*

Be it known that I, BENJAMIN BUTTERFIELD, of Kensington, in the county of Philadelphia and State of Pennsylvania, have invented a new dovetailed wedge, in combination with the spring-holdfast at the end of the same, for the fastening of rails to the chairs of railways; and I do declare that the following is a full description of the same.

The nature of my invention consists in a piece of iron, say, eight inches long by one in depth, a quarter of an inch thick on one edge, and three eighths of an inch on the other as per drawing No. 1, the point of which is made of steel or iron, turned upon itself (A) so as to form a spring to catch and confine closely and permanently the rail in the chair, when the said wedge is driven in horizontally between the jaws of the chair and the rails, as per drawing No. 2. The jaws of the chair are wider at the bottom than at the top, as will be perceived upon reference to drawing No. 3, (see letters B and C;). The wedge is a wedge both longitudinally and sectionally, the point being inserted between the jaws of the chair with the thinnest sectional edge uppermost, when it has passed through the wedge cannot be moved upward and fills the dove tail; nor, can it recede, because it is retained and kept

fastened at the point end by the spring. The lower part of the rail resting in the socket of the chair (D) with the wedges on either side (B, C;) driven through longitudinally at opposite extremities, is securely fastened with sufficient room to play.

Drawing No. 2 shows the chair with the rails resting in the socket sustained in their places at their junction by the two wedges B and C.

Drawing No. 3, shows a transverse vertical section of the chair with the rail resting thereon secured by the wedges; D, the chair; A, the rail; B and C, the heads and points of the two wedges; E, the jaws of the chair, between which and the rails the bolts are driven and resting on the bottom of the dove-tail to the jaws. I thus give security to the rail, safety to the jaws of the chair and economy to a very great degree in labor and expense. And

What I claim as my invention is,

The dovetailed wedge in combination with the spring hold fast at one end of the wedge, to prevent its receding or working out of the chair, and thus permanently securing the rails at their junction in the chair.

BENJA. BUTTERFIELD.

Witnesses:

EDMUND C. UABMOUGH,  
CLARK GOLDSMITH.