

J. M. ATKINSON.  
STREET RAILROAD RAIL-CHAIR.

No. 170,979.

Patented Dec. 14, 1875.

Fig 1.

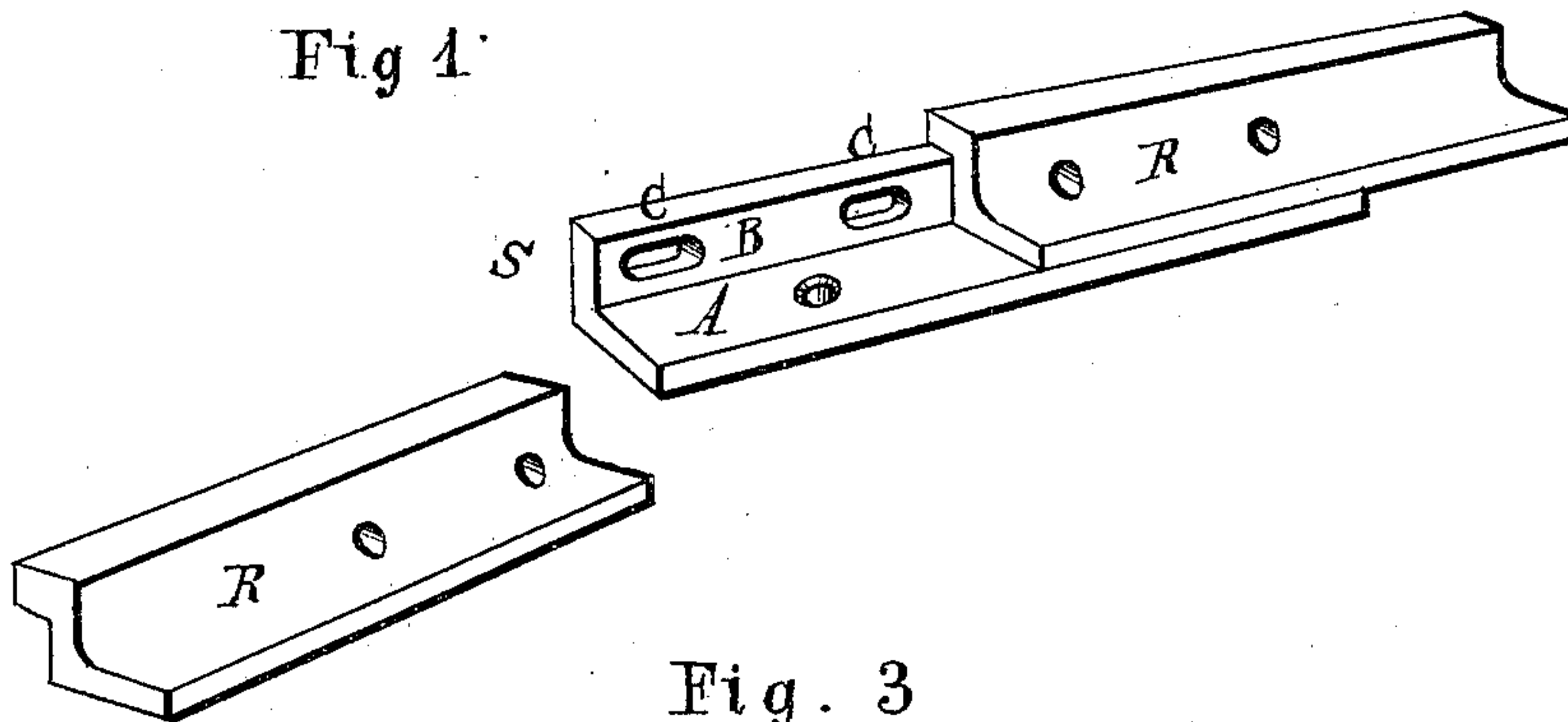


Fig. 3

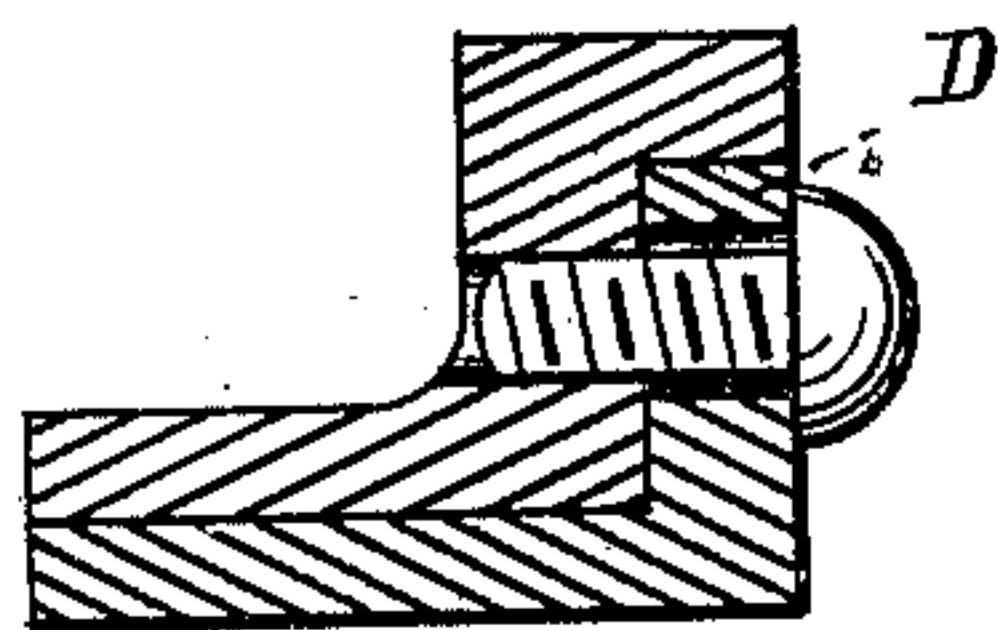
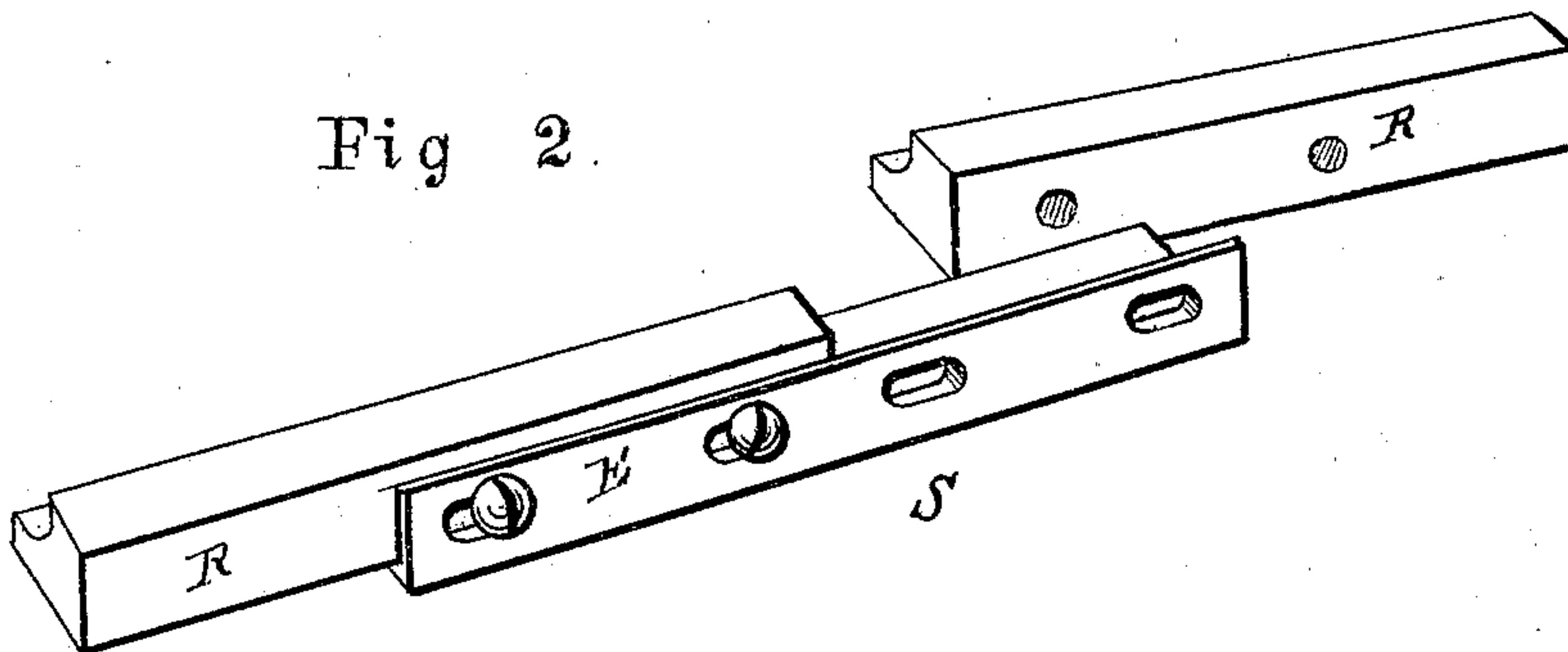


Fig 2.



Witnesses.

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Inventor.

James M. Atkinson

# UNITED STATES PATENT OFFICE.

JAMES M. ATKINSON, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN STREET-RAILROAD RAIL-CHAIRS.

Specification forming part of Letters Patent No. **170,979**, dated December 14, 1875; application filed October 13, 1875.

*To all whom it may concern:*

Be it known that I, JAMES M. ATKINSON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented an improvement in that class of devices for connecting the ends of railroad-rails in which provision is made for the lateral contraction or expansion of the rails; and it consists in a shoe having a base-plate and flange or side plate provided with oblong slots, adapted to secure the ends of rails in a convenient and simple manner, as hereinafter more fully set forth.

Figure 1 is a perspective view of the shoe as made and applied to new rails, and Fig. 2 the same when applied to old rails. Fig. 3 is a sectional view.

S represents the shoe, which consists of a flat metallic bar, A, of the width of the base of the rail, having a slotted flange, B, on its outer edge. This flange enters a recess, D, on the outer sides of the ends of the rails, and acts there as a fish-bar—commonly used on railroads to hold the end of the rails in place. In the flange B are four or more longitudinal slots, C, through which screws pass, having their ends secured on the rails.

By this arrangement a lateral movement is

allowed to the rails for expansion or contraction, but at the same time all vertical movements are prevented.

The shoe is rigidly secured to the ties by which the rails are supported, by either spikes or screws. If, however, old rails, or rails which are not provided with recesses at their ends, are to be used, the flange E, Fig. 2, is applied to the outside of the rails, and the screws passing through the slots secured in the rails, as formerly stated.

By means of the heads of the screws which press upon the outer side of the flange, the rails and shoe are firmly held together, and may be readily released, if necessary.

Having thus described my invention, I claim—

The shoe S, consisting of base-plate A and flange or side plate B, raised from the edge of said base, and provided with oblong longitudinal slots C, substantially as and for the purpose specified.

JAMES M. ATKINSON.

Witnesses:

O. D. LEVIS,

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