

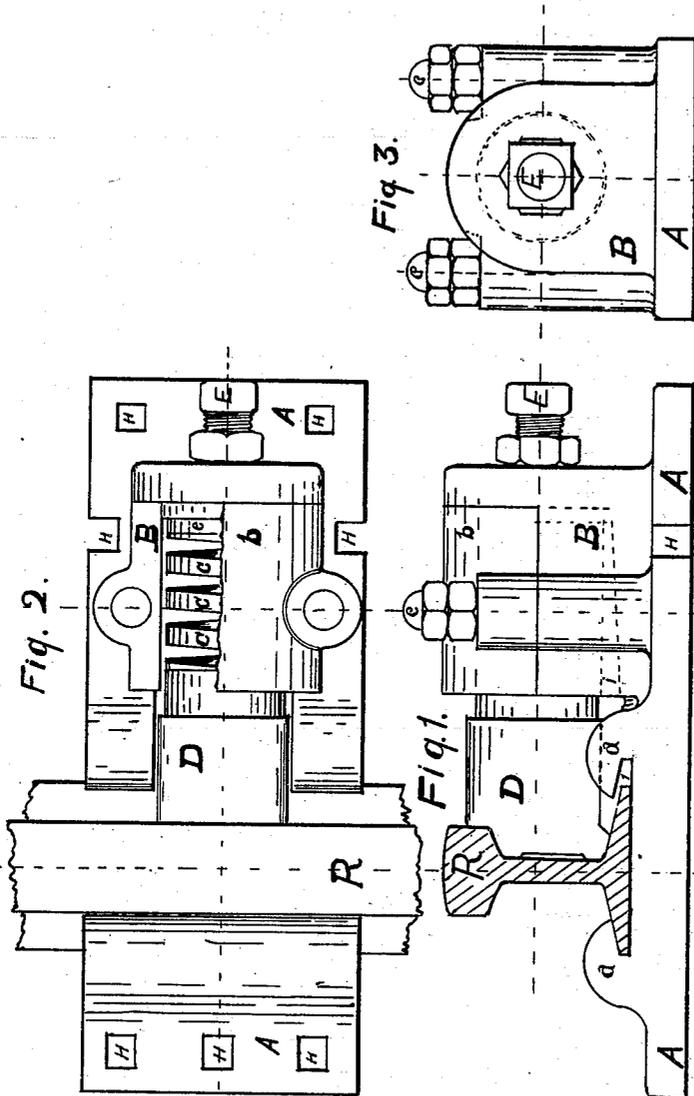
No. 650,135.

Patented May 22, 1900.

J. E. REEVES.
RAILWAY CURVE CUSHION CHAIR.

(Application filed Apr. 3, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JACOB EGBERT REEVES, OF YARMOUTH, CANADA.

RAILWAY-CURVE CUSHION-CHAIR.

SPECIFICATION forming part of Letters Patent No. 650,135, dated May 22, 1900.

Application filed April 3, 1899. Serial No. 711,621. (No model.)

To all whom it may concern:

Be it known that I, JACOB EGBERT REEVES, engineer, a British subject, residing in the town of Yarmouth, in the county of Yarmouth, Province of Nova Scotia, Canada, have invented a new and useful Railway-Curve Cushion-Chair; and I do hereby declare that the following is a specification.

My invention relates to improvements in railway-chairs for use on curves, and is intended for easing the shock and strain against the outer or pressure rail of railway-curves and preventing breakage of wheels and flanges and derailment of trains and permitting of higher rates of speed on railways. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation. Fig. 2 is a plan or top view, partly in section; and Fig. 3 is an end elevation.

Similar letters refer to like parts in all the views.

The chair A has lips *a a* cast thereon for holding the rail R in position and between which the rail slides in a lateral direction, space for same being left at *l*. A spring-box B, cast upon the chair and forming part thereof, having a removable cap *b*, secured by bolts *c c* or in any other suitable manner, contains the cushioning-spring C, as shown in plan. A block or follower D, bearing against the outside of rail R, held in place by the spring C, as shown on plan and elevation, holds the rail in position. The adjusting-screw E, bearing against washer *e* and spring C, is provided to give the spring C any desired tension.

H H are spike-holes and slots for spiking the chair to the ties.

The slot in the bottom of spring-box (marked *i* and shown by dotted lines in the elevation) is to form a drip for the escape of any water that may find its way into the spring-box.

The object and operation of my invention are as follows:

The chair being secured in place on and spiked to the tie under the outer or pressure rail of a curve with the spring-box B on the outer side of rail, the spring C and follower

D are placed in the position shown by drawings, and the cap *b* is bolted on. The adjusting-screw E is then set up, compressing the spring C and forcing the follower D against the rail with any desired pressure. A train rushing upon a curve, having a tendency to move in a straight line, is thrown forcibly against the outer rail. With a solidly-fixed rail the blow or shock is very great, often causing breakage of wheels and even derailment of trains.

The object of my invention is to diminish or remove the danger by softening the blow by allowing the rail to yield slightly in a horizontal direction, the spring C forming an elastic cushion for that purpose and forcing the rail gradually back to place as the strain diminishes.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A railway-chair for use on railway-curves having a space left between the lips of chair in excess of the width of base of rail carried thereon to allow rail to move laterally between them, in combination with a spring and follower-block placed horizontally and bearing against the outer side of the outer or pressure rail, substantially as, and for the purpose shown.

2. In a railway-chair, having means for permitting lateral movement of a rail, the combination of a spring and follower-block pressing against the outside of the outer or pressure rail on a railway-curve, substantially as shown, and for the purpose specified.

3. The combination in a railway-chair for use on railway-curves, means for permitting lateral movement of a rail, a cushioning-spring, a screw for adjusting the tension of the spring, and a spring-box and follower, said spring being held in place by said screw and spring-box and pressing upon the follower and rail as described and for the purpose set forth.

JACOB EGBERT REEVES.

In presence of—
DAVID WETMORE,
U. V. JEAN.