(No Model.)

T. L. BEAMAN.

RAIL CHAIR.

No. 321,673. Patented July 7, 1885.

Fig. 1

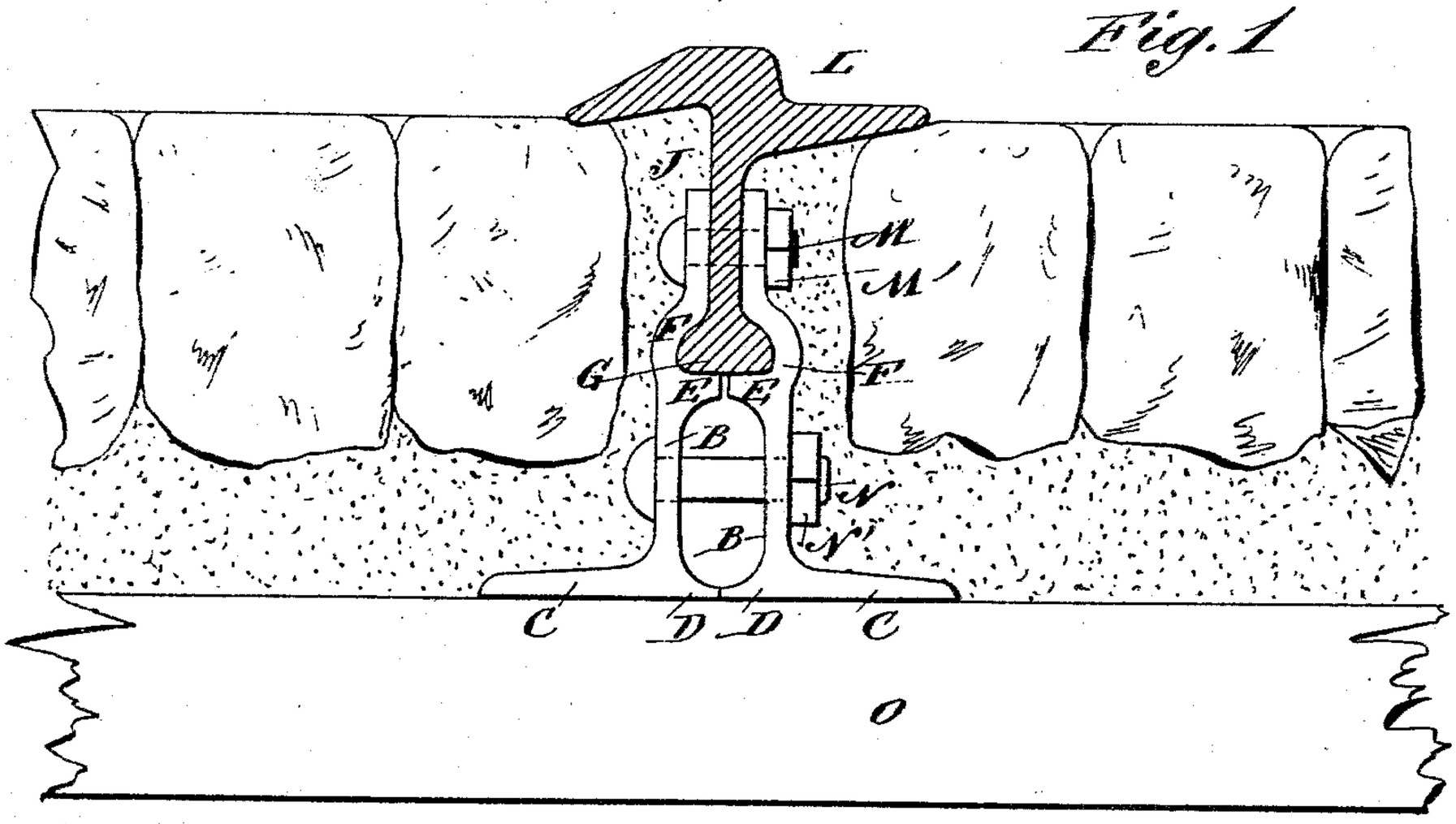


Fig. 2

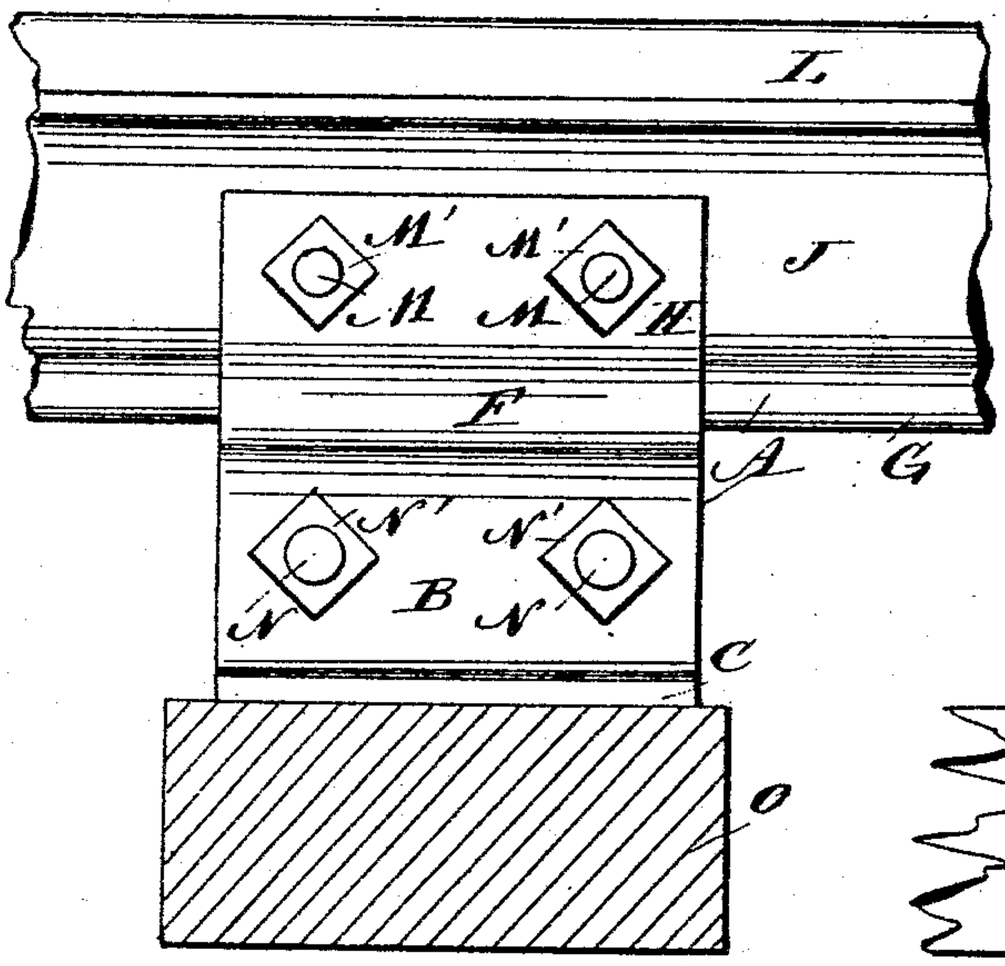
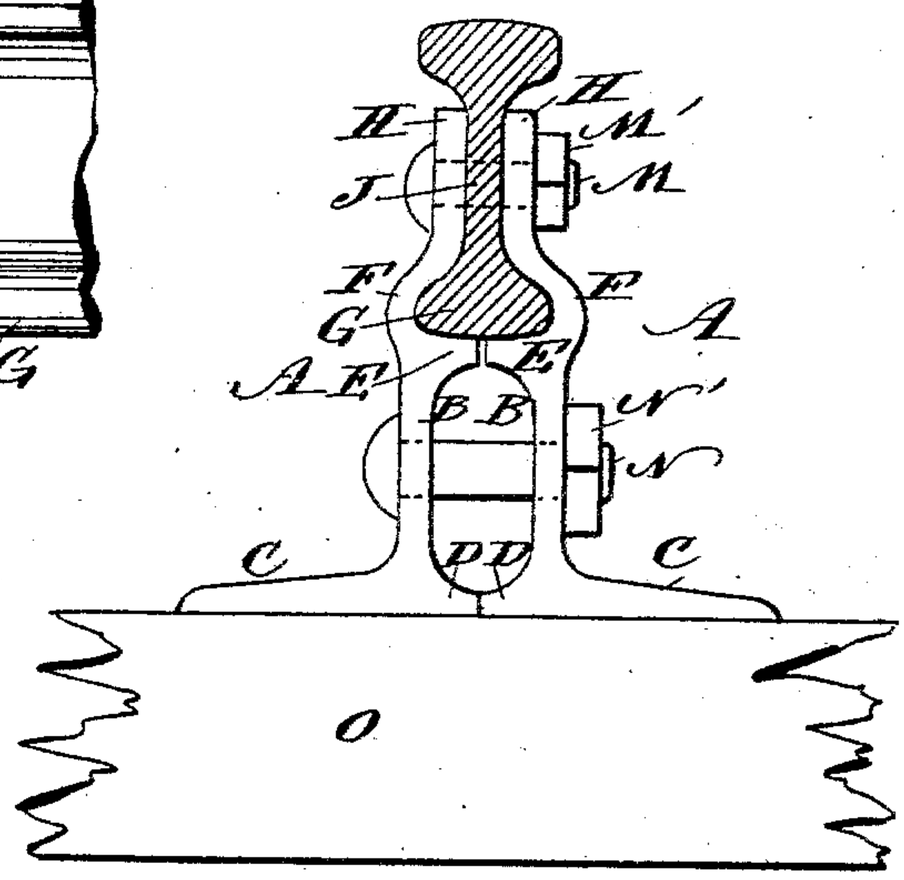


Fig. 3



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UNITED STATES PATENT OFFICE.

TIMOTHY L. BEAMAN, OF KNOXVILLE, TENNESSEE.

RAIL-CHAIR.

SPECIFICATION forming part of Letters Patent No. 321,673, dated July 7, 1885.

Application filed May 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY L. BEAMAN, of Knoxville, Knox county, Tennessee, have invented a new and Improved Rail-Chair, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved rail-chair for holding rails the heads of which are at the surface of the street; to provide a rail-chair by which the cross-ties or sleepers may be laid at any desired depth below the surface of the street without increasing the weight or depth of the rail, the requisite depth being obtained by the chair; to provide a chair for rails in which the parts shall interlock and the bolts which fasten the chair to the rail shall only serve to hold these parts together, and will not be affected by any bending or twisting strains.

The invention consists in a rail-chair formed of two sections, each provided with an inwardly and an outwardly projecting base-flange, an inward projection above the base, an outwardly-curved part above the projection, and an upwardly-projecting part above the curved part, all as will be fully set forth and described hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a cross-sectional elevation of a street-railway rail and an end view of one of my improved rail-chairs holding the said rail. Fig. 2 is a side view of the same. Fig. 3 is a cross-sectional view of a modified construction of the rail and an end view of the chair.

The rail-chair consists of two like sections, A, each formed of a web, B, on the base of which an outwardly-projecting base-flange, C, and an inwardly-projecting flange, D, are formed. At the middle of its height it is provided with a projection, E, on its inner side, the width of the projection being equal to the width of the inwardly-projecting flange D. That part, F, projecting above the projection E is curved outward to fit the base G of the rail, and is then carried up straight at H to rest against the web J of the rail. The rail may have a flat shouldered head, L, as shown in Figs. 1 and 2, or an ordinary rail-head. The lower part of the rail is placed between two sections, A, the inner edges of the inner base-flange, D, and of the projections E abutting. The bolts M, having nuts M′, are passed through the upper parts, H, of the sections and through the web of the rail, and bolts N, provided with nuts N′, are passed through the webs B. The bases of the sections A rest upon the sleeper O.

The bolts M and N only serve to hold the sections of the chair together, and are not subjected to any bending or twisting strains.

The pressure exerted on the rail is transmitted through the two sections A upon the sleeper, and as the chair has a wide base the strain is distributed over a large surface of the sleeper. The chair rests securely on the sleeper and does not work, as it is divided into two webs directly below the rail.

By keeping the webs separated the chair is stiffened and strengthened. It cannot be bent or tilted by lateral strains, and the sections can be made comparatively light.

Preferably the chair is constructed with divided webs B B; but the open space formed by the divided webs B B and the projections E E and D D might be eliminated and the lower part of the chair made solid by making the inner sides of the webs B B straight and parallel with the rail, and thereby filling in the open space.

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

1. A rail-chair formed of two sections, A, each composed of a web, B, having an outwardly-projecting base-flange, C, and an inwardly-projecting base-flange, D, at the bottom edge, an inwardly-extending projection, E, an outwardly-curved part, F, above the projection E, and an upwardly-projecting part, H, above the curved part F, substantially as herein shown and described.

2. The combination, with a rail, of the sections A, each composed of a web, B, having two outwardly and inwardly projecting base-flanges C D, the inward projections E, the curved parts F above the projections E, and the straight parts H above the curved parts F, the bolts M, passed through the parts H and the web of the rail, and the bolts N, passed through the webs B, substantially as herein shown and described.

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Witnesses:
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F. L. CHAMPION.