No. 651,825.

Patented June 19, 1900.

## D. J. CLARK. STREET RAILWAY RAIL.

(Application filed Sept. 7, 1899.)

(No Model.)

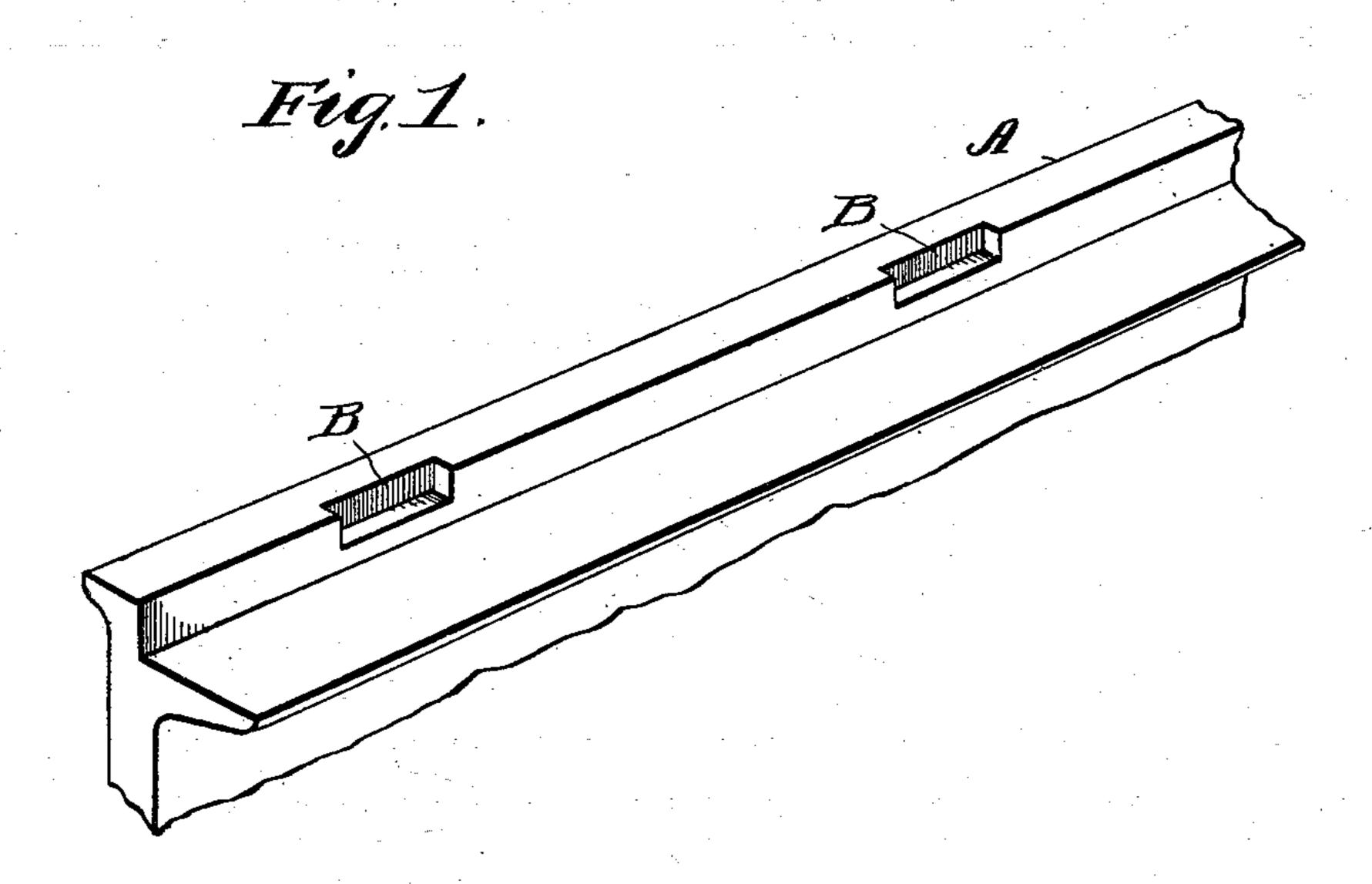
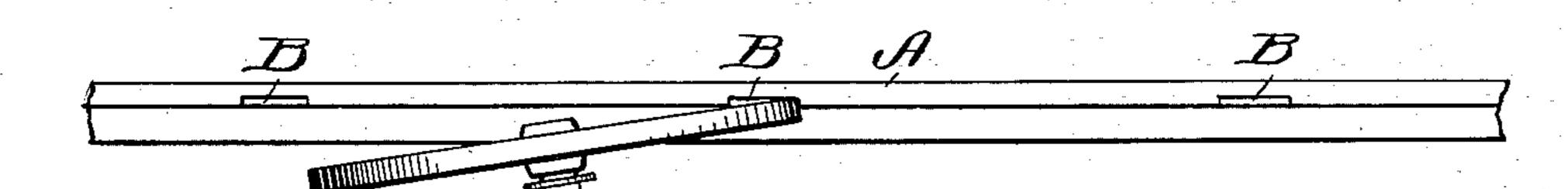


Fig. 2.



Witnesses St. Hilliamson E.H. Forsyth.

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## United States Patent Office.

DAVID J. CLARK, OF PHILADELPHIA, PENNSYLVANIA.

## STREET-RAILWAY RAIL.

SPECIFICATION forming part of Letters Patent No. 651,825, dated June 19, 1900.

Application filed September 7, 1899. Serial No. 729,748. (No model.)

To all whom it may concern:

Be it known that I, DAVID J. CLARK, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Street-Railway Rails, of which the following is a specification.

My invention relates to a new and useful improvement in street-railway rails, and has to for its object to so construct such a rail as to facilitate the turning out of wagons from the tracks and at the same time not interfere with the travel of the cars.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand be stand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective of a portion of a rail, showing my preferred form of construction; and Fig. 2, a diagrammatical plan view showing the manner in which a vehicle-wheel is assisted in turning out of the tracks.

30 In carrying out my invention as embodied in the drawings I form in the rail A the notches or depressions B, and this is preferably accomplished in the rolling of the rail by keying die-blocks in the rolls in such man-35 ner as to bring about the formation of the depressions at proper intervals. These depressions, as clearly shown in Fig. 1, do not extend to the bottom of the flange of the rail, nor do they extend entirely across the top of 40 the tire. The result of this is that the travel of the car-wheels upon the rail is not interfered with, since the tread of the car-wheel, being wider than the depressions, overlaps the same and is therefore constantly sup-45 ported by the rail. Likewise the flange of the car-wheel, extending below the bottom of the notch or depression, is always guided by the

rail, and this prevents any hammering of the wheels, which would otherwise take place. A track composed of rails thus constructed will afford a ready means for the turning out of vehicles of all kinds, since the turning of the wheels of a vehicle at an angle to the track will cause the wheel upon the side in the direction of turn to pass into one of the 55 depressions, as clearly shown in Fig. 2, when, it is obvious, the wheel will readily ride up the walls of this depression to the level of the rail, and thereby free it from the flange, and this with but little effort upon the part 60 of the team.

Much wear and tear will be saved to the rails by avoiding the cutting action of vehicle-wheels upon the flange of the rails, as at present, and also an equal amount of wear 65 will be prevented upon vehicle-wheels, since this cutting action of the wheel affects both the wear and tear of the wheel.

The depressions may be located at any suitable intervals along the rails, or there may 70 be but one depression in each rail, since it is not often necessary that a vehicle turn out of a track at an exact point, and were the depressions disposed along the track the length of each rail they would afford ample facility 75 for the purpose intended. No addition is made to the cost of this form of rail over the old form, since the depressions rather decrease the weight of metal in the rail without injuring the same.

Having thus fully described my invention, what I claim as new and useful is—

A street-railway rail having formed in the upper flange thereof one or more rectangular depressions, said depressions being of less 85 width and depth than said flange, as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

DAVID J. CLARK.

Witnesses:

MARY E. HAMER, L. W. MORRISON.