

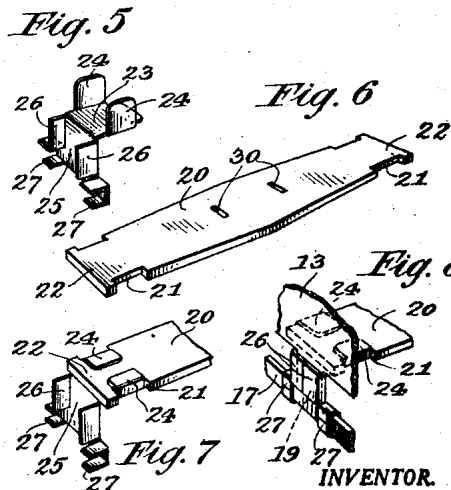
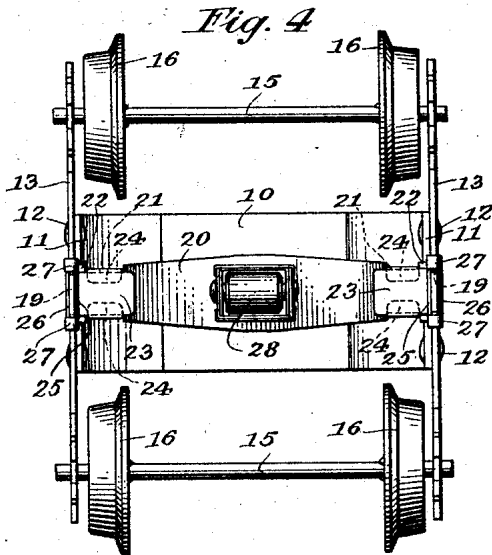
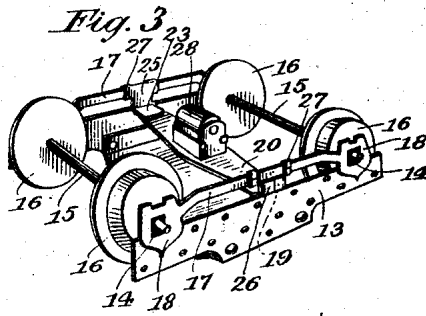
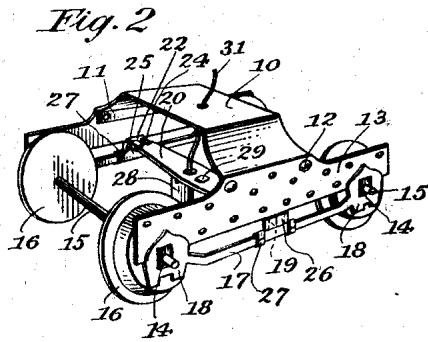
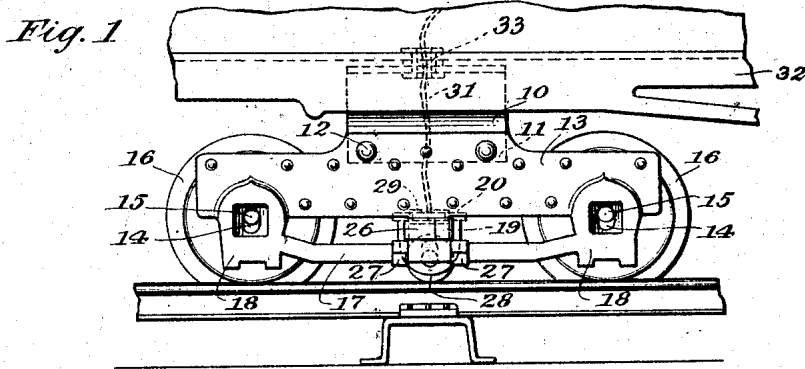
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1,542,139

H. C. IVES

TRUCK FOR TOY RAILWAY CARS

Filed Dec. 20, 1924



INVENTOR.  
Harry C. Ives  
BY

Chamberlain & Newman ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HARRY C. IVES, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE IVES MANUFACTURING CORPORATION, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

TRUCK FOR TOY RAILWAY CARS.

Application filed December 20, 1924. Serial No. 757,140.

*To all whom it may concern:*

Be it known that HARRY C. IVES, a citizen of the United States, and resident of Bridgeport, in the county of Fairfield and State of Connecticut, has invented certain new and useful Improvements in Trucks for Toy Railway Cars, of which the following is a specification.

The present invention relates to an improved truck for toy electric railway cars, and has for an object to provide a truck structure of relatively great strength, and which cannot be readily distorted to allow of separation of the wheels; and further to provide a brace in the form of an insulating bar secured between the sides of the truck and adapted to support a contact or current gathering shoe. These trucks are made of relatively thin sheet metal which may be readily bent, and the non-braced structure, as heretofore constructed, was such that any great weight might bend them to an extent to cause separation of the wheels. An important object of the invention, therefore, is to provide such a brace structure which may be attached to the existing forms of trucks, without necessitating any change therein, and which will act as an efficient and reliable support for the contact shoe.

With the above and other objects in view an embodiment of the invention is shown in the accompanying drawings, and this embodiment will be hereinafter more fully described with reference thereto, and the invention will be finally pointed out in the claims.

In the drawings:

Fig. 1 is a side elevation of a toy electric railway truck, according to the present embodiment of the invention, and showing a portion of the attached car, and track;

Fig. 2 is a perspective view of the truck;

Fig. 3 is a perspective view of the truck in inverted position to show the under side;

Fig. 4 is a bottom plan view of the truck;

Fig. 5 is a perspective view of the end clip for attaching the brace bar;

Fig. 6 is a perspective view of the brace bar employed;

Fig. 7 is a perspective view of one end of the brace bar with the clip attached thereto; and

Fig. 8 is a similar view showing the manner of attaching the clip to the truck side, a fragment of the latter being shown.

Similar reference characters indicate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, the toy electric railway truck comprises an upper transverse portion 10 bent downwardly in curved relation at each side, and having its flanged ends 11 secured by rivets 12 to the truck sides 13, which latter are provided at their ends with axle receiving slots 14, in which the ends of the wheel axles 15 are engaged, the wheels 16 being rotatably mounted on said axles. The sides 13 are shaped in simulation of the sides of a regular railway truck, and to this end include a longitudinal brace rod portion 17 extending between the bearing and stuffing box portions 18, and integrally connected at its center by a vertical strut portion 19 to the upper portion of the side.

The brace bar, according to the present embodiment of the invention, consists of a strip 20 of insulating material, as fibre, notched at its ends, as at 21, to provide T-shaped ends 22 for interlocking connection of the attaching clips. One of these attaching clips is secured to each end, as shown in Fig. 7, and comprises a seating portion 23, adapted to be engaged with the end of the bar at its under side, and having upwardly extending clip lugs or ears 24, adapted to be engaged in the notches 21 and bent over to interlockingly secure the clip.

The clip is provided with a portion 25 bent downwardly from the forward edge of the seating portion, and adapted to engage the inner side of the truck side 13 at its central strut portion 19, being provided with projecting clip lugs or ears 26 adapted to be bent about said strut portion to secure the clip. The clip is further secured by means of clip portions 27 at the lower corners of the portion 25 adapted to be bent about the brace rod portion 17 at each side of the strut portion, thereby providing a reliable interlocking connection between the brace bar and the truck sides.

A contact or current gathering shoe or roller device 28, adapted to contact with the central current carrying rail, is supported centrally on the brace bar by means of lugs

29 formed on the casing of the device, and inserted through slots 30 in the bar and bent over upon the upper side thereof, where one of the lugs has the end of a lead wire 31  
5 connected thereto. The wire extends into the car body 32 through the central vertical passage of the eyelet 33 which connects the body to the transverse portion 10 of the truck, to allow of pivotal movement of the  
10 latter.

The truck, according to the invention, is effectually braced, so that the sides are supported against distortion either through excessive weight thereon or careless handling,  
15 and at the same time an insulating support for the contact current gathering shoe is provided, which is highly efficient in both its supporting and insulating functions. The construction is furthermore very simple and  
20 economical of construction, and the insulating brace bar may be readily attached to the existing types of trucks.

I have illustrated and described a preferred and satisfactory embodiment of the  
25 invention, but it will be obvious that changes may be made therein, within the spirit and scope thereof, as defined in the appended claims.

Having thus described my invention, what  
30 I claim and desire to secure by Letters Patent is:

1. In a toy railway truck, a frame including an upper transverse portion, and opposed side portions at the ends of said  
35 upper portion, wheel carrying axles supported in and extending between said sides, a transverse brace bar extending between said sides, and clip means at each end of said bar interlockingly clipped to said sides.

40 2. In a toy railway truck, a frame including an upper transverse portion, and opposed side portions at the ends of said upper portion, wheel carrying axles supported in and extending between said sides, a transverse insulating brace bar extending  
45 between said sides, clip means at each end of said bar interlockingly clipped to said sides, and said brace bar having openings to re-

ceive means for supporting a current gathering contact shoe.

50 3. In a toy railway truck, a frame including an upper transverse portion, and opposed side portions at the ends of said upper portion, wheel carrying axles supported in and extending between said sides, a transverse brace bar extending between said sides  
55 and having notched end portions, clip means interlockingly clipped about the notched end portions of said bar, and means on said clip means secured to said side portions.

60 4. In a toy railway truck, a frame including an upper transverse portion, and opposed side portions at the ends of said upper portion each including a brace rod portion and a central strut portion, wheel carrying  
65 axles supported in and extending between said sides, a transverse brace bar extending between said sides, and clip means secured at each end of said bar and including clip portions clipped about said brace  
70 rod portion at each side of said strut portion.

5. In a toy railway truck, a frame including an upper transverse portion, and opposed side portions at the ends of said  
75 upper portion each including a brace rod portion and a central strut portion, wheel carrying axles supported in and extending between said sides, a transverse brace bar extending between said sides, and clip  
80 means secured at each end of said bar and including clip portions clipped about said brace rod portion at each side of said strut portion and clip portions clipped about said strut portion.

85 6. A device as in claim 5 in which the transverse brace rod is of insulating material and is provided with openings to receive lugs for securing a current gathering contact shoe to the truck.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 17th  
90 day of December A. D. 1924.

HARRY C. IVES.

Witness:

MAY S. PLATT.