

Feb. 2, 1926.

1,571,505

H. S. BECKER

DOOR AND MOUNTING THEREFOR FOR TOY RAILROAD CARS

Filed March 19, 1925

2 Sheets-Sheet 1

Fig. 1.

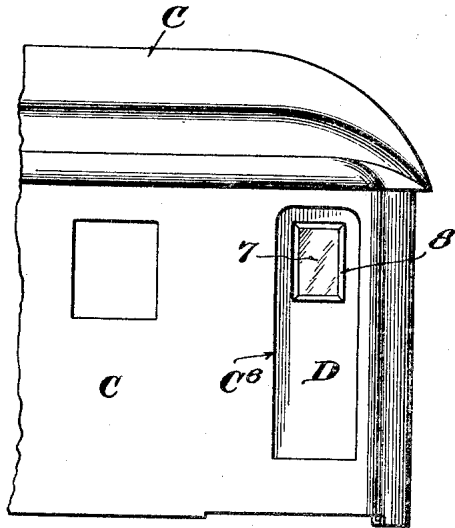


Fig. 2.

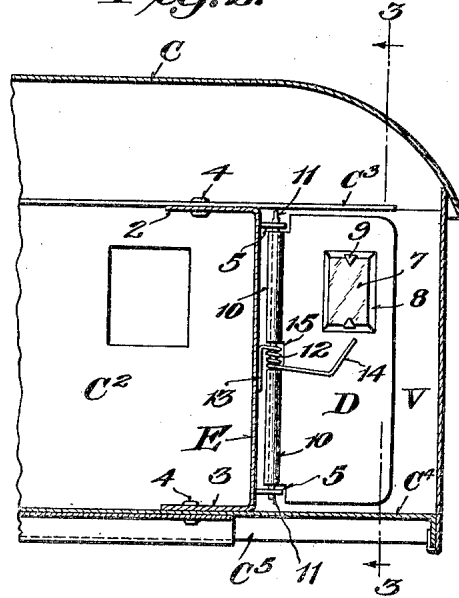
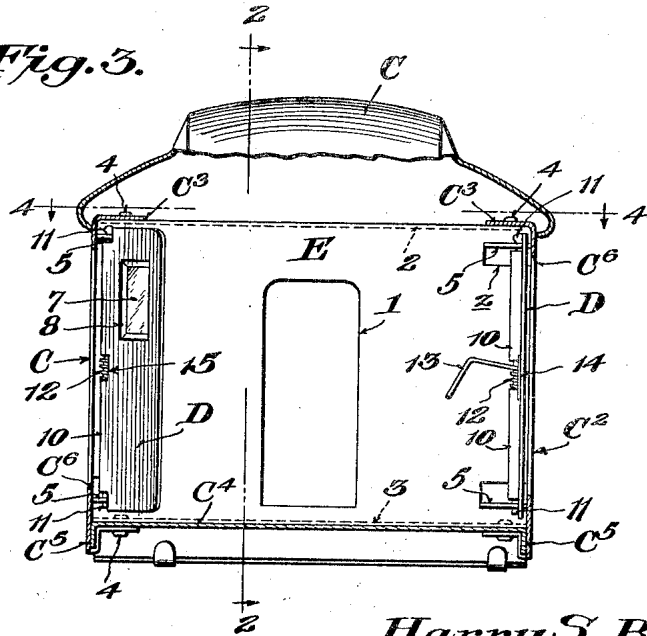


Fig. 3.



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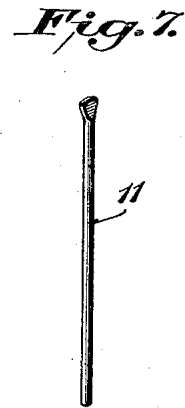
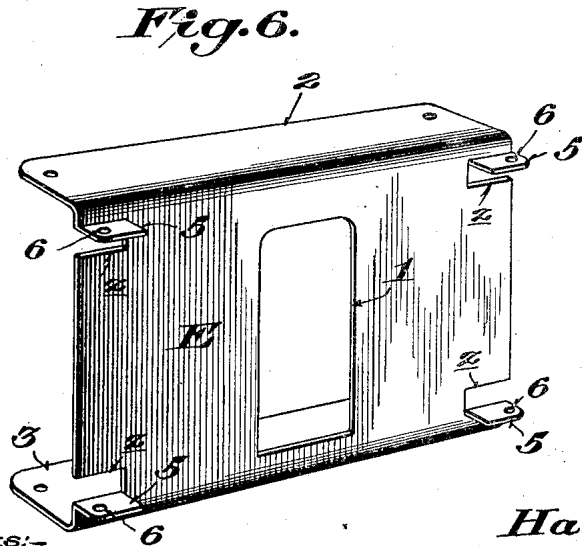
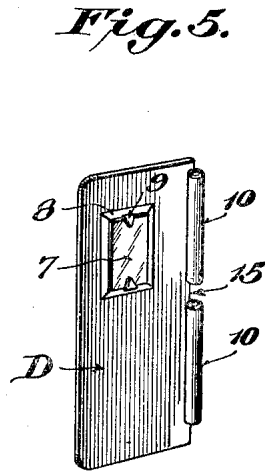
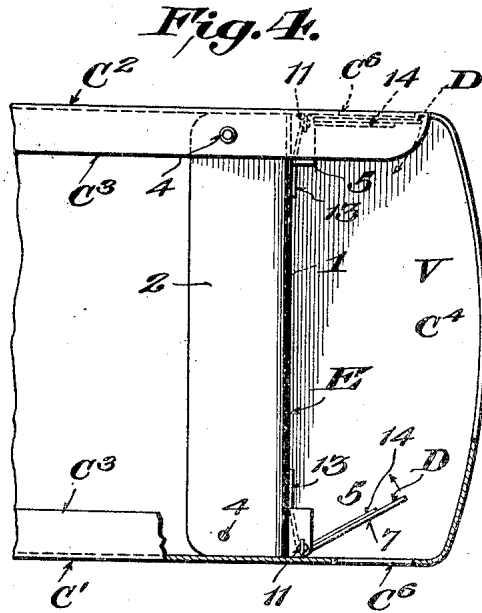
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1,571,505

DOOR AND MOUNTING THEREFOR FOR TOY RAILROAD CARS

Filed March 19, 1925

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

HARRY S. BECKER, OF CHICAGO, ILLINOIS, ASSIGNOR TO AMERICAN FLYER MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DOOR AND MOUNTING THEREFOR FOR TOY RAILROAD CARS.

Application filed March 19, 1925. Serial No. 16,856.

To all whom it may concern:

Be it known that I, HARRY S. BECKER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Doors and Mountings Therefor for Toy Railroad Cars, of which the following is a specification.

This invention relates to toy railroad cars and more particularly to a novel self-closing door and mounting therefor.

One of the objects of the invention is to provide a toy door that will simulate doors of the hinged or swinging type used on Pullman passenger cars. In that connection it is one of the features of the invention that the door will be normally held in closed position and when opened will automatically close thereby to present and preserve the appearance of the solid vestibule characteristic of the Pullman car.

Another object of the invention is to provide a construction which is easy to make and assemble, and which in use contributes materially to providing a substantial car end-construction thereby increasing the strength and stability of the car.

A further object of the invention is to provide novel means for hanging the swinging door and mounting the same so that it will not come apart by accident, and will not rattle, when it is in motion.

With the above and other objects in view which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

A preferred and practical embodiment of the invention is shown in the accompanying drawings in which—

Figure 1 is an elevation of one end of a car illustrating the application of the present invention.

Figure 2 is a detail longitudinal sectional view taken on the line 2—2 of Figure 3.

Figure 3 is a detail vertical sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a horizontal sectional view of the construction shown in Figures 2 and 3.

Figure 5 is a perspective view of the door.

Figure 6 is a perspective view of the wall member for carrying the doors.

Figure 7 is a perspective view of the headed hinge pin for mounting the door on the wall or partition member.

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

According to the embodiment of the invention shown in the drawings it will be observed that the toy car designated generally as C includes the side walls C' and C² having the upper inwardly projecting flanges C³ and the bottom section C⁴ supported in the side walls C' as indicated at C⁵. This construction is fully shown and described in my copending application Serial No. 12,724 filed March 2, 1925 and although the invention disclosed herein may be embodied in a toy car construction of that type, nevertheless it will be readily understood that it is susceptible of embodiment in toy cars made differently, while the features and characteristics of the door and mounting may be incorporated in toy cars other than the Pullman type.

As will be observed from Figure 1 the side walls C' of the car C are provided with the door opening or doorway C⁶ which is opened and closed by means of the door D that normally covers the opening except when pressed inwardly as might be the case when it is intended to play that passengers were entering or leaving the car. This door D and its mount or support C constitute in effect a unit of construction that is of special utility and importance in toy car construction. That is to say, the unit comprising the door D and the wall E is intended to be arranged in one end of the car adjacent the position of the doorway C⁶ thereby to provide a vestibule V between the car end and the car interior, the said car interior being accessible through the door opening 1 formed in the central portion of the plate constituting the wall E.

Referring further to the wall member E it will be observed that the same consists of a body preferably coextensive with the interior dimensions of the car body proper, and is formed with the upper and lower offset flanges 2 and 3 which not only serve to reinforce and stiffen the plate but also provide convenient means for attaching or anchoring the wall member as indicated at 4—4 respectively to the flanges C³ and bottom C⁴

of the side walls of the car. The edges of the plate constituting the wall E are preferably slit as indicated at *z* thereby to permit of the formation of the offset ears 5 which may be perforated as indicated at 6 to receive the hinge pintle or pin for mounting the door D. It will be observed that the ears 5 are offset toward the vestibule side of the plate E and are preferably arranged in pairs at the sides of the plate so as to provide upper and lower door supporting members. In placing the member E within the car it will be observed that the same is located adjacent the door openings thereby to permit of the doors D readily closing the door openings C³.

The doors D are preferably stamped from sheet metal and are formed with the window openings 7 surrounded by a beveled or beaded frame 8, and fastening tongues 9 may be also left at the sides of the openings to facilitate the holding of glass or other translucent medium. The rear edge of the door is formed with the spaced tubular portions 10—10 for receiving a headed hinge pin 11, the latter being adapted to pass through the openings 6 and through the tubular portions 10—10 thereby to swing the doors D at one side of the openings C⁶ and also connect them to the wall E.

For the purpose of maintaining the doors in closed position a spring S is utilized. This spring preferably comprises an intermediate coiled portion 12 having the free ends 13 and 14, the former being adapted to rest against the plate E and the latter being adapted to press against the inside face of the door D. As will be observed from Figure 2, for example, the said spring S is arranged in the recess 15 provided between the spaced apart tubular portions 10—10 on the door. This arrangement not only has the advantage of locking the spring in place so that it can not readily fall out or come part, but also facilitates the assembling of the door with reference to the plate E, and insures the door being placed under tension so that it will not rattle when the car is moving.

From the foregoing it will be apparent that the present invention provides a combined novel door mounting for toy railroad cars and a novel vestibule construction which not only adds materially to the attractive features of the car but by reason of the rigidity afforded through the use of the plate forming the wall E, adds strength to the end of the car thereby providing a better constructed and more stable article.

As will be observed the headed pin or pintle member 11 in its final assembled position lies beneath a flange C³ of the car body construction. In other words, when the flanges C³ are bent down for fastening to the top flange 2 of the door-carrier E the

said flanges C³ will lock the hinge pintle in place to prevent accidental removal or withdrawal.

Without further description it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art, and it will of course be understood that changes in the form, proportion and minor details of construction may be resorted to without departing from the spirit of the invention and scope of the appended claims.

I claim:—

1. In a toy railway car, a car body including side members and having door openings in said side members, a support disposed transversely within the car body between the sides thereof, a door carried by said support and adapted to be moved into and out of closed relation to said door openings, and a spring for holding said door normally closed.

2. In a toy railway car, a car body including a car side having a door opening, and a door carrying unit mounted within the car and comprising a wall member arranged transversely of the body and secured to the car side, and a door hinged adjacent the edge of said wall member and adapted to close said opening.

3. In a toy railway car, a car body having side door openings, a plate arranged transversely within the car body adjacent one end and having an opening simulating an inside vestibule door, doors pivotally mounted adjacent the ends of said plate and adapted to be moved into position to close said door openings.

4. A toy car construction comprising in combination, a car body having side door openings, a wall forming member arranged within the car body at one side of the door openings and consisting of a plate having upper and lower offset attaching flanges and pivot ears also formed therefrom, door members having hinge pintle receiving portions at one edge, a hinge pintle adapted to connect the doors with the pivot ears of the wall forming member, and a spring for yieldingly maintaining said doors in closed relation to the door-openings of the car body.

5. A toy car construction comprising in combination, a car body having side door openings, a wall forming member arranged transversely of the car body and having offset perforated pivot ears, a door member having spaced tubular portions at one edge adapted to fit between a pair of said pivot ears, a spring having a coiled portion adapted to fit between said spaced tubular portions of the door, and a hinge pintle adapted to fit through said perforated ears, the tubular portions of the door and through the coiled part of the spring.

6. A toy car construction comprising a car body including a bottom, side wall members having door openings and also provided with inturned flanges, a wall member secured to the bottom of the car and to said inturned flanges of the side walls, and doors hinged to said wall member and adapted to close the door openings, and a pintle for the hinge connection between the doors and the wall members being headed and lying beneath one of said inturned flanges thereby to prevent accidental removal.

In testimony whereof I hereunto affix my signature.

HARRY S. BECKER.