

958,362.

Patented May 17, 1910.

2 SHEETS—SHEET 1.



S. P. BUSH.
TRUCK CONSTRUCTION FOR CARS.
APPLICATION FILED APR. 24, 1909.

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2 SHEETS—SHEET 2.

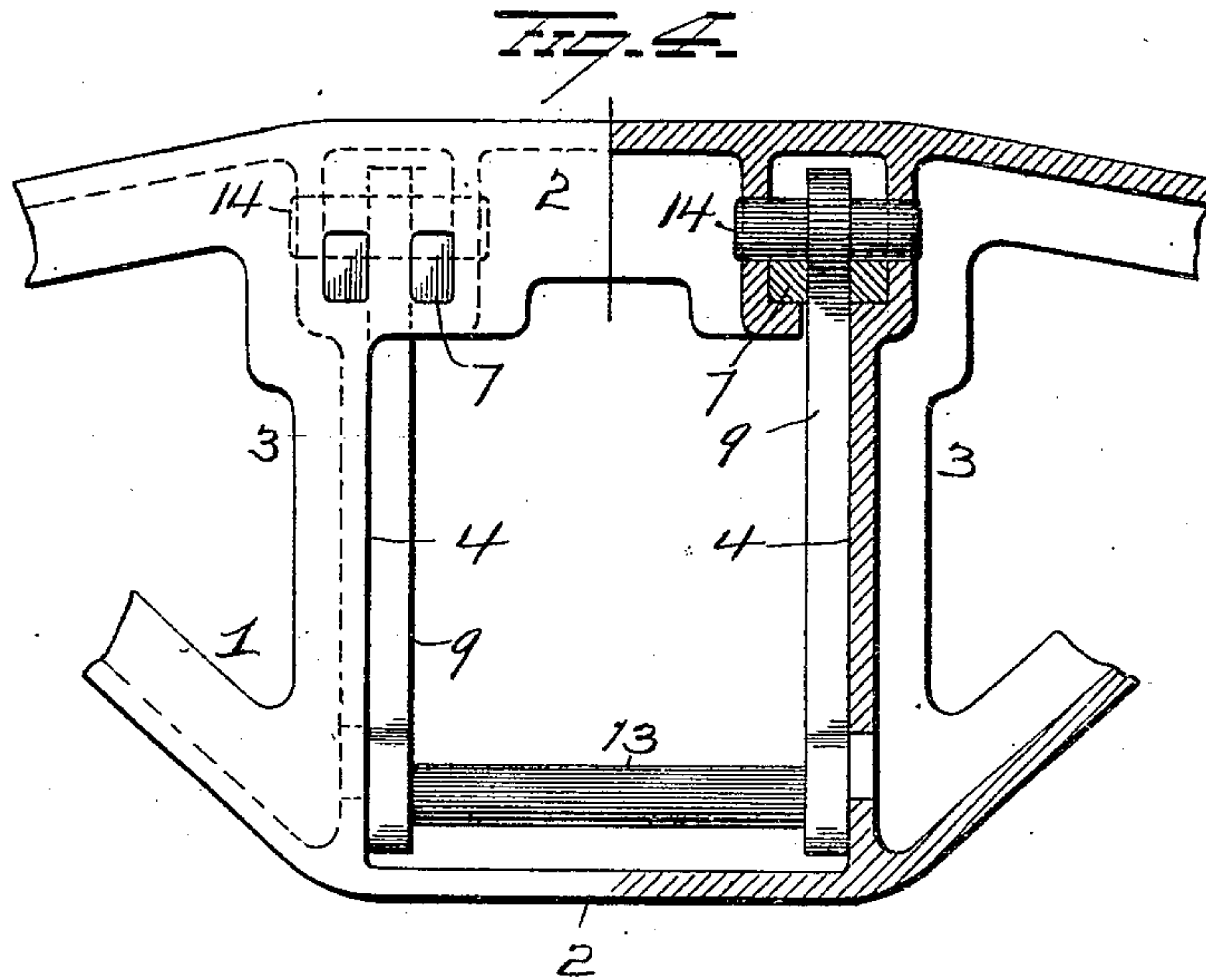


Fig. 5.

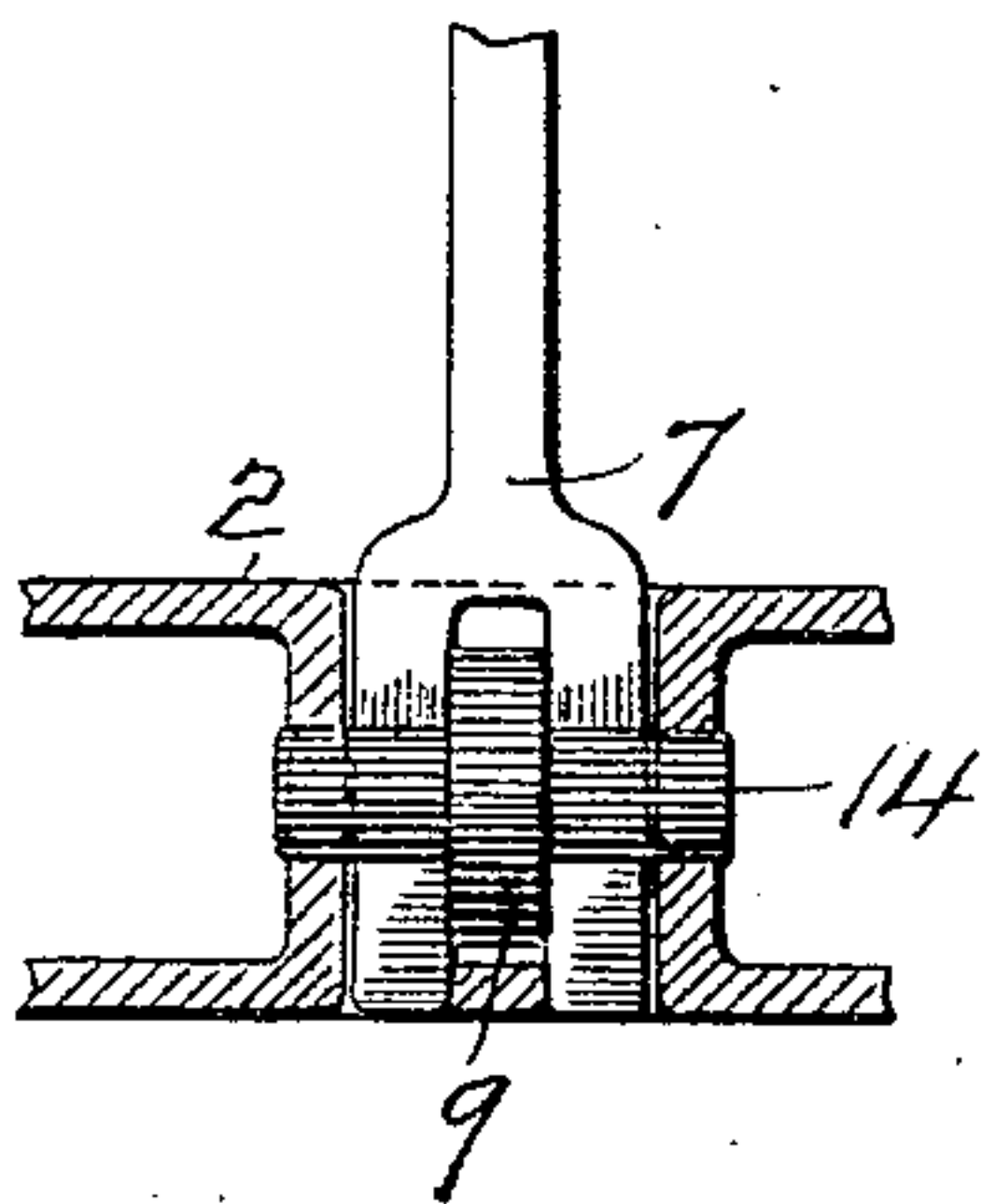
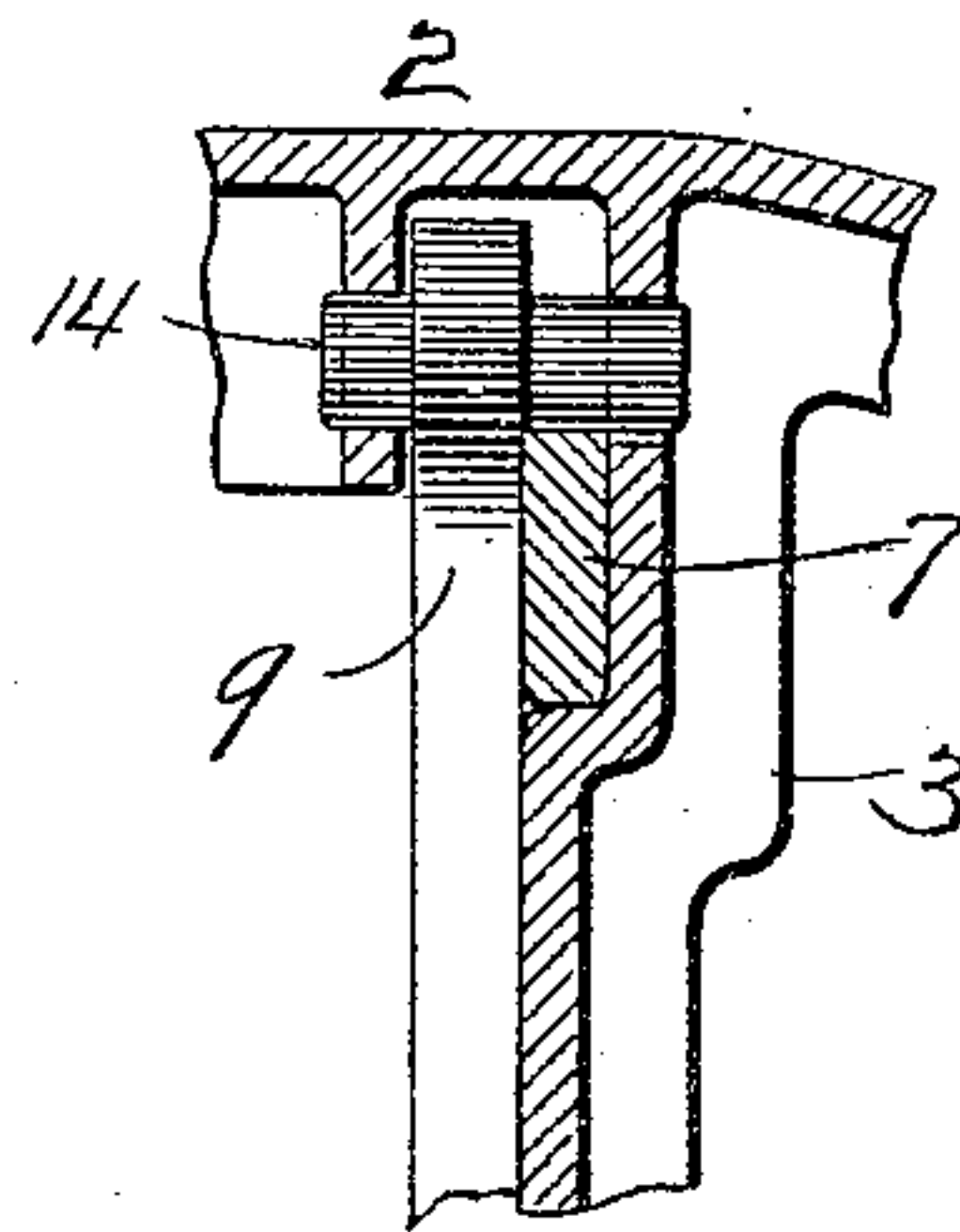


Fig. 6.



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TRUCK CONSTRUCTION FOR CARS.

958,362.

Specification of Letters Patent.

Patented May 17, 1910.

Application filed April 24, 1909. Serial No. 492,031.

To all whom it may concern:

Be it known that I, SAMUEL P. BUSH, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Truck Construction for Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a truck construction for cars, locomotive tenders or other vehicles, and particularly to that type of trucks known as the swing motion truck, in which the truck bolster and bolster support, swing laterally with relation to the truck side frames.

The object of my invention is to simplify and make safer, this type of truck, and to reduce the cost of construction. Heretofore swing motion trucks have been objectionable owing to the breakage of the swing hangers, thus permitting the bolster, springs and other supporting members to fall on the track and derail cars. In my construction I avoid this danger and at the same time reduce the number of parts necessary.

With this and other ends in view, my invention consists in the parts and combinations of parts as will be more fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view partly in elevation and partly in section of a side frame showing the bolster, bolster supporting devices and transoms. Fig. 2 is a view in plan partly in section of a section of one side frame and also a section of the bolster and transoms. Fig. 3 is a similar view partly in section of a slightly modified form. Fig. 4 is a view in side elevation partly in section of a portion of an end frame showing a modified arrangement of hanger support and transom. Fig. 5 is a view in horizontal section through one of the hanger supports of same, and Fig. 6 is a view similar to Fig. 4 of another modification.

Referring to the drawings, 1 represents a truck side frame, which in this case is shown cast integral, but may be otherwise. This frame is made up of the usual upper and lower members 2 and cross members 3, with an opening 4 between the cross members in which the bolster 5 can be fitted and swung. In the constructions shown in Figs. 1, 2, 3

and 6 this opening is made wider at the top than at the bottom, as shown at 6. I use this wider opening to accommodate transoms 7 located in front and rear of the bolster 5, and which connect and secure the two side frames 1 of the truck together, but I may use it for other purposes. These transoms are supported by the side frames, and support the hangers 9, spring carriers 10, springs 11 and bolster 5. These hangers have a pivotal support on the bolt 12 which bears at its ends on the transoms and carry pivotally, the spring carrier the latter resting on the bolt 13 supported by the lower ends of the hangers. This permits the hangers to swing from their upper end, and while this pivotal action may be secured in any suitable manner, I prefer the arrangements I have shown in the drawings. In Figs. 4 and 5 the transoms are bifurcated at their ends, the said ends resting in seats located in planes above the bolster openings in the side frames, with short pins 14 resting on said bifurcated ends and also resting in bearings formed in the side frame.

In Fig. 6, the construction is the same as that shown in Fig. 1 except that each hanger is supported on one short pin instead of both being suspended from one long bolt, hence carries but part of the load of the car body.

One of the principal features in my construction is that of having the side frames, the transoms and the hangers interconnected and the transoms supporting the hangers within the structure of the side frames. It will be seen that by means of this construction if the hangers should break, the lower member of the side frame will prevent it and the parts supported thereby, from falling on the track.

Transoms 7 in addition to performing the functions already described, serve as guides for the bolster 5, and prevent the latter from moving in a direction longitudinal to the side frame and avoid its striking or rubbing against the hangers. This may be accomplished by having a projection or protruding surface 14^a on the transoms, or 15 on the bolster, and will guide the bolster in its lateral motion.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:—

1. In a car truck, the combination of

truck sides and transoms connecting them near their upper portion and carrying a portion of the weight of the car body transmitted through the hangers, from a point
5 within the structure of the truck sides.

2. The combination with side frames, each having an opening wider at the top than at its lower or intermediate portion, of two transoms the ends of which rest in the
10 enlarged portion of said openings, hangers located intermediate the two transoms and a bolster carried by said hangers.

3. In a swing motion car truck the combination of truck sides and transoms connecting and interlocking with them, and
15 carrying that portion of the weight of the car body transmitted through the hangers, at a point within the structure of the truck sides.

20 4. In a car truck the combination of truck

sides, cross transoms connecting therewith and hangers suspended partly from the side frames and partly from the transoms.

5. In a car truck the combination of truck sides and transoms connected therewith, 25 having bifurcated ends and supporting the hangers.

6. In a car truck the combination of side frames and transoms connecting and supported by them, and the transoms carrying 30 the weight of the car body within the structure of the side frames through the medium of hangers.

In testimony whereof, I have signed this specification in the presence of two subscrib- 35 ing witnesses.

SAMUEL P. BUSH.

Witnesses:

A. W. BRIGHT,

A. N. MITCHELL.