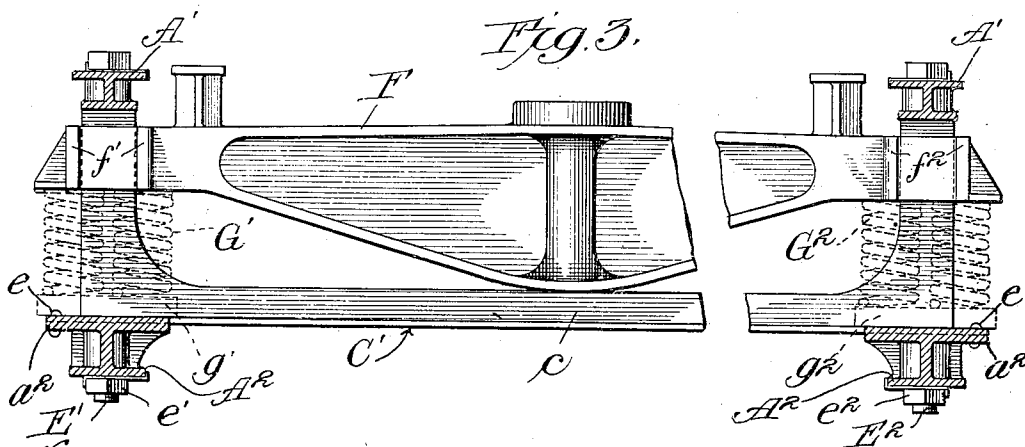
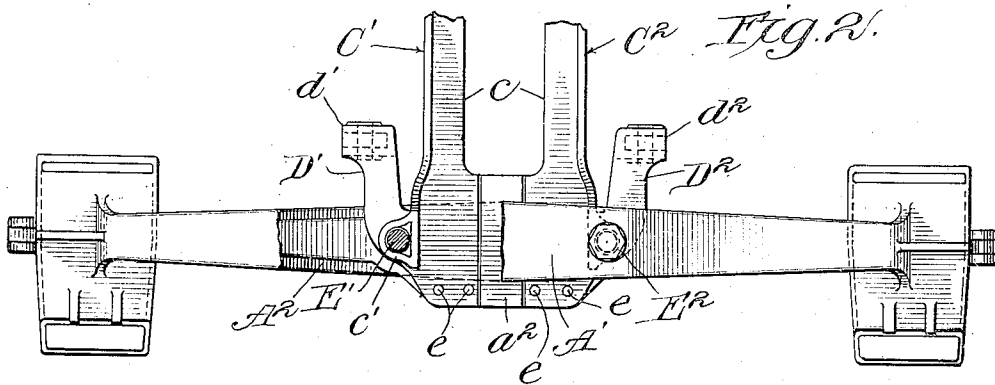
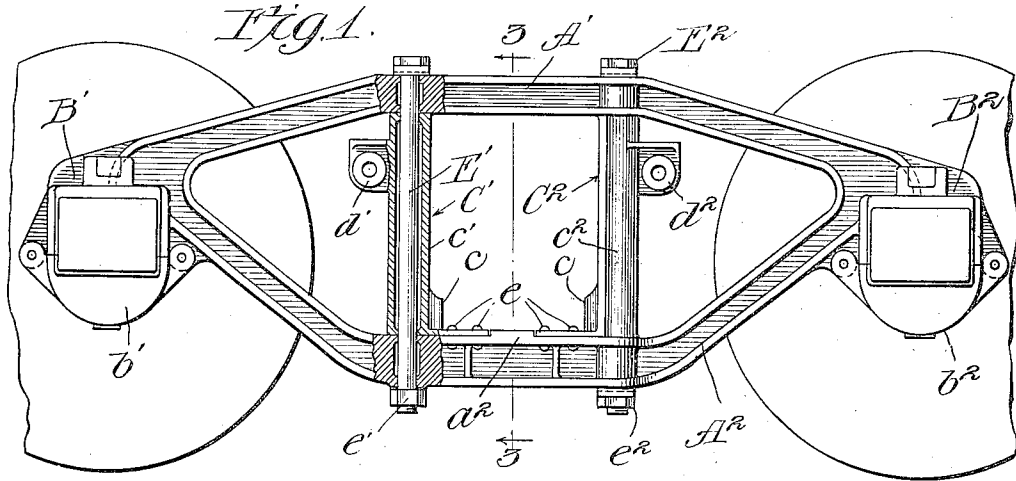


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CAR TRUCK.

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Witnesses:

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CAR-TRUCK.

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To all whom it may concern:

Be it known that I, GUSTAV KOMAREK, a citizen of the United States, residing in St. Louis and State of Missouri, have invented certain new and useful Improvements in Car-Trucks, of which the following is a specification.

My invention relates in general to car trucks, and more particularly to car trucks having cast metal side frames.

The form of cast metal side frames for trucks in most general use at the present time comprises a pair of spaced columns cast integrally with the side frames, a portion of the bolster opening between the columns being widened to permit the passage between the columns of the end of a bolster having integral column guides on the sides thereof. In this form of cast side frames, the springs alone serve to retain the bolster ends within the upper contracted portions of the bolster openings, and should the ends of the bolster accidentally be lowered to register with the widened portions of the openings between the columns, the bolster would become disconnected from the side frames. Furthermore, the greatest wear to which truck side frames are subjected is upon the columns, owing to the constant vertical movement of the bolster ends relatively to the columns, and as the columns are formed integrally with the side frames they cannot be replaced when worn.

My invention has for its object to provide a car truck of the type having cast metal side frames with means for permitting the convenient assembling of the bolster with the side frames, which will prevent any danger of the accidental disconnection of the bolster from the side frames; which will permit the convenient disassembling of the bolster from the side frames; and which will enable new columns to be readily substituted for worn columns.

A further object of my invention is to provide a car truck which will be strong and durable in use, and which will comprise parts capable of being readily assembled into secure operative relation, and also readily disassembled should occasion require.

My invention will be more fully described hereinafter with reference to the accompanying drawing, in which the same is illustrated as embodied in a convenient and practical form, and in which—Figure 1 is a

side elevational view, parts being broken away; Fig. 2, a plan view of one side of a car truck embodying my invention, a portion thereof being broken away; and Fig. 3, a central vertical section on line 3, 3, Fig. 1, the scale being somewhat larger.

The same reference characters are used to designate the same parts in the several figures of the drawing.

Reference character A' designates the upper bar and reference character A² the lower bar of a truck side frame formed in an integral casting.

B' and B² indicate the upper portions of journal boxes which are also formed integrally with the cast metal side frame.

b', b² indicate the lower portions of the respective journal boxes which are detachably secured to the upper portions. So far as my invention is concerned however, it is not material whether part or all of each journal box is cast integrally with the side frame. My invention does not reside in, nor is it limited to, divided journal boxes as illustrated in the drawing. Nor is my invention restricted to a cast metal side frame, the bars of which are I-shaped in cross section, as the upper and lower bars which are formed in a single integral casting may have other cross sections without departing from my invention.

The upper surface of the horizontal central portion of the lower bar A² is widened to form an integral flange a² which serves as a spring seat, as will be clear from the subsequent description.

C' and C² indicate transverse members for rigidly connecting the side frames of my improved car truck, each of said transverse members being formed in an integral casting and comprising columns at its opposite ends of a height to fit between the upper and lower bars of the side frames. The transverse member C' comprises vertical hollow columns c', c², which are connected at their lower ends by the bar c which is preferably angular in cross section. The other transverse member C² comprises vertical hollow columns, such as indicated at c², at each end thereof, the lower ends of said columns being integrally connected by a bar c also preferably angular in cross section.

The transverse members C' and C² are assembled with the side frames by inserting the columns c', c² between the upper and lower bars of the side frames, the columns

on the corresponding ends of the transverse members being spaced apart between the upper and lower bars of the side frames so as to form a bolster opening. Bolts E' and E^2 extend vertically through the columns c' , c^2 and also through registering openings formed in the bars of the respective side frames. e' and e^2 indicate nuts located upon the lower screw threaded ends of the bolts which project below the under surface of the lower bar of the side frames.

The transverse members of the truck frame C' and C^2 are assembled with the side frames with the horizontal flanges of their connecting bars c extending toward each other and seated at their ends upon the spring seats a^2 formed integrally with the lower bars of the side frames. The spring seats are preferably cut away so that the central portions thereof will be flush with the horizontal inwardly projecting flanges of the angle bars of the transverse members. Suitable fastening devices, such, for instance, as rivets e , secure the horizontal flanges of the cross bars to the underlying portions of the spring seats.

D' and D^2 indicate inwardly extending brackets formed integrally with the columns and each comprising a pair of apertured ears d' , d^2 from which may be hung any suitable form of brake hanger.

F' designates a bolster, the opposite vertical surfaces of the ends of which are provided with spaced pairs of column guides f' , f^2 which engage the outer and inner surfaces of the respective columns c' and c^2 so as to securely unite the bolster with the side frames but at the same time so as to permit a free vertical movement of the ends of the bolster relatively to the columns.

G' and G^2 designate nests of springs which support the ends of the bolster and are supported between columns upon the spring seats of the side frames.

g' and g^2 indicate wooden blocks interposed between the lower ends of the springs and the spring seats.

In assembling the parts of my improved car truck, the bolster is placed between the transverse members with the pairs of columns located between the column guides on the bolster ends, after which the transverse members with the bolster between them are secured to the side frames by inserting the columns between the upper and lower bars of the side frames and then passing the bolts through the registering holes in the top and bottom bars and intermediate columns. The ends of the horizontal flanges of the angle bars forming parts of the transverse members are then secured by the rivets e to the spring seats. The springs are then interposed between the spring seats and the ends of the bolster.

From the foregoing description it will be

observed that I have invented an improved car truck comprising cast metal side frames and two cast transverse members rigidly, though detachably, secured to the side frames and serving to securely retain the bolster in locked engagement with the side frames. It will be further observed that each of the transverse members is in the form of an integral casting comprising a bar, at the ends of which columns project at right angles thereto, and that by providing two of such transverse members suitably spaced apart, the pairs of columns for guiding the bolster ends are formed between the upper and lower bars of the side frames.

While I have described more or less in detail the specific form in which I have illustrated my invention as embodied, yet I do not wish to be understood as limiting myself thereto, as I contemplate changes in form, proportion of parts, and substitution of equivalents, as circumstances may require, or as may be deemed expedient.

I claim:

1. In a car truck, the combination with cast metal side frames each comprising integral top and bottom bars, of a pair of transverse cast metal members each comprising a column at each end thereof and an intermediate angle bar cast integrally with the columns and uniting the lower ends thereof, and means for securing said transverse members to the side frames with the columns on their corresponding ends spaced apart to form openings for the end of the bolster and with the horizontal flanges of the angle bars extending toward each other at the bottoms of the said bolster openings.

2. In a car truck, the combination with cast metal side frames each comprising integral top and bottom bars, of a pair of transverse cast metal members each comprising a column at each end thereof and an intermediate angle bar cast integrally with the columns and uniting the lower ends thereof, and bolts passing vertically through the top and bottom bars of the side frames and through the interposed columns, thereby uniting the transverse members to the side frames and spacing apart the columns on the corresponding ends of the transverse members to form openings for the ends of the bolster, the horizontal flanges of the angle bars extending toward each other at the bottoms of the said bolster openings.

3. In a car truck, the combination with cast metal side frames each comprising integral top and bottom bars, of a pair of transverse cast metal members each comprising a column at each end thereof and an intermediate angle bar cast integrally with the columns and uniting the lower ends thereof, means securing the columns of the transverse members between the upper and lower bars of the side frames to form openings for

the ends of the bolster, a spring seat formed integrally with the upper surface of the central portion of the lower bar of each side frame, and means for securing the ends of the horizontal flanges of the angle bars of the transverse members to the spring seats.

4. In a car truck, the combination with cast metal side frames, each comprising integral top and bottom bars and a spring seat formed integrally on the upper surface of the central portion of the bottom bar, of a pair of transverse cast metal members each comprising a column at each end thereof and an intermediate angle bar cast integrally with the columns and uniting the lower ends thereof, the spring seats being cut away to receive the horizontal flanges of the adjacent ends of the angle bars, and means for securing the columns between the top and bottom bars of the side frames and for securing the horizontal flanges of the angle bars to the spring seats.

5. In a car truck, the combination with

cast metal side frames, each comprising integral top and bottom bars, of a pair of transverse cast metal members each comprising a column at each end thereof and a brake hanger bracket projecting inwardly from each column, each of said transverse members also comprising an angle bar cast integrally with the columns and uniting the lower ends thereof, and means for securing the said transverse members to the side frames with the columns on their corresponding ends spaced apart to form openings for the ends of the bolster and with the horizontal flanges of the angle bars extending toward each other at the bottoms of the said bolster openings.

In testimony whereof, I have subscribed my name.

GUSTAV KOMAREK.

Witnesses:

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CHAS. P. GORMAN.