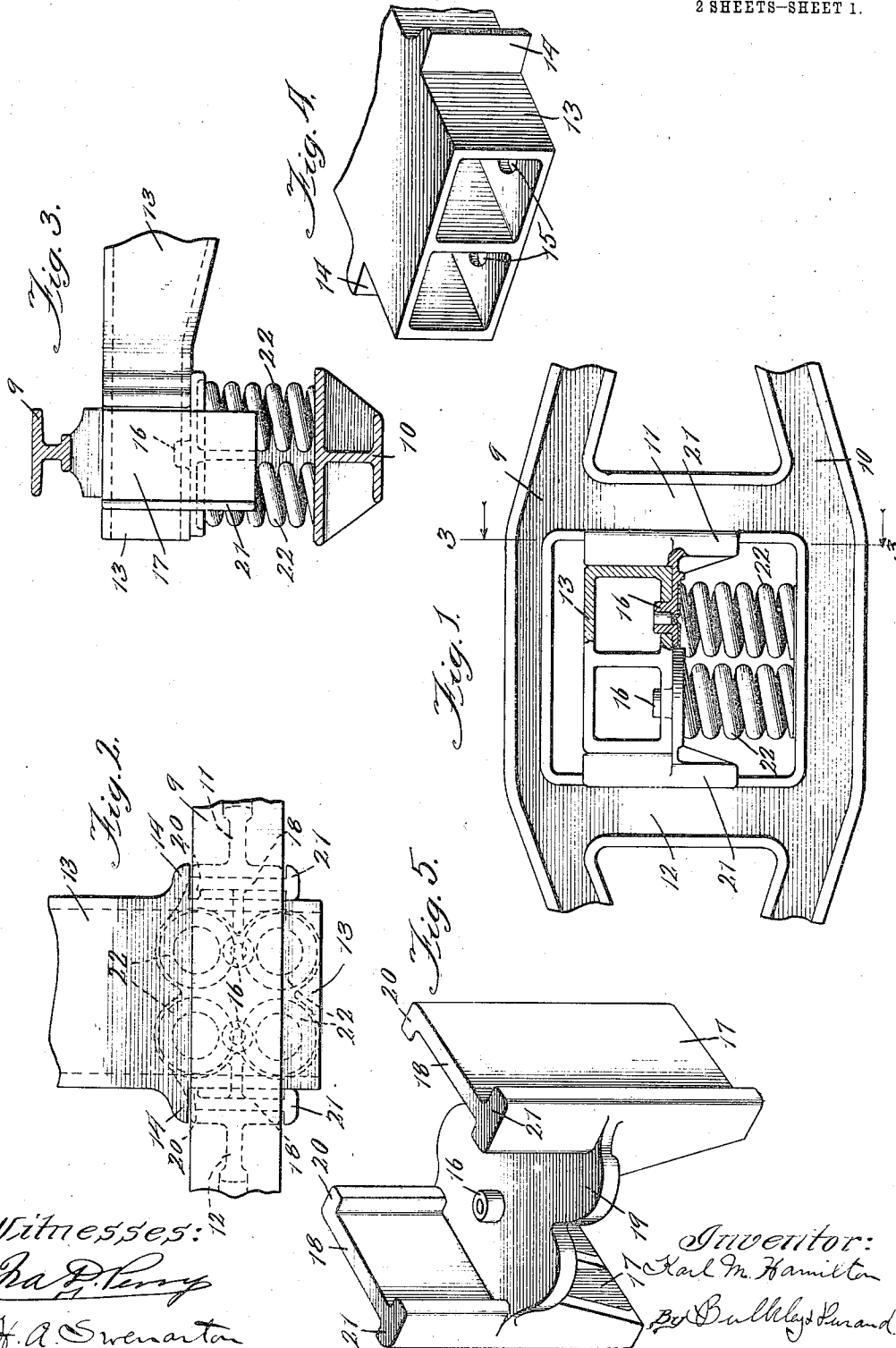


K. M. HAMILTON.
CAR TRUCK.
APPLICATION FILED MAY 5, 1911.

1,009,242.

Patented Nov. 21, 1911.

2 SHEETS-SHEET 1.



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Inventor:
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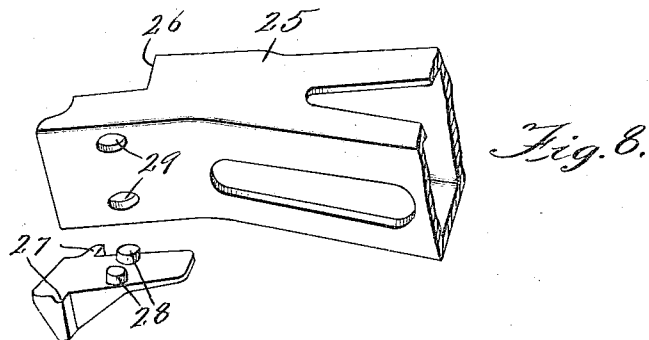
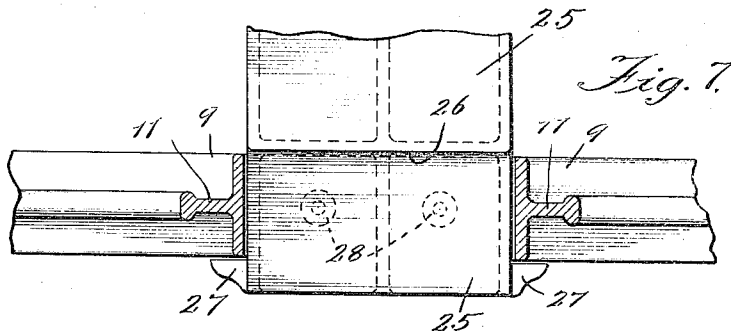
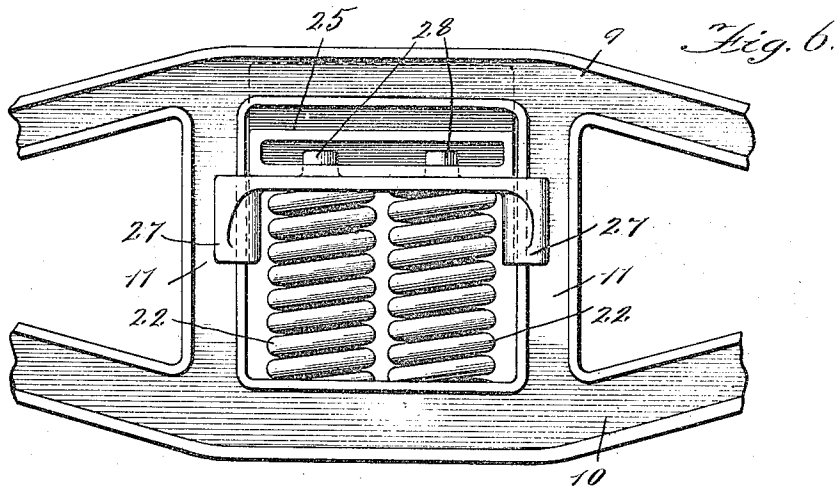
Atty.

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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

KARL M. HAMILTON, OF DAVENPORT, IOWA, ASSIGNOR TO BETTENDORF AXLE COMPANY, OF DAVENPORT, IOWA, A CORPORATION OF IOWA.

CAR-TRUCK.

1,009,242.

Specification of Letters Patent. Patented Nov. 21, 1911.

Application filed May 5, 1911. Serial No. 625,290.

To all whom it may concern:

Be it known that I, KARL M. HAMILTON, a citizen of the United States of America, and resident of Davenport, Scott county, Iowa, have invented a certain new and useful Improvement in Car-Trucks, of which the following is a specification.

My invention contemplates an improved construction in car trucks, and relates more particularly to car trucks in which the various parts are held together without the use of bolts or rivets.

The object of my invention is to provide improved means for attaching the bolster to the side frame. In prior trucks of similar construction, in which the parts have been held together without the use of bolts or rivets, it has been necessary to enlarge the lower portion of the bolster opening in the side frame, so that when the bolster springs have been removed, the bolster can be removed from the side frame. By my improved construction, however, I provide means whereby the bolster can be readily removed from the side frame without the provision of the large opening. I also provide an extended bearing surface between the bolster and the side frame, whereby I am enabled to dispense with the ordinary spring plate or rod. These and other objects of my invention will be more clearly understood by reference to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of a portion of the car truck. Fig. 2 is a plan view of the same. Fig. 3 is a section taken on the line 3—3 in Fig. 1, looking in the direction of the arrows. Fig. 4 is a detail view of one end of the bolster. Fig. 5 is a detail view of the locking member. Fig. 6 is a side elevation of a modified form of my device. Fig. 7 is a plan view, partly in section, of this modified form. Fig. 8 is a detail view of this modified form, showing the bolster and locking member in disassembled relation.

Throughout the drawings, similar reference characters refer to similar parts.

I have shown the side frame comprising an upper arch bar 9, a lower arch bar 10, and columns 11 and 12, between which there is formed the usual bolster opening. As clearly shown in Fig. 4, the bolster 13 is provided with a flange 14 near the end

thereof, which flange is adapted to bear against the inside of the side frame when the bolster is in position, as clearly shown in Fig. 2. Near the ends of the lower surface of this bolster there are provided a pair of openings 15, through which corresponding lugs 16 of a locking member 17 are adapted to pass. This locking member is clearly shown in detail in Fig. 5, and comprises a pair of side members 18 connected together by means of a bottom portion 19 from which the lugs 16 project. The side portions 18 extend downwardly below the bottom portion 19 for a purpose which will hereinafter be pointed out. These side portions are provided with a rear bearing flange 20, and a locking flange 21 upon their front ends. In assembling the parts, the end of the bolster 13 is first inserted through the bolster opening in the side frame, and then the locking member 17 is inserted within this opening, so that the bottom portion 19 rests beneath the end of the bolster and the lugs 16 pass through the openings 15 in the bolster. In this position of the bolster and the locking member, the flange 14 of the bolster bears against the inside surface of the side frame, while the locking flanges 21 bear against the outside surface of this side frame, adjacent to the bolster opening. The bolster and locking member are then raised a sufficient distance to enable the bolster springs 22 to be placed in position beneath the bolster, in the ordinary manner, and these springs, by their upward pressure, securely hold the lugs 16 within the openings 15 in the bolster, thus rigidly connecting this locking member with the bolster. By this construction, it will be readily seen that the bolster is securely fastened to the side frame, as movement in one direction is prevented by means of the flange 14 bearing upon one side of the side frame, while movement in the opposite direction is prevented by reason of the locking flange 21 bearing upon the opposite side of the side frame. By means of the downward extensions of the sides 18 of this locking member, I provide an increased bearing surface for this member against the side frame, whereby I obtain a much more rigid and efficient connection between the bolster and the side frame, and also obtain a point of connection at a lower point upon this side frame, whereby I am enabled to do

away with the ordinary spring plate or rod. In dismantling this type of truck, it is merely necessary to raise the bolster slightly, so that the bolster springs can be removed, and then the locking member is removed by first permitting the lugs 16 to disengage from the openings 15, and then the bolster can be readily withdrawn from the opening in the side frame.

10 In the modified form of my invention, shown in Figs. 6, 7 and 8, I have shown the bolster 25 being cut away at its end so as to form a flange 26 which bears against the inside of the upper portion of the side frame. 15 The locking member is also slightly modified, being provided with the depending locking flanges 27 which bear against the outside surface of the side frame, in the manner above described. This locking member 20 is likewise provided with locking lugs 28, similar to those described in the other form of my invention, which engage with corresponding openings 29 in the lower surface of the bolster. This locking member and 25 bolster are locked together by means of the bolster springs 22, in the manner above described, and the assembling and disassembling of this type of truck is accomplished in the same manner as described in connection with my preferred construction. 30

It will thus be seen that I have devised an improved type of truck which can be readily assembled and disassembled, and in which the parts are held together without the use of bolts or rivets, and in which I provide an extended bearing connection between the bolster and the side frame whereby a much more rigid construction is obtained. 35

What I claim as my invention is:

40 1. In a car truck, a side frame having a bolster opening therein, a bolster extending through said opening and having a flange integral therewith bearing against the inner side of said frame, and a locking member 45 removably connected with said bolster and having a flange bearing against the opposite side of said side frame to thereby hold said bolster in position in said bolster opening. 50 2. In a car truck, a side frame having a bolster opening therein, a bolster extending through said opening and having a flange adapted to bear against one side of said side frame, one or more openings in the lower surface of said bolster near the ends thereof, a member having lugs corresponding 55 to said openings and adapted to be inserted therein, and a flange on said member

bearing against the opposite side of said side frame.

3. In a car truck, a side frame having a 60 bolster opening therein, a bolster extending through said opening and having a flange adapted to bear against one side of said side frame, one or more openings in the lower surface of said bolster near the ends thereof, 65 a member having lugs corresponding to said openings and adapted to be inserted therein, one or more bolster springs bearing beneath said lugs to hold the same securely within said openings, and a flange on said 70 member bearing against the opposite side of said side frame.

4. In a car truck, a side frame having a bolster opening therein, a bolster extending 75 through said opening and having a flange bearing against the inner side of said frame, and a locking member removably connected with said bolster and having a flange bearing against the opposite side of said side frame to thereby hold said bolster in position 80 in said bolster opening, said flange extending for a distance below said bolster.

5. In a car truck, a side frame having a bolster opening therein, a bolster extending 85 through said opening and having a flange adapted to bear against one side of said side frame, one or more openings in the lower surface of said bolster near the ends thereof, a member having lugs corresponding to said 90 openings and adapted to be inserted therein, and a flange on said member bearing against the opposite side of said side frame, said flange extending for a distance below said bolster.

6. In a car truck, a side frame having a 95 bolster opening therein, a bolster extending through said opening and having a flange adapted to bear against one side of said side frame, one or more openings in the lower surface of said bolster near the ends thereof, 100 a member having lugs corresponding to said openings and adapted to be inserted therein, one or more bolster springs bearing beneath said lugs to hold the same securely within said openings, and a flange on said member 105 bearing against the opposite side of said side frame, said flange extending for a distance below said bolster.

Signed by me this 27th day of April, 1911.

KARL M. HAMILTON.

Witnesses:

A. B. FRENIER,
A. K. READING.