C. A. LINDSTRÖM.

CAR TRUCK. APPLICATION FILED FEB. 4, 1911. Patented May 23, 1911. 993,083. 3 SHEETS-SHEET 1.

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3 SHEETS-SHEET 2.

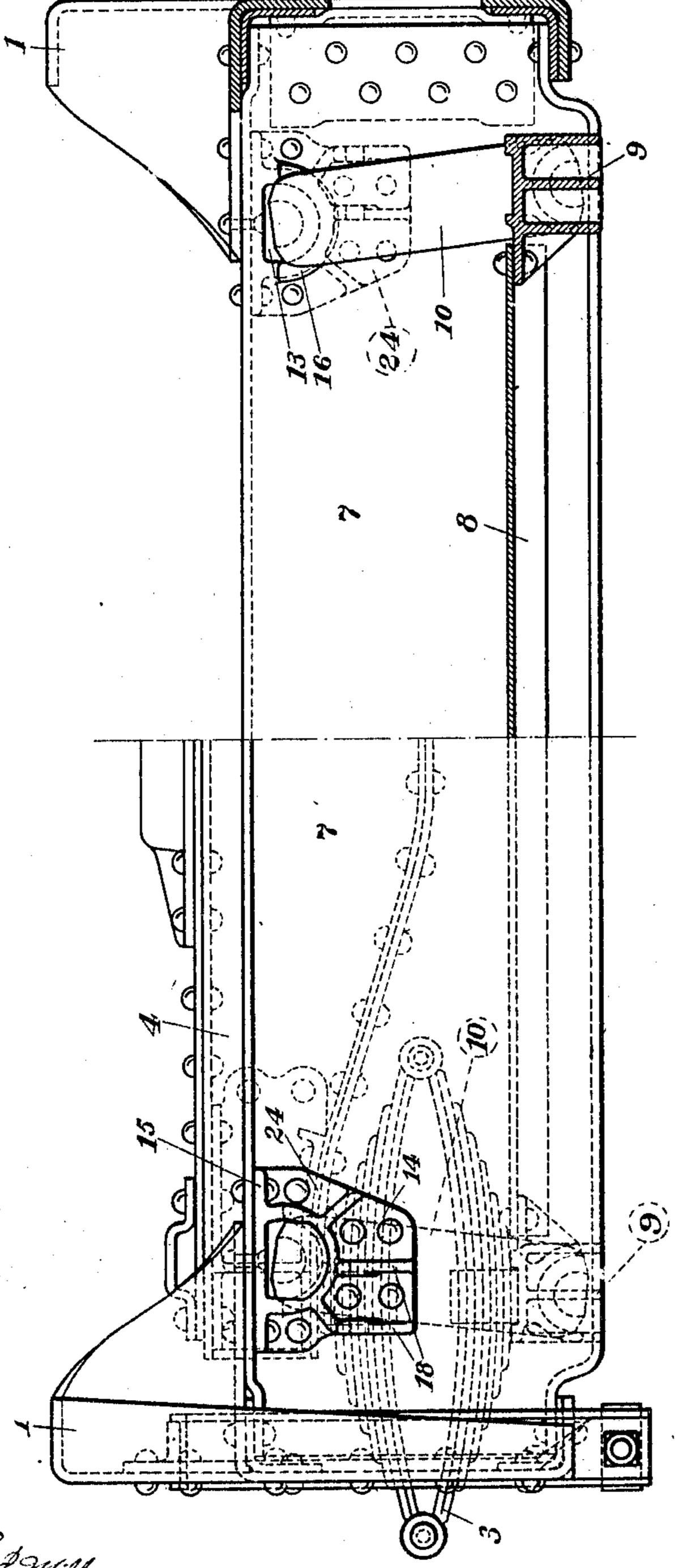


Fig. 2.

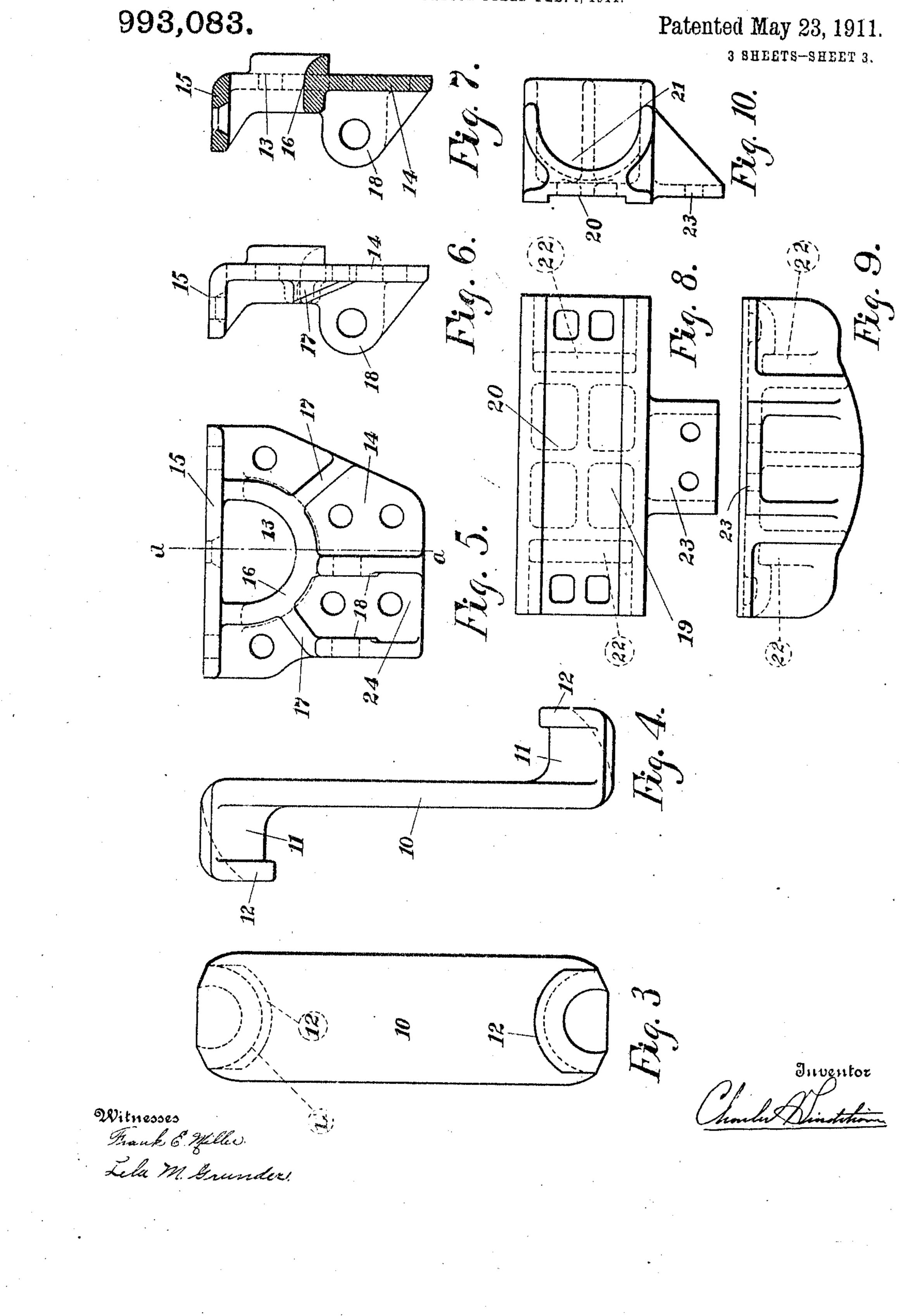
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UNITED STATES PATENT OFFICE.

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CAR-TRUCK.

993,083.

Specification of Letters Patent.

Patented May 23, 1911.

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To all whom it may concern:

Be it known that I, Charles A. Lindström, a citizen of the United States, residing at No. 138 Stratford avenue, Pittsburg, E. E., in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Cartrucks, of which the following is a specification.

but more particularly to trucks of the type in which the bolster is swingingly supported as by means of links, bails, or the like, whereby the bolsters and car body have a limited sidewise swing or movement laterally of the car when it passes around a curve or over an uneven portion of the tracks.

The principal object of my present invention is to modify the usual and customary construction so as to facilitate the removal

of the bolster and other parts.

Heretofore the bolster has generally been supported directly by the truck side frames or transoms by means of links or the like, 25 connected to the side frames or transoms and also to the bolster by means of pin or bolt connections, and an object of my invention is to dispense with said pin or bolt connections, thus reducing the number of loose parts, the liability of these parts to work out of place and get lost, and also in a reduction of cost of manufacture of such trucks.

In the accompanying drawings forming

In the accompanying drawings, forming a part of this specification, and in which like reference characters indicate like parts throughout the several figures, I have illustrated the application of my invention to a truck of what is known as the Fox type.

Referring to the drawings: Figure 1 is a 40 side elevation of a car truck in which my invention is embodied. Fig. 2 shows in the left hand half an end elevation, and in the right hand half a vertical section, taken at a point midway between the transoms, the 45 truck belster being removed in order that my invention may be illustrated more clearly; Figs. 3 and 4 show side and end elevations respectively of one of the so called hanger arms; Figs. 5, 6 and 7 are side elevation, end elevation and section taken on line a-a of Fig. 5, of the castings for receiving and supporting the upper end of said hanger arms, and Figs. 8, 9 and 10, are plan, side and end views respectively of the end cast-55 ings attached to the spring plank, and

adapted to support the springs, and also engage the lower ends of the hanger arms.

In the construction illustrated, 1 indicates the side frame of the truck, formed of pressed steel, having a central opening 2 for 60 the accommodation of the projecting ends of the springs 3, which support the bolster 4, and openings 5, 5 for the accommodation of the pedestals 6, 6. The side frames 1, are connected together at the required distance apart by transoms 7, 7, which are illustrated as flanged members formed of pressed steel.

8 designates the spring plank, and 9, 9 the spring plank end castings attached thereto 70 and illustrated in detail in Figs. 8, 9 and 10. The spring plank is swingingly supported. by the hanger arms 10, which are provided at both their upper and lower ends with laterally projecting pivot bosses 11, of the 75 same dimensions, which seat in the concave recesses in castings shown in Figs. 5-10. At the outer ends of the projecting pivot bosses are projecting lips 12, which when in position extend beyond the concave re- 80 cesses in the said castings, and serve to prevent the portions 11 from becoming displaced from their respective recesses. These pivot bosses provide for the suspension of the spring plank and spring seat end cast- 85 ings in such a manner as to permit the members to swing transversely of the truck side frames in order that the truck bolster, which is supported above the spring seats on the springs 3, may partake of a lateral swing- 90 ing motion relative to the truck of which it forms a part.

The projecting pivot bosses 11, of the so called hanger arms 10, are so shaped that when they are seated in the recessed bearings 13, in castings 24, the hanger is capable of a certain amount of swinging motion. These castings are formed with a flat portion 14 and top flange 15, for the purpose of attachment to the transoms 7, arcuate bearing flanges 16, one of which projects slightly through the web of the transom 7, and strengthening ribs 17, 17. They are further provided with perforated projecting lugs 18, for the support of the brake hangers, thus forming in one casting a combined spring plank hanger and brake hanger support.

The castings 19, Figs. 8-10, which are secured to the ends of the spring plank, are so formed as to provide seats 20, for the 110

springs, and are also provided with recessed bearing portions 21, similar in shape to the recesses in casting 24, to accommodate the lower projecting pivot boss 11, of the hanger arm 10, and a recess 22, is also provided for the reception of the projecting lips 12. 23 indicates a projection on this casting adapted to be secured to the end of the spring plank 8.

be understood that the ends and projecting pivot bosses of the hanger arms 10 are alike and that the whole hanger arm is reversible

end for end.

be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention; hence, I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown, but,

Having fully described my invention what I claim as new and desire to secure by Let-

25 ters Patent is:—

1. An integral hanger arm for swing motion trucks provided with projecting pivot bosses, and lips thereon to prevent displacement from their bearing supports; substan-

³⁰ tially as described.

2. An integral hanger arm for swing motion trucks consisting of a vertical portion, projecting pivot bosses at each end and on opposite sides thereof, and lips on the pivot bosses to prevent displacement from their bearings; substantially as described.

3. In a car truck, the combination with reversible Z shaped hanger arms pivotally connected to the transoms thereof, of a spring plank supported by said hanger arms 40 for endwise movement transversely of the

truck; substantially as described.

4. In a car truck, the combination with reversible Z shaped hanger arms pivotally connected at their upper ends to the tran-45 soms thereof, and a spring plank pivotally connected to the lower ends of said hanger arms, of a truck bolster, and springs interposed between said truck bolster and spring plank, whereby said truck bolster is sup-50 ported with freedom for limited endwise movement transversely of the truck.

5. In a car truck, reversible Z shaped hanger arms pivoted thereto, a spring plank supported by said hanger arms, springs sup- 55 ported by said spring plank, and a bolster supported by said springs; substantially as

described.

6. In a car truck Z shaped hanger arms pivoted thereto, a spring plank supported by 60 said hanger arms, springs supported by said spring plank, and a bolster supported by said springs; substantially as described.

7. In a swing motion truck, a combined hanger arm and brake hanger support; sub- 65

stantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. LINDSTRÖM.

Witnesses:

FRANK E. MILLER, LELA M. GRUNDER.