

E. C. COVERT.  
TRUCK SIDE FRAME.  
APPLICATION FILED DEC. 20, 1910.

993,578.

Patented May 30, 1911.

2 SHEETS—SHEET 1.

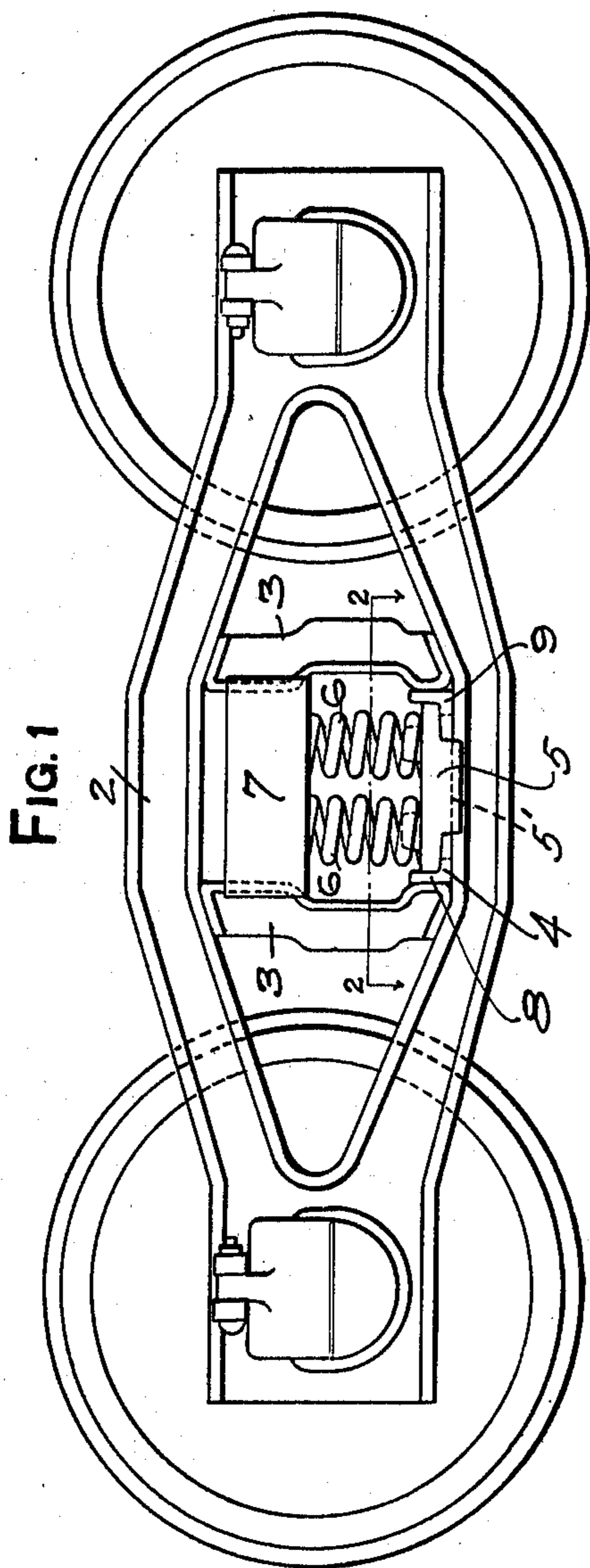


FIG. 1

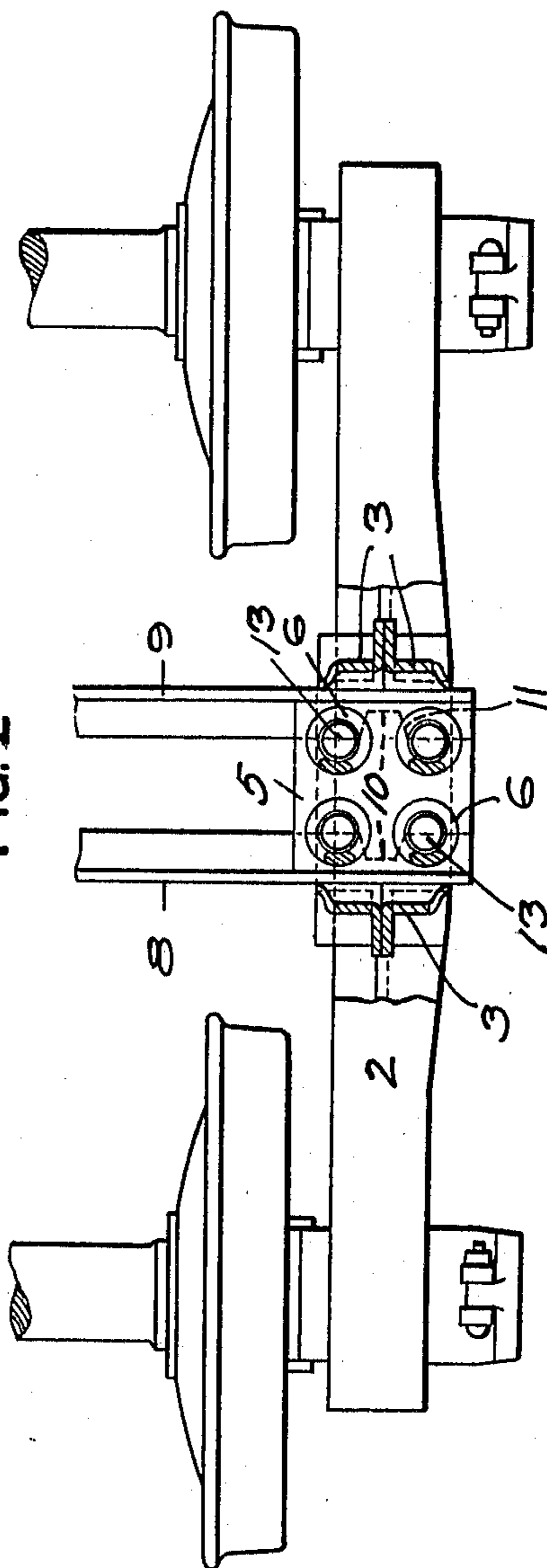


FIG. 2

WITNESSES

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*M. A. Barth*

INVENTOR

*Edson C. Covert*  
*by B. B. Keller*  
*by M. A. Keller atty*

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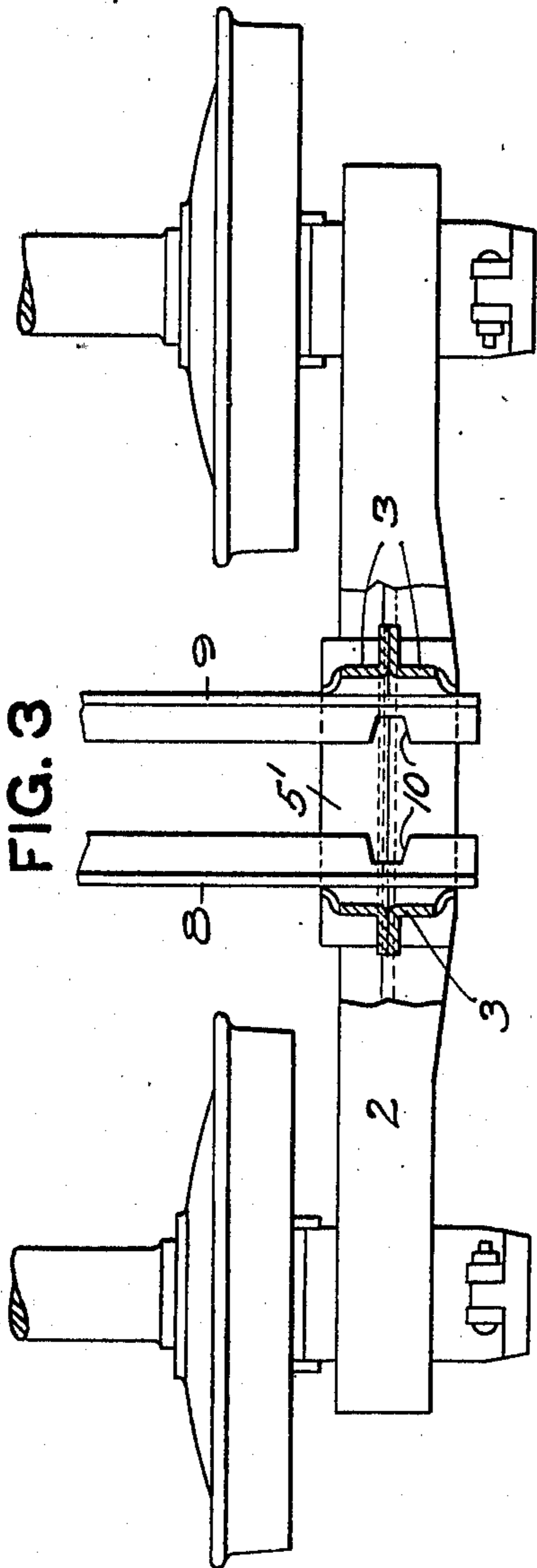


FIG. 3

WITNESSES.  
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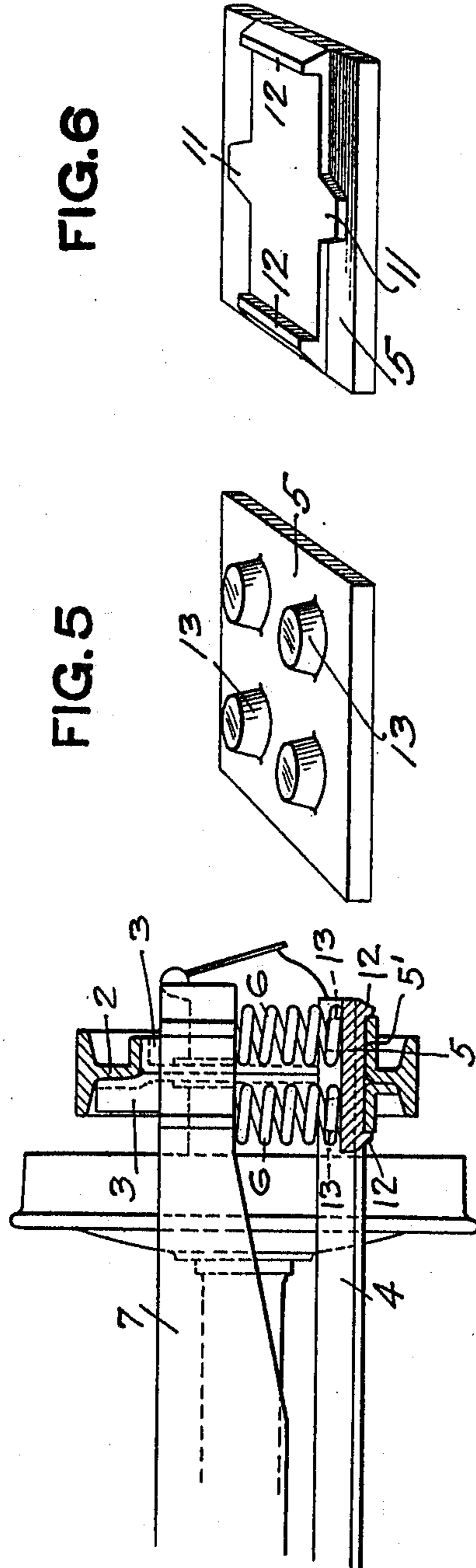


FIG. 6

FIG. 5

FIG. 4

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Edson C. Covert  
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# UNITED STATES PATENT OFFICE.

EDSON C. COVERT, OF NEW KENSINGTON, PENNSYLVANIA.

## TRUCK SIDE FRAME.

993,578.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed December 20, 1910. Serial No. 598,419.

*To all whom it may concern:*

Be it known that I, EDSON C. COVERT, a citizen of the United States of America, residing at New Kensington, county of Westmoreland, and State of Pennsylvania, have invented a new and useful Improvement in Truck Side Frames, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to truck side frames and particularly to means for attaching the spring plank and spring seat to the frame. As such a device it aims to provide a simple and improved construction whereby the spring seat and spring plank mounting may be effected without the use of bolts, rivets or similar fastenings, which tend to weaken the side frame.

My invention may, of course, be employed in connection with separate fastening means such as rivets and bolts but its primary object is to provide a form of mounting which shall operate toward the formation of truck side frames known as the "boltless" type.

I will now describe my invention so that others skilled in the art to which it appertains may understand and construct the same, referring to the accompanying drawings in which I have shown my invention as employed in connection with a side frame of the general diamond shape.

Figure 1 is a side elevation of a truck employing a side frame embodying my invention; Fig. 2 is a top plan view sectioned on the line 2—2 of Fig. 1; Fig. 3 is a similar view but showing the bolster springs and spring seat removed; Fig. 4 is a transverse sectional view through the car truck, being taken on a line substantially central of the side frame; Fig. 5 is a perspective view of the spring seat, showing the upper face of the seat with the spring retaining bosses thereon; and Fig. 6 is a similar view showing the under side of the spring seat.

In describing my invention the reference numeral 2 indicates a truck side frame having the usual bolster guide columns 3 between which and resting on the spring plank 4 is interposed the seat 5 which receives the usual springs 6 interposed between it and the bolster 7.

While the truck side frame shown is that of the general diamond shape, I do not limit myself thereto as the side frame may be of any construction or any shape provided it is such as may receive the usual spring seat.

The spring plank 4 is shown as formed preferably of the two angle sections 8 and 9. However, it will be apparent without necessity of specific illustration, that the spring plank may take other forms. The horizontal flanges of these angle sections are notched as at 10 in complement with the lugs or lugged face 11 of the spring seat casting 5 which notches or recesses receive the lugs 11 when the casting 5 is in position. Coextensive with the under face of the lugs 11 the under face of the casting 5 is formed to fit between the opposite edges of the horizontal flanges of the members 8 and 9, at points between the side edges of the frame spring plank seat 5'. Interlocking engagement of the spring seat casting 5 with the frame seat 5' is effected by the depending shoulders of the casting 5.

The upper face of the casting 5 is shown as provided with the spring receiving bosses 13. However, it will be apparent that aside from the locking feature embodying my invention, the spring seat casting may be constructed to conform to any desired standard. For instance the body portion thereof may be of a hollow or cored out construction.

It will be readily seen that the interlocking effect of the spring seat casting with the spring plank and with the side frame brought about by the lugs 11 and 12 respectively with the recesses 10 of the spring plank and seat 5' of the frame, is such as to not require any bolts to effect rigid attachment or union between these several members, it being apparent that the springs 6 when under operative compression will act to keep the casting 5 seated. While endwise displacement of the spring plank is prevented by these interlocking lugs, I do not desire to limit myself in this respect.

The advantages of my invention will be apparent to those skilled in the art, since it provides a strong and rigid spring plank mounting which can be easily and cheaply manufactured. The construction is such that the seat 5 may be raised and the spring plank readily passed between the columns

of the side frame in the application or removal of the plank without disturbing the other parts of the arrangement.

As stated above the device may be greatly  
5 varied in details of construction without departing from my invention. Thus, the spring seating portions may be changed in form, and the spring plank may take the form of a channel section instead of the  
10 angle sections shown, since

What I claim and desire to secure by Letters Patent is:

1. In a car truck, a side frame having a bolster opening therein, a spring plank, and  
15 a spring seat casting in interlocking engagement with the spring plank and side frame.

2. In a car truck, a truck side frame, a spring plank associated therewith and having a horizontal web-like portion, and a spring  
20 seat casting engaging with the web-like portion of the spring plank and with the side frame.

3. In a car truck, a side frame, a spring plank associated therewith and having a  
25 web-like portion, and a spring seat casting having lugged portions engaging with the web-like portion of the spring plank.

4. In a car truck, a side frame, a spring plank associated therewith, and a spring  
30 seat casting having a lug in interlocking engagement with the spring plank and a lug in interlocking engagement with the side frame.

5. In a car truck, a side frame, a spring  
35 plank associated therewith and comprising a

plurality of tie-bars, and a spring seat casting in interlocking engagement with the bars and with the side frame.

6. A spring plank having at its ends spring seating members which are inter- 40 lockingly carried thereby and having a lower face adapted to interlock with a lower face of a side frame.

7. A spring plank for car trucks, comprising a plurality of angle sections, having at 45 their ends spring seating members with which they are interlockingly associated, said spring seating members being adapted to engage with a side frame of the car truck.

8. A spring plank composed of angles and 50 spring seating portions with projections interlockingly engaging with the angles.

9. A spring plank composed of angles and having separate spring seating portions with lugs interlockingly associated with the 55 flanges of the angles.

10. In a side frame, a bolster opening, a spring plank composed of spaced parallel angles abutting against the sides of the bolster opening, and a spring seating member 60 interposed between the angles and in engagement therewith and in interlocking engagement with the side frame.

In testimony whereof, I have hereunto set my hand.

EDSON C. COVERT.

Witnesses:

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M. A. BARTH.