

No. 692,567.

Patented Feb. 4, 1902.

C. T. WESTLAKE.
SWINGING SPRING SEAT FOR CAR BOLSTERS.

(Application filed June 20, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

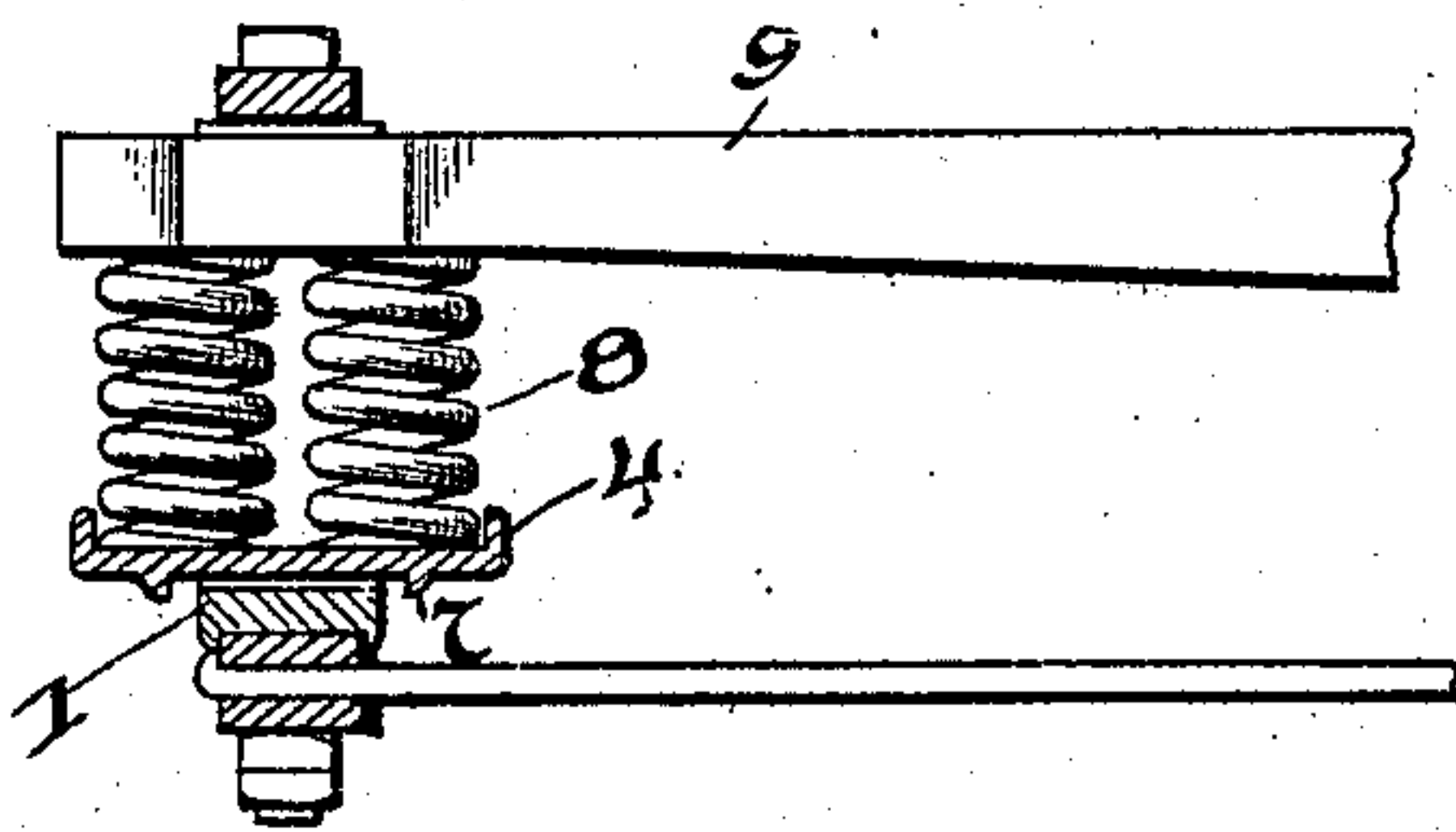
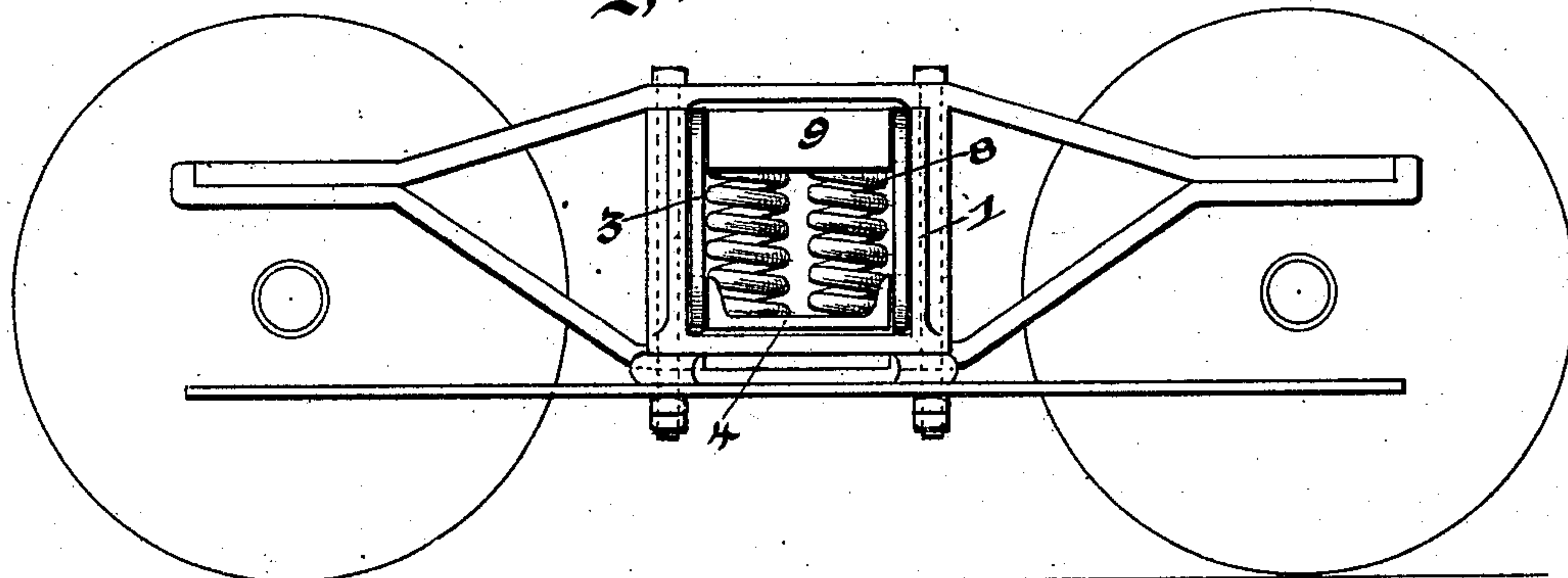


Fig. 2.

Fig. 3.

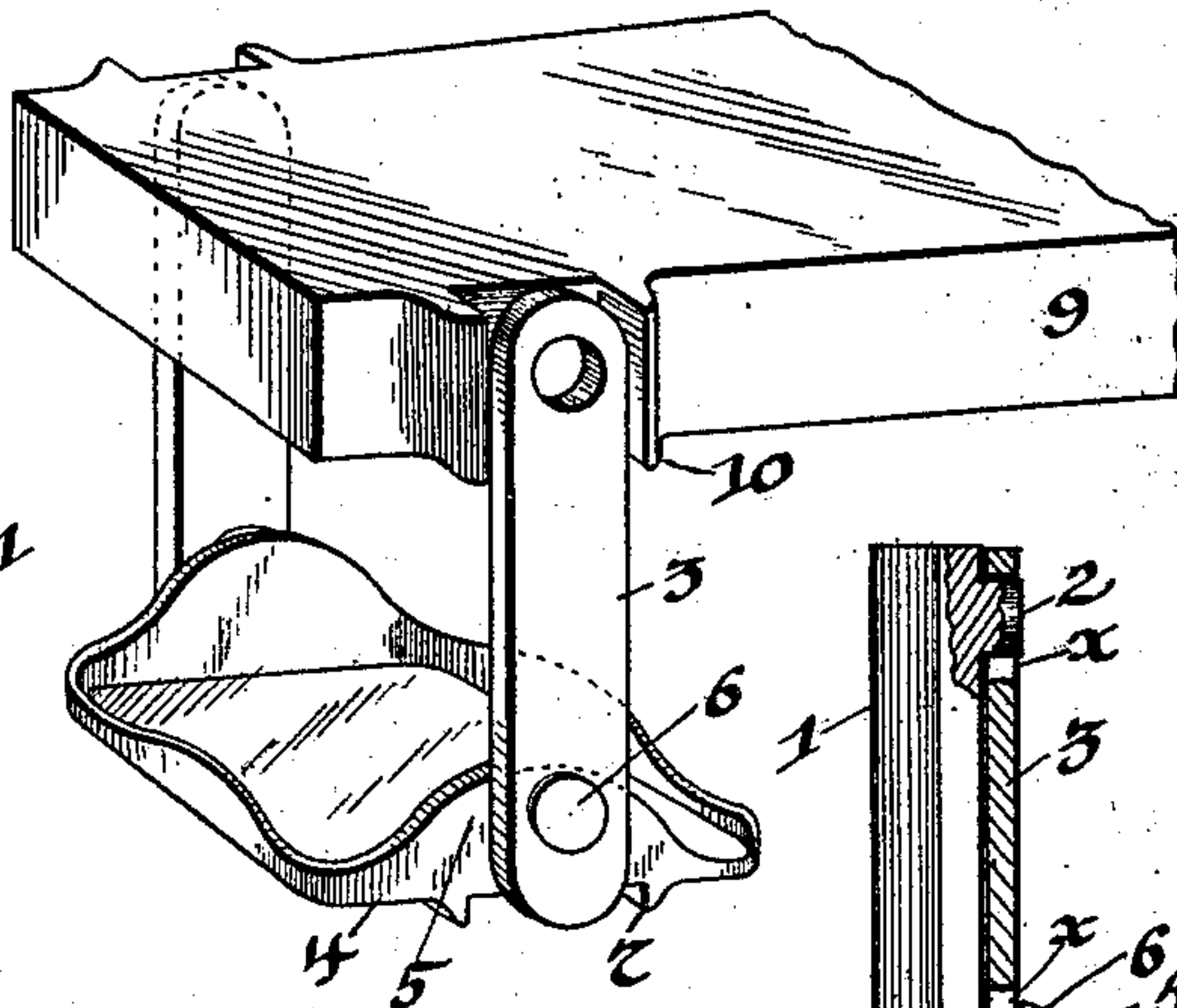


Fig. 4.

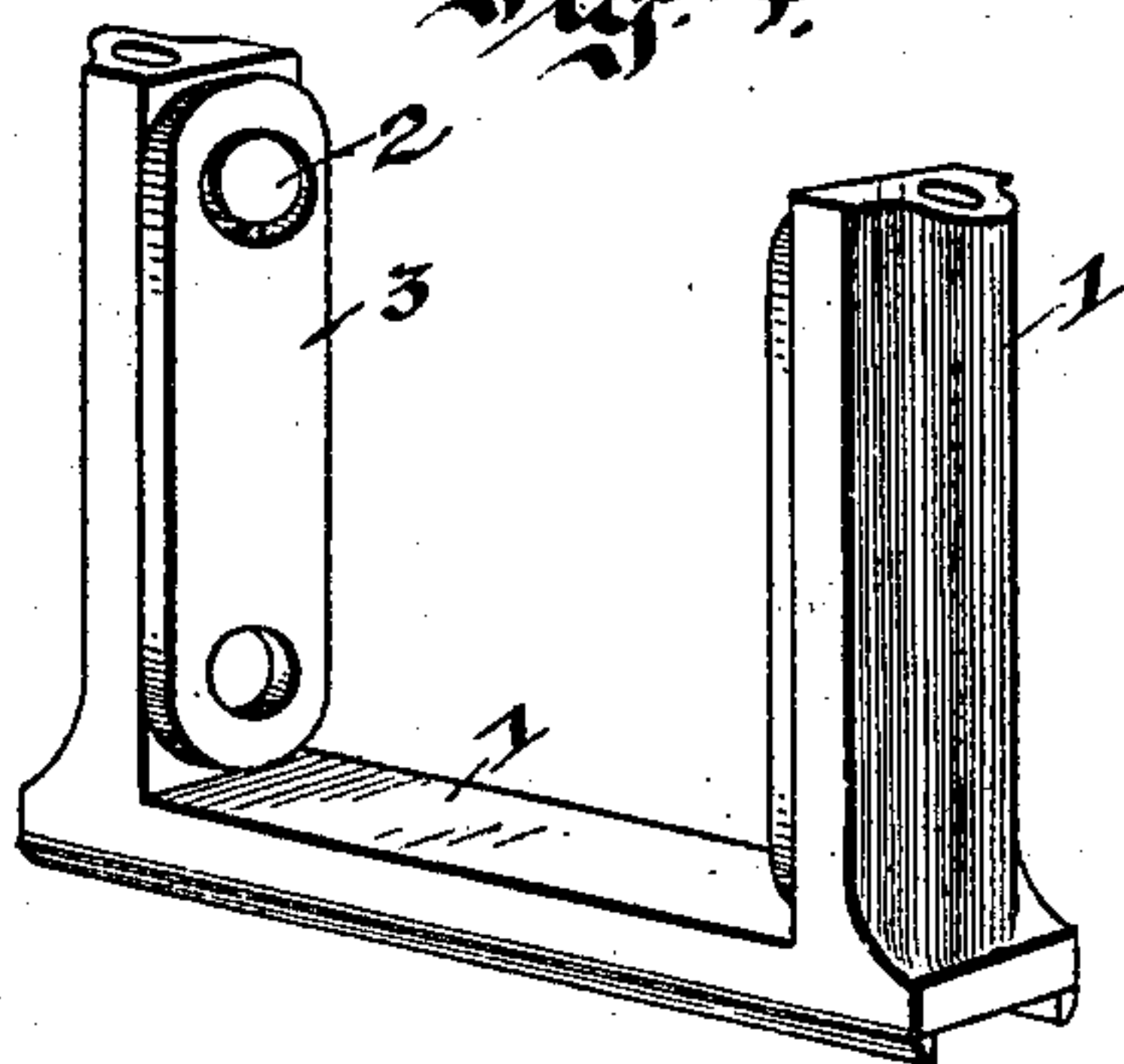
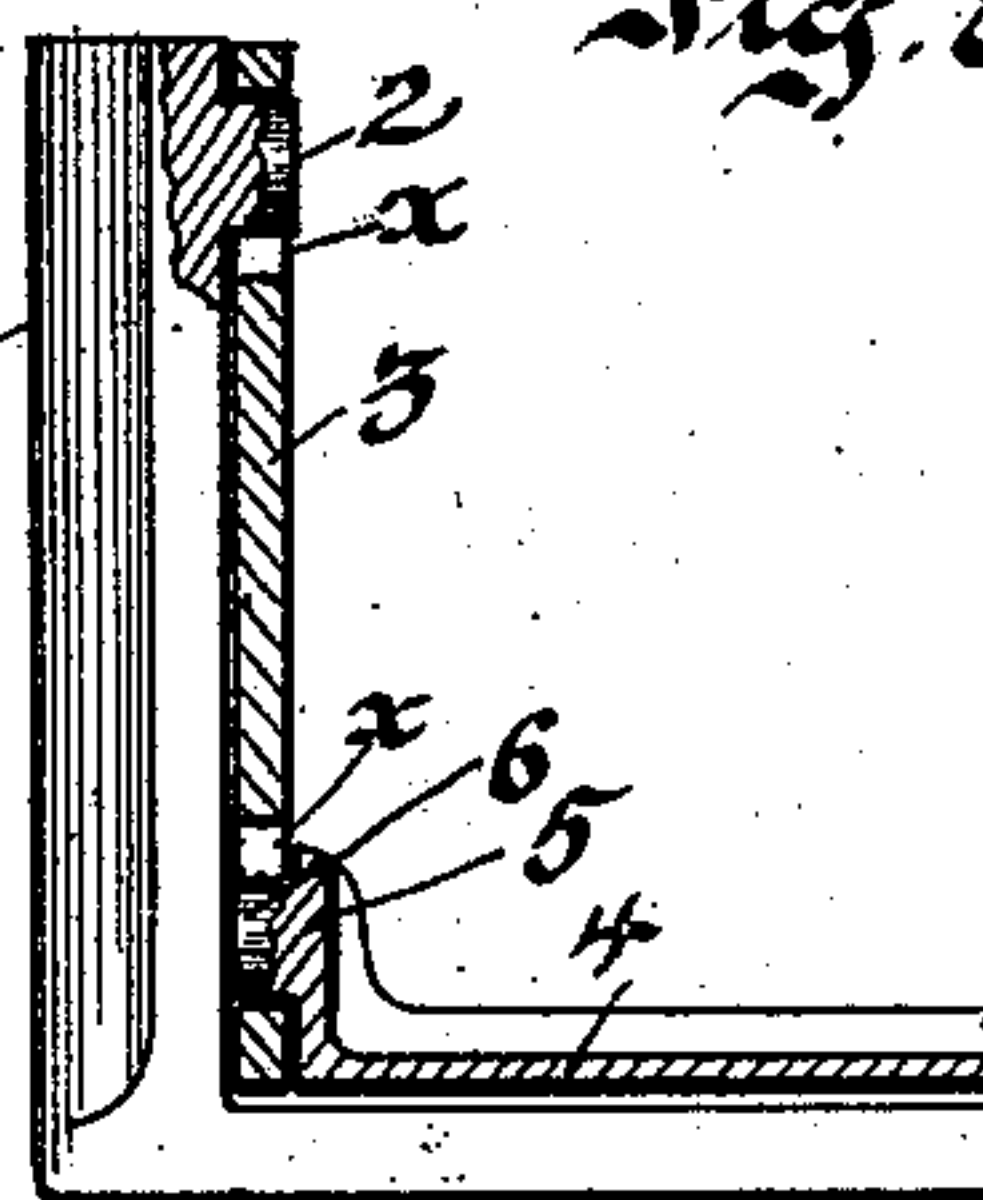


Fig. 5.



Witnesses

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2 Sheets—Sheet 2.

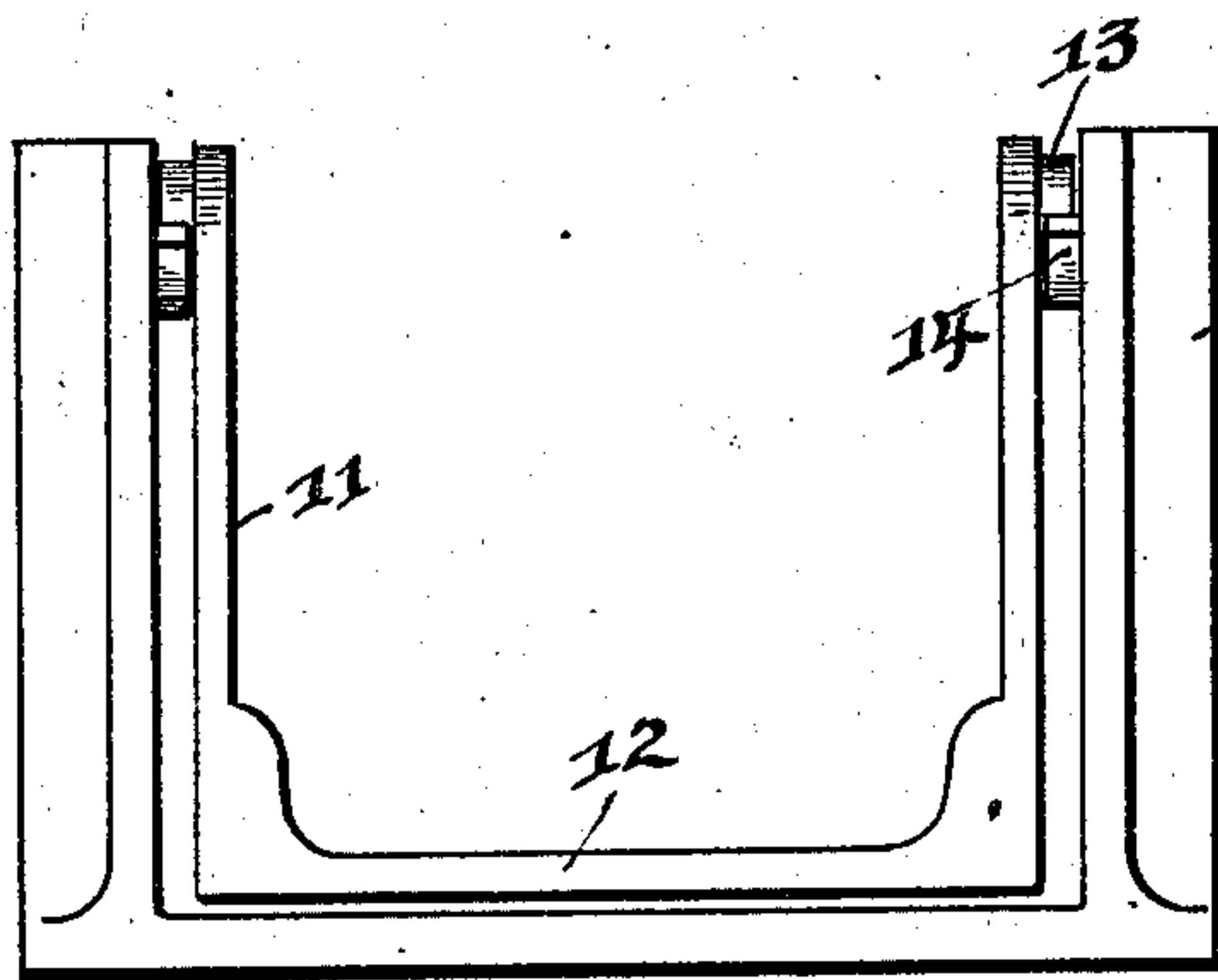


Fig. 6.



Fig. 7.

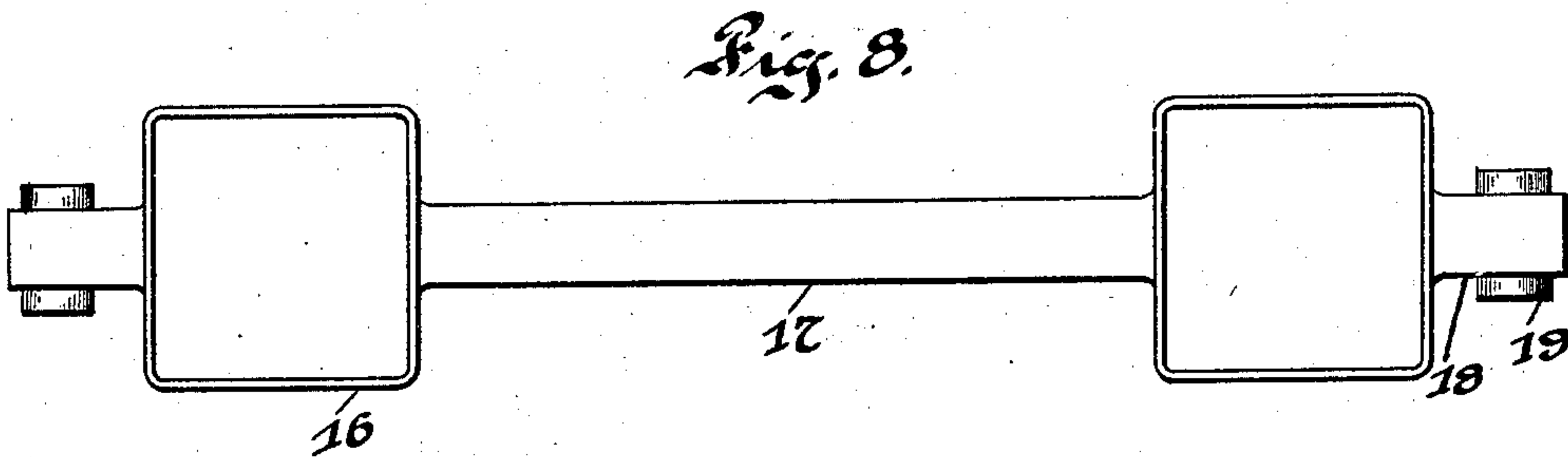


Fig. 8.

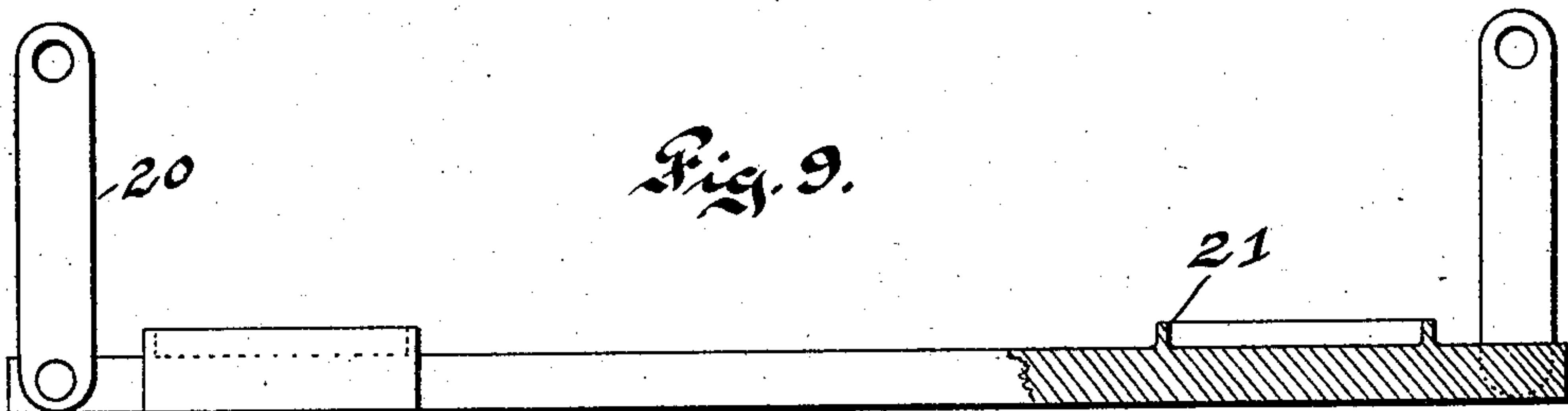


Fig. 9.

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UNITED STATES PATENT OFFICE.

CHARLES T. WESTLAKE, OF GRANITE, ILLINOIS.

SWINGING SPRING-SEAT FOR CAR-BOLSTERS.

SPECIFICATION forming part of Letters Patent No. 692,567, dated February 4, 1902.

Application filed June 20, 1901. Serial No. 65,246. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. WESTLAKE, of Granite, State of Illinois, have invented certain new and useful Improvements in Swinging Spring-Seats for Car-Bolsters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to swinging spring-seats for car-bolsters; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

The object of this invention is to provide an improved support for car-truck bolsters to be suspended so that it may have a certain lateral movement when the car makes short turns or is otherwise lunched toward one side and which is provided with means to prevent it from moving beyond the truck-frame.

Figure 1 is a side elevation of a truck-frame, showing my invention applied thereto. Fig. 2 is a detail sectional view of the spring-seat. Fig. 3 is a perspective view showing the spring-seat below one end of the bolster. Fig. 4 is a perspective view of the support by which the spring-seat is suspended. Fig. 5 is a sectional detail view showing the pivots whereby the spring-seat is supported. Figs. 6 and 7 are views showing a modification of my invention. Fig. 8 is a plan view showing a modification of spring-seats united by a transverse bar. Fig. 9 is a side elevation of the same with parts in section.

In the construction of my invention as shown in Figs. 1 to 5 the U-shaped member 1 is supported between the upper and lower members of the truck-frame and is rigidly retained in position by means of bolts or other similar fastening devices. A lug 2 is rigid with the upper end of each of the vertical arms of the member 1, and a plate or link is supported by each of the said lugs 2. A spring-seat 4, having vertical flanges 5 at its ends and lugs 6 integral with the said flanges, is suspended by the said plates or links 3, the said lugs 6 extending in openings provided for their reception. The openings xx in links are made considerably larger than the lugs 2 and 6 to provide a rolling contact to prevent frictional wear. When in operative position,

the spring-seat is suspended a short distance above the lower part of the member 1, so that it may have slight lateral movement without making contact therewith. Flanges 7 are integral with the under side of the spring-seat 4, and one of the said flanges is on each side of the horizontal portion of the member 1 to prevent the spring-seat from moving laterally out of position. As shown in Fig. 2, these flanges are spaced apart, so that the spring-seat can move a short distance in either direction before the flange will make contact with the member 1, allowing the bolster and the spring-seat a slight lateral movement. The springs 8 have their lower ends resting within the spring-seats 4 and the bolster 9 bears upon the upper ends of the said springs, the side flanges 10 inclosing the links or plates 3 to prevent the bolster from moving out of position. These flanges 10 are also spaced apart, as are the flanges 7, so as to permit the bolster to have lateral play, and the flanges 10 and 7 are so spaced that the former comes in contact with link 3 and the latter with the member 1 at the same time, thus dividing the force of the impact between the upper and lower members of the truck side frame.

In Figs. 6 and 7 I have shown a modified form of spring-seat, in which the arms 11 are formed integral or rigid with the spring-seat 12, and the lugs 13 are integral with the upper ends of the said arms 11 and rest within the bearings 14, integral with the inner sides of the vertical arms of the U-shaped member 15, corresponding to the member 1, above described.

In Figs. 8 and 9 another modified form is shown, in which the spring-seats 16 are united by a transverse bar 17 and the said spring-seats are located between the truck side frames. The extensions 18 project outwardly from the spring-seats 16 and are provided with lugs 19, to which are pivoted vertical arms 20, whereby the spring-seats may be suspended. The spring-seats 16 are substantially rectangular in shape and have vertical flanges 21 extending around their edges to retain the springs in position. The swinging spring-seats are especially advantageous, for the reason that the bolsters and springs can have a slight lateral movement when the

car makes short turns, thereby avoiding any sudden jar on any of the parts, as occurs where the spring-seats are supported rigidly in the truck-frames. The spring-seats are
5 stopped or prevented from moving too far by the flanges 7, which inclose the lower portions of the members 1, and thereby prevent any of the parts from becoming permanently displaced.

10 I have shown only a swinging bolster's support with springs intervening between the bolster and the swinging support; but it is obvious that I may change the general arrangement of parts shown, still adhering to
15 the novel features of my invention, so that the bolster may be connected directly to the swinging links and the springs placed over the oil-boxes or in other convenient place.

The main object of my invention is to provide means to suspend the swinging supports as nearly as possible in the longitudinal vertical center line of the truck side frame, so as to dispense with the heavy and expensive cross-frames or transoms now in use.

25 I claim—

1. The combination in a car-truck, of the side frames, swinging spring-supports connected directly to said side frames, springs,

and a bolster arranged to space apart the upper ends of said supports. 30

2. In a car-truck, side frames having vertical arms formed integral with a common base, links pivotally supported by said arms, spring-seats carried by said links, springs located upon said spring-seat, and a bolster
35 mounted upon said springs, substantially as specified.

3. In a car-truck, the combination of the side frames 1 having the lugs 2, suspending-links directly supported by said lugs, independent spring-supports carried by the suspending-links, springs mounted upon the spring-supports, and a bolster supported by
40 said springs.

4. In a car-truck, independently-movable
45 spring-supports, and flanges 7 for limiting the movement of said supports, springs mounted upon said supports, a bolster movably carried by said springs, and flanges 10 for limiting the movement of the bolster. 50

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

CHARLES T. WESTLAKE.

Witnesses:

ALFRED A. EICKS,
JOHN C. HIGDON.