No. 817,078. PATENTED APR. 3, 1906.

M. LINTON.

MEANS FOR ADJUSTING THE HEIGHT OF SPRING PLANKS FOR RAILWAY TRUCKS.

APPLICATION FILED JAN. 8, 1906.

Fig. 1.

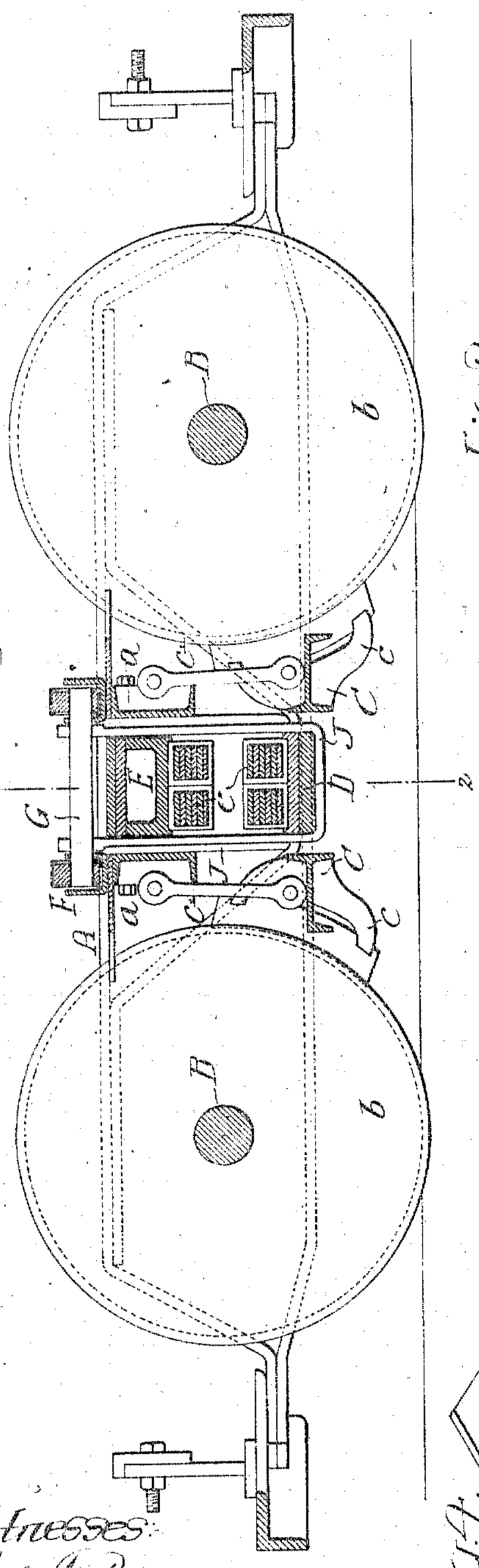


Fig. 2.

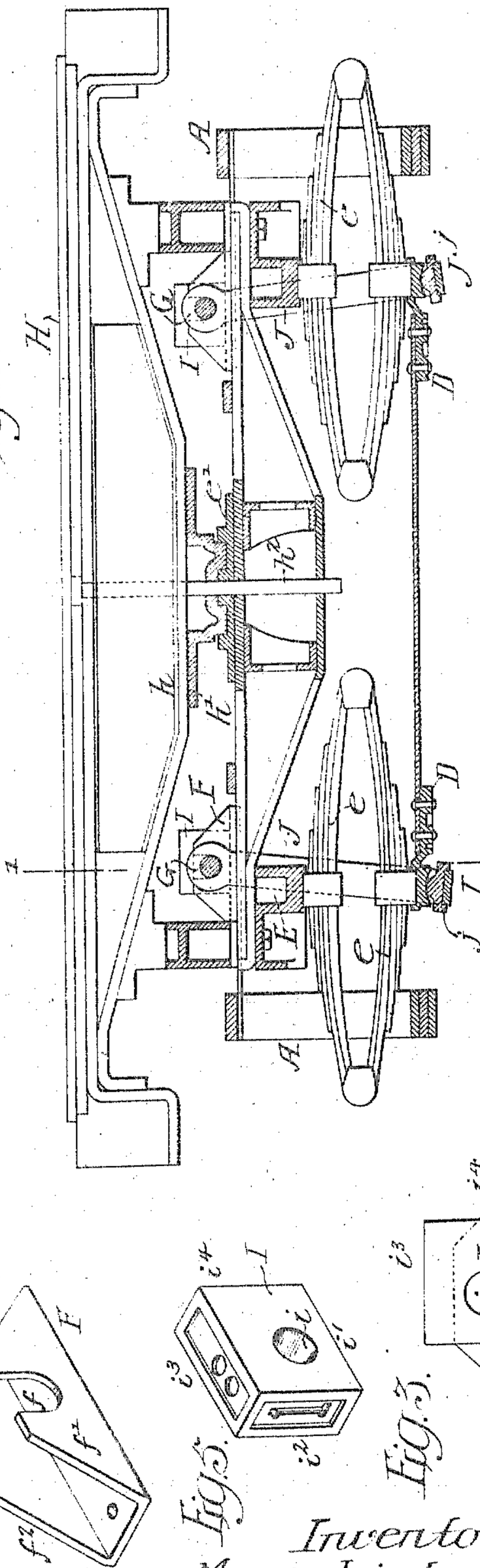
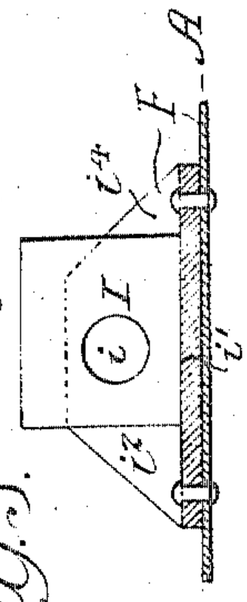


Fig. 4.

Fig. 5.

Fig. 6.



Witnesses:
Walter J. Pellinger
Arthur B. Coppin

Inventor:
Morris Linton.
by his Attorneys,
Howson & Howson

UNITED STATES PATENT OFFICE.

MORRIS LINTON, OF MOORESTOWN, NEW JERSEY, ASSIGNOR TO BURNHAM, WILLIAMS & COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A FIRM.

MEANS FOR ADJUSTING THE HEIGHT OF SPRING-PLANKS FOR RAILWAY-TRUCKS.

No. 817,078. Specification of Letters Patent. Patented April 3, 1906.

Application filed January 8, 1906. Serial No. 295,114.

To all whom it may concern:

Be it known that I, MORRIS LINTON, a citizen of the United States, residing at Moorestown, New Jersey, have invented certain Improvements in Means for Adjusting the Height of Spring-Planks of Railway-Trucks, of which the following is a specification.

The object of my invention is to provide means for adjusting the height of the spring-plank of a railway-truck whereby the height of the body of the car at one or both ends can be readily varied when necessary.

In practice it has been found that a car-body often settles at one or both ends or the spring-plank of the truck settles at one side or the other, and at the present time there is no effective means for adjusting this spring-plank so as to level the body of the car. By my invention I provide means which can be manipulated without dismantling the truck and, in fact, without removing the truck from the car.

In the accompanying drawings, Figure 1 is a longitudinal sectional view through a truck, illustrating my invention, the section being on the line 1 1, Fig. 2. Fig. 2 is a sectional view on the line 2 2, Fig. 1. Fig. 3 is an enlarged detail view of part of Fig. 2. Fig. 4 is a perspective view of one of the boxes, and Fig. 5 is a perspective view of one of the blocks.

A is the frame of the truck, having boxes for the axles B B, on which are mounted the wheels *b*.

C C are the brake-beams, carrying brake-shoes *c c* and hung from the transverse beams *a* of the body portion of the truck by links *c'*.

D is a spring-plank, and E is a bolster. Mounted between the bolster and the spring-plank are springs *e e* of the elliptical type in the present instance, although it will be understood that any type of spring may be used.

H is the body of the car, pivoted to the bolster E, and carried by the car-bolster *h* is one of the center bearing-plates *h'*, and carried by the bolster E is the center plate *e'*, the car being pivoted to the truck by the ordinary center-pin *h²*.

The above-described construction forms no part of my present invention.

Mounted on the truck-frame A are bearing-boxes F. (Clearly illustrated in Figs. 3 and 4.) The boxes are made by taking a flat plate, cutting it to the desired shape, and recessing it at *f* for the passage of the suspension-bar, then bending up portions of the plate to form side members *f' f²* of the block, the side member *f''* having the recess *f* therein and the member *f²* being solid, so as to form an abutment to prevent longitudinal movement of the suspension-bar. There are four of these boxes, a pair being mounted on each side of the truck. Mounted in the boxes are blocks I, each having an opening *i* for the passage of the suspension-bar. This opening is in line with the recesses *f* in the boxes.

G represents suspension-bars extending across the central opening in the truck. Each bar has its ends mounted in the block I, and the rods are prevented from moving longitudinally by the solid side members *f²* of the boxes. Thus no nuts or keys are used to hold the bars in position.

J J are saddles which extend under the spring-plank D and support it. There is a saddle at each side of the truck, as illustrated in Fig. 2. The arms of each saddle are perforated at their upper ends for the passage of the suspension-bar G, from which each saddle is hung. In the present instance there is a shoe *j* carried by each saddle, and this shoe has a round surface resting in a concaved seat in the spring-plank. By this construction one portion of the truck is free to swing laterally independently of the other portion.

Usually the connections between the spring-plank and the body of the truck have been such that it is impossible to make any vertical adjustment; but by my invention I am enabled to make at least four different adjustments to regulate the height of the spring-plank. It will be noticed in referring to Figs. 3 and 5 that the opening in each block is not in the center of the block, but the distance between the opening and the four ends of the block differ—for instance, the opening is nearer the end *i'* than it is to the end *i²*, but the opening is nearer the end *i²* than the end *i³*, while the end *i³* is nearer the opening than the end *i⁴*. Consequently there are four possible adjustments. If, for instance, the blocks are in the position shown in Figs. 2 and 3, the spring-plank is at its lowest point, and if it is found desirable to raise the spring-plank slightly all that is necessary

is to jack the spring-plank and turn the block so that the end i^2 of the block will rest upon the box and the adjustment is made. If it is necessary to make another adjustment, the block can be turned so that the portion i^3 will rest upon the box, and so on.

It will be understood that while I have shown a quadrangular block which can be turned so as to make four adjustments a hexagon or triangular block may be used without departing from my invention.

I preferably number the ends, as shown in Fig. 5, so that the mechanic who is making the adjustment can readily see by looking at the numbers that the adjustment has been properly made.

I claim—

1. The combination of a car-truck, a spring-plank, blocks mounted on the car-truck, and connections between the blocks and the spring-plank so that on turning the blocks the spring-plank can be adjusted in height, substantially as described.

2. The combination of a truck-frame, a spring-plank, a saddle by which the spring-plank is suspended from the frame, blocks carrying the saddle, said blocks being so formed that different adjustments of the spring-plank can be made by turning the blocks, substantially as described.

3. The combination of a truck-frame, a spring-plank, a suspension-bar, means connecting the suspension-bar with the spring-plank, blocks in which the suspension-bars are mounted, the openings in the blocks being such that they will be nearer one side of the block than the other so that on turning the block different adjustments of the spring-plank can be made, substantially as described.

4. The combination of a car-truck frame, a spring-plank, boxes carried by the frame, blocks mounted in the boxes, openings in the blocks at one side of the center of each block, suspension-bars mounted in the openings in the blocks, and saddles hung from the suspension-bars and supporting the spring-plank, substantially as described.

5. The combination of a car-truck frame, a spring-plank, bearing-boxes mounted on the frame, each bearing-box having two side members, one side member being recessed, blocks mounted in the said boxes and laterally confined therein by the side members of the box, an opening in each block, a suspension-bar having each end mounted in the openings in the block and extending through the slotted portions of the boxes, the solid side members of the boxes preventing the longitudinal movement of the suspension-bar, and connections between the suspension-bar and the spring-plank, substantially as described.

6. The combination of a car-truck frame, a spring-plank, quadrangular blocks carried by the truck-frame suspension-bars mounted in the blocks and connections between the suspension-bars and the spring-plank, the opening in each block for the reception of the bar being so situated that the distance between the opening and the ends of the block will vary so that on turning the block the spring-plank can be adjusted to different heights, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MORRIS LINTON.

Witnesses:
LEON P THOMAS,
EDWARD JAMES ABBOTT.