

(No Model.)

2 Sheets—Sheet 1.

E. PECKHAM.
CAR TRUCK.

No. 419,876.

Patented Jan. 21, 1890.

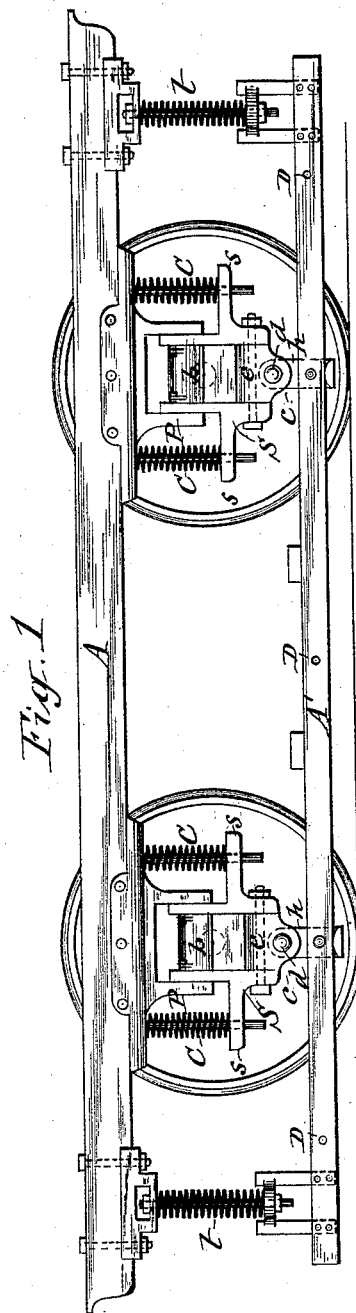


Fig. 1

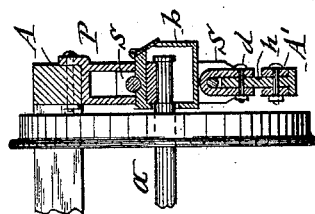


Fig. 3

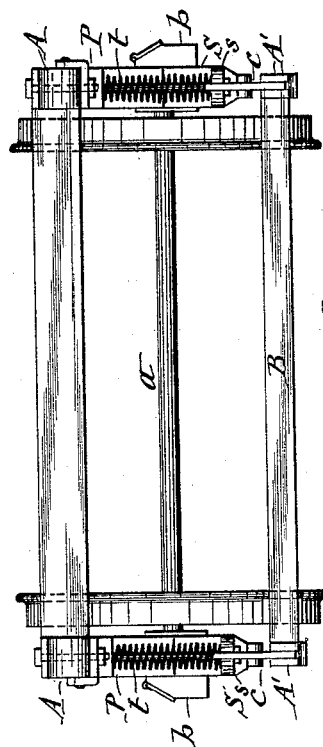


Fig. 2

WITNESSES:

J. J. Laatz.
H. M. O'Connell

INVENTOR

Edgar Peckham

BY

Wm. L. Laatz & Co.
ATTORNEYS

(No Model.)

2 Sheets—Sheet 2.

E. PECKHAM.
CAR TRUCK.

No. 419,876.

Patented Jan. 21, 1890.

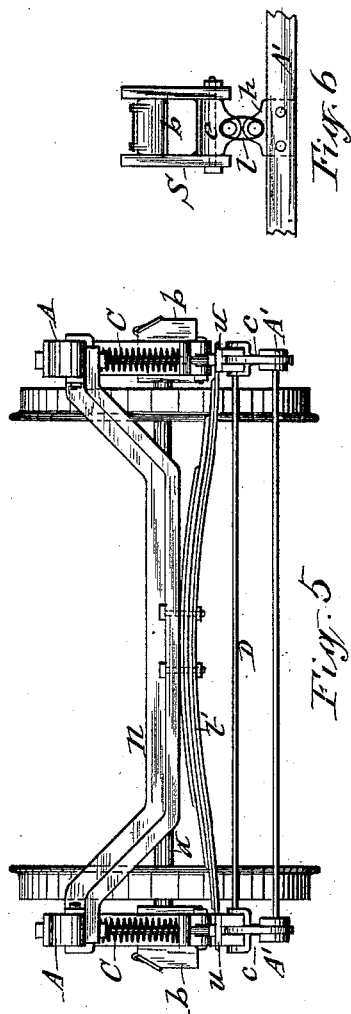


Fig. 5

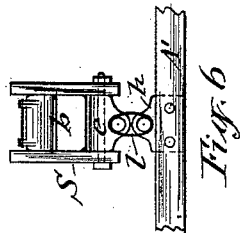


Fig. 6

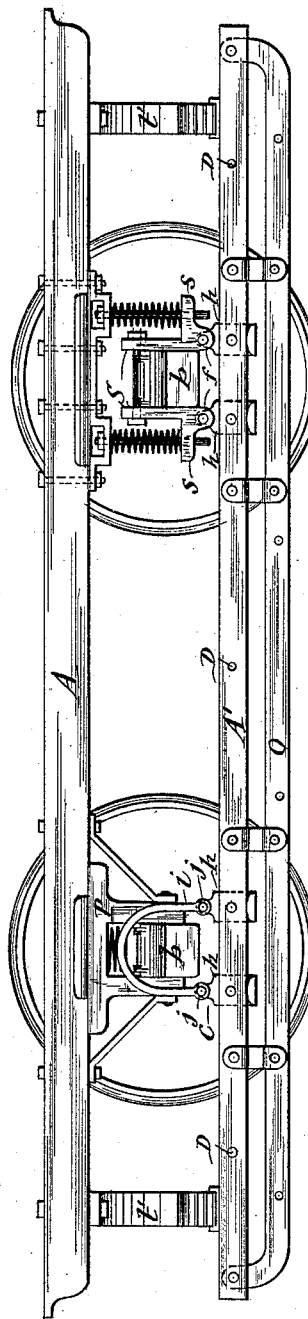


Fig. A

WITNESSES:

J. J. Gaass.

H. M. Seamans

INVENTOR

E. Peckham

BY

Smith, Loring & Smith

ATTORNEYS

UNITED STATES PATENT OFFICE.

EDGAR PECKHAM, OF NEW YORK, N. Y.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 419,876, dated January 21, 1890.

Application filed September 2, 1889. Serial No. 322,646. (No model.)

To all whom it may concern:

Be it known that I, EDGAR PECKHAM, of New York, in the county of New York, in the State of New York, have invented new and useful Improvements in Car-Trucks, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention consists in a novel construction of a car-truck designed to afford spring-supports under the end portions of the car-body as well as at the axles, and thus support said body nearly throughout its length and also obviate in a great measure the vertical oscillation of the same when moving over an undulating track.

The invention is fully illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of my improved car-truck. Fig. 2 is an end elevation of the same. Fig. 3 is a vertical transverse section through the axle and coupling. Fig. 4 is a side elevation of a modification of my improved car-truck. Fig. 5 is an end elevation of the same, and Fig. 6 is a side view of a further modification of the means for suspending the longitudinal beams of the truck from the axles.

Similar letters of reference indicate corresponding parts.

A and A' represent, respectively, the upper and lower longitudinal beams of the truck. The upper beams A may be a portion of the car-body. Said latter beams are supported upon the axles *a a* by saddles S S, mounted on the journal-boxes *b b*, and, if desired, they may be guided vertically between the usual jaws of pedestals P P, secured to the upper beams A A. I prefer to form the said saddles with arms *s s*, projecting horizontally from the front and rear sides thereof, and upon these arms I mount springs C C, which support the beams A A over opposite sides of the axles. The lower beams A' A' are preferably each formed of two stout steel bars placed edgewise vertically side by side with a space between them, and filling-blocks interposed at suitable intervals and firmly united by bolts or rivets passing through the bar and filling-blocks in the usual and well-known manner. Cross-beams B B and tie-

rods D D fasten the two beams A' A' to each other. These beams, as well as the upper beams A A, are extended so as to bring their end portions under the end portions of the car-body, and the lower beams A' A', I support under the axles *a a* by pivoted couplings *c c*, hung on the journal-boxes or saddles riding on the axles, the pivots of the couplings being parallel with the axles, and thus allowing the said beams a limited longitudinal play.

I do not limit myself to any specific construction of the said couplings, inasmuch as it is susceptible of many modifications without departing from the spirit of my invention.

Several forms of the said couplings are illustrated in the annexed drawings.

Fig. 1 shows the coupling of the form of a strap *h*, pivotally connected to the beam A' and suspended from a pin *d*, which is parallel with the axle and passes through a hanger *e*, pivoted to the lower ends of the saddle at right angles to the axle, which hanger permits a lateral movement of the beam A'. Fig. 4 shows two forms of the aforesaid couplings. At the right-hand portion of said figure the saddle S is provided with two eyes *f f*, and from pins inserted in said eyes are suspended two straps *h h*, pivotally connected to the beam A'. The left-hand portion of Fig. 4 shows the coupling *c* as consisting of a yoke *i*, hung from the top of the journal-box *b* and terminating with two eyes *j j*, to which are connected the straps *h h*.

Fig. 6 of the drawings shows the coupling of the form of a link *l*, suspended from the before-described hanger *e* and having its lower end coupled to the strap *h*, carrying the beam A'.

Between the end portions of the upper and lower beams A A', I interpose suitable springs, which may be either of the spiral species, as shown at *t t*, or of the so-called "semi-elliptic" form, as shown at *u u*, in Figs. 4 and 5 of the drawings, which latter form of spring is disposed crosswise of the truck and rests with its ends in suitable shoes *u u*, secured to the top of the beams A' A', and upon the central portion of the spring is mounted a truss *n*, which is extended across the under side of car-body and firmly secured thereto.

The beams A' A', I preferably stiffen longi-

tudinally by a suitable truss O, extending the length thereof, as shown in Fig. 4 of the drawings.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A car-truck comprising saddles mounted on the axles, longitudinal beams supported under the axles by pivoted couplings hung on said saddles, and springs interposed between said beams and car-body, substantially as set forth and shown.

2. A car-truck comprising saddles mounted on the axles, longitudinal beams supported under the axles by pivoted couplings hung on said saddles, and the ends of the beams extending under the end portions of the car-body, and springs interposed between the aforesaid beams and car-body at the central and end portions thereof, substantially as described and shown.

3. A car-truck comprising longitudinal beams under the axles and supported thereon, longitudinal beams above the axles and movable toward and from the lower beams, pedestals on said movable upper beams embracing the journal-boxes, and springs interposed between said beams, substantially as described and shown.

4. In combination with the car-axles, longitudinal beams above the axles and supported elastically vertically upon the same, saddles hung on the axles, longitudinal beams suspended from said saddles, and springs interposed between the said elastically-supported beams and suspended beams, as set forth.

5. In combination with the car-axles, longitudinal beams above the axles and supported elastically vertically upon the same, saddles hung on the axles, longitudinal beams suspended from said saddles by pivoted couplings, and springs interposed between the said upper and lower beams, as set forth.

6. In combination with the car-axles, longitudinal beams above the axles and supported elastically vertically upon the same, saddles hung on the axles, hangers pivoted to the saddles at right angles to the axles, longitudinal beams connected to said hangers, and springs interposed between the said upper and lower longitudinal beams, as set forth.

7. In combination with the car-axles, longitudinal beams above the axles and supported elastically vertically upon the same, saddles hung on the axles, hangers pivoted to the saddles at right angles to the axles, longitudinal beams connected to the hangers by hinge-joints parallel with the axles, and springs interposed between the said upper and lower longitudinal beams, substantially as described and shown.

8. In combination with the car-axles and saddles hung thereon, a truck-frame having longitudinal beams above the axle and elastically supported thereon and extending forward and rearward therefrom, saddles hung on the axles, hangers pivoted to the saddles at right angles to the axles, longitudinal beams of the length of the aforesaid upper beams suspended from the hangers by pivotal connections axially parallel with the axles, and springs interposed between the aforesaid upper and lower longitudinal beams at the end portions thereof, substantially as described and shown.

9. The combination, with the longitudinal beam A', of a truss extending lengthwise thereof and secured thereto to stiffen the same, as set forth.

In testimony whereof I have hereunto signed my name this 24th day of August, 1889.

EDGAR PECKHAM. [L. s.]

Witnesses:

FRANK H. EDMUNDS,
EMANUEL BOTSCHON.