

No. 606,979.

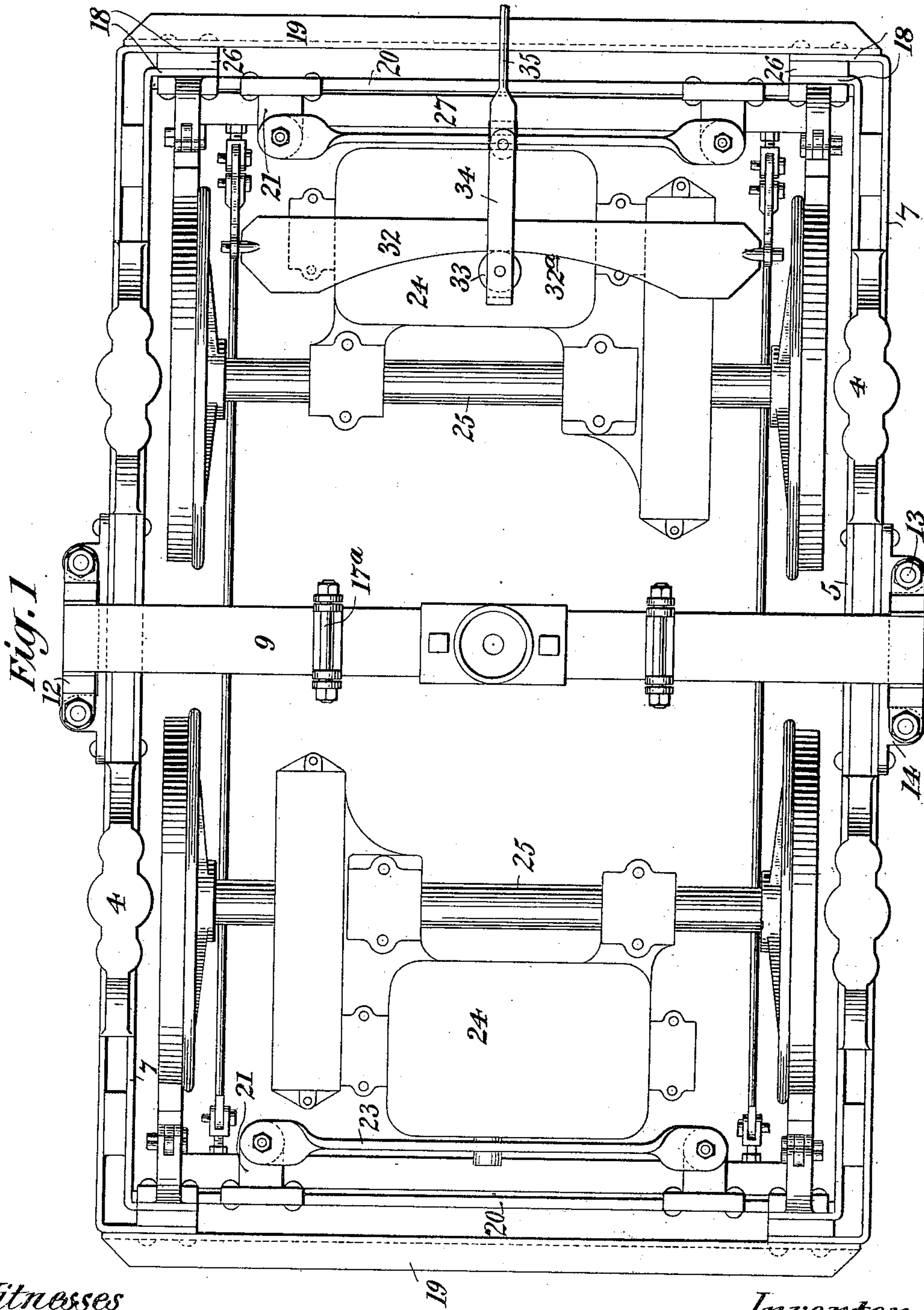
Patented July 5, 1898.

E. PECKHAM.
MOTOR TRUCK.

(No Model.)

(Application filed Sept. 11, 1897.)

2 Sheets—Sheet 1.



Witnesses
Raphael Vetter
J. M. Dornen

Inventor
Edgar Peckham

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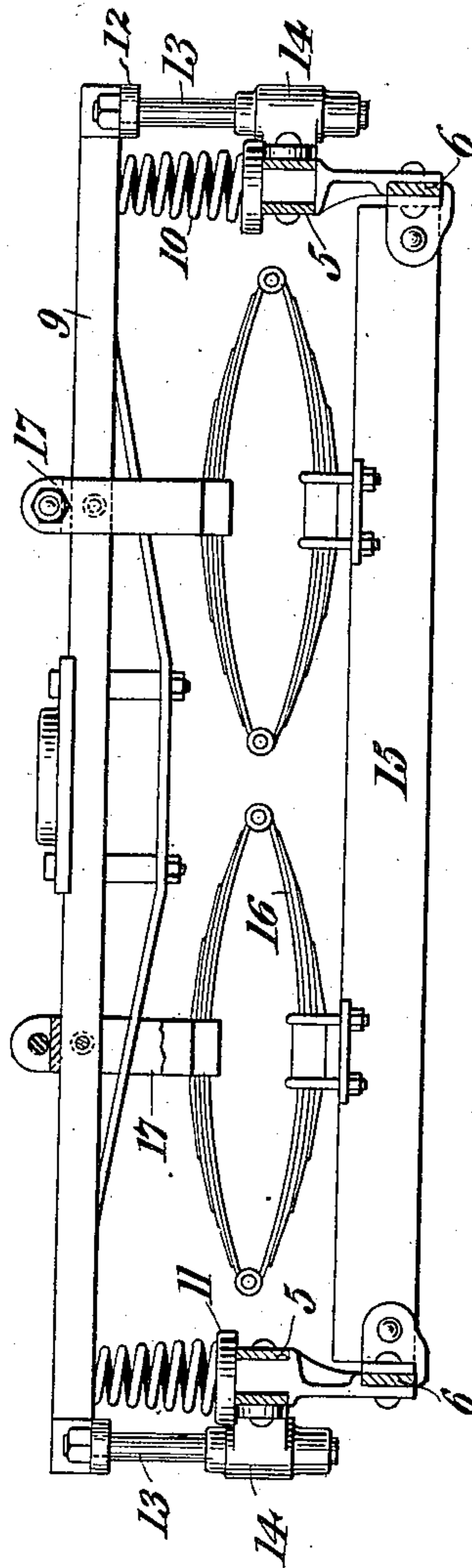
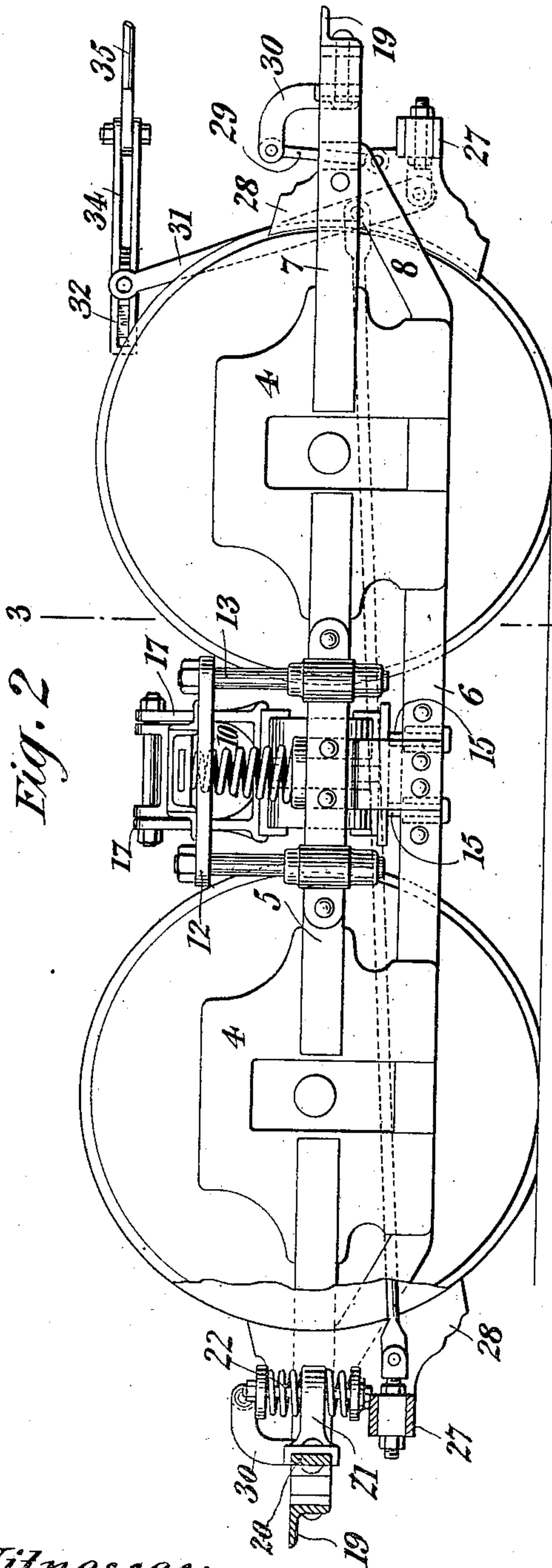
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Witnesses:
Raphaël Ketter
J. E. M. B. Wren

Inventor
Edgar Peckham

UNITED STATES PATENT OFFICE.

EDGAR PECKHAM, OF NEW YORK, N. Y.

MOTOR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 606,979, dated July 5, 1898.

Application filed September 11, 1897. Serial No. 651,375. (No model.)

To all whom it may concern:

Be it known that I, EDGAR PECKHAM, a citizen of the United States, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Motor-Trucks, of which the following is a specification.

My invention relates to pivotal motor-trucks for electric railways, the car-body being mounted upon two of such trucks, which have center bearing-bolsters.

The object of the present invention is to devise a truck of the type indicated which shall have a short wheel-base and will be adapted to support a pair of motors, one at each end of the truck. To accomplish this, with the truck having a wheel-base of about four feet, for example, and a center bearing-bolster, it is necessary to make provision for supporting the motors at the ends of the truck.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view; Fig. 2, a side elevation, partly in section; and Fig. 3, a cross-section on the line 3 3 of Fig. 2.

The side frames of the truck comprise pedestals 4, connected together at about the center of their height by duplex beams 5 and at their bottoms by beams 6. Longitudinal end beams 7 are provided at the outer sides of the pedestals and are supported from beneath by truss-beams 8, connected to the bottoms of the pedestals and to the said end beams.

The bolster 9 is arranged or mounted at the center of the wheel-base. It is supported on spiral springs 10, which are seated in the pockets 11, secured to the duplex beams 5. At the extreme ends of the bolster 9 are attached cross-bars 12, through the ends of which are adapted to play bolts 13, which are secured in brackets 14, riveted to the side beams 5. The bars 12 and bolts 13 thus serve as guides for the bolster and prevent it from being deflected laterally.

Riveted to brackets secured to the lower beams 6 are the transverse beams 15, upon which are mounted the elliptic springs 16, such springs being connected to the beams 15 by the usual form of elliptic spring-sockets. The elliptic springs 16 are connected to

the bolster 9 by the hangers 17, the latter being rigidly affixed to the top leaves of said springs and pivoted to the bolster and provided with a pivotal connection 17^a at the top to prevent binding. The connection between the elliptic springs and the bolster is therefore a substantially rigid one, so that any vertical movement imparted to the bolster is communicated to such springs. While the form of bolster and its supporting appurtenances shown in the drawings is desirable for a truck of this description—the bolster having no swinging movement—other forms may be employed, and the bolster may be so supported as to have a swinging movement as well as an elastic vertical movement.

At the ends of the truck-frame the duplex end beams 7 are bent at right angles to their main portions, and to said bent portions 18 are riveted the angle-beams 19, which are adapted to hold the side frames of the truck in alinement and to add strength to the structure.

To the inside of the angular portions 18 of the end beams 7 are riveted the bars 20, extending transverse of the truck-frame, and to these bars are secured the brackets 21, which furnish pockets for the spiral springs 22, upon which are cushioned the bars 23, which support the motors 24 at one side, the opposite sides of the motors being sleeved upon the axles 25 of the truck. Filling-pieces 26 are placed between the angular ends 18 of the end beams 7 for the purpose of providing support at that point.

By the described arrangement of the motors at each end of the truck the weight is more evenly distributed and the necessary traction on the truck-wheels obtained.

The brake-operating appliances comprise brake-beams 27, to which brake-shoes 28 are secured, one for each wheel, the brake-shoes being provided with links 29, which are connected to brackets 30, supported on the transverse beams 20. Levers 31 are connected to the brake-beams, and at their upper ends these levers are pivoted to the equalizing or floating bar 32. The inner edge of the equalizing-bar 32 is cut out in the arc of a circle, as shown at 32^a, and against this surface a roller 33 is adapted to travel, the said roller

being journaled in strap 34, which is connected to the rod 35, leading to the sway-bar arranged in the middle of the car. By this construction of the equalizer or floating bar
 5 an even application of the brakes is secured when the car is rounding curves, as it prevents the lengthening and shortening of the brake connections when curving.

The beams 5 and 6 are sufficiently heavy
 10 to afford the requisite strength to support the bolster and its appurtenances, and the under truss-beams 8, at the ends of the truck, render it possible to support with safety the weight of the motors suspended indirectly
 15 from the transverse beams 20 at the ends of the truck.

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

20 1. In a car-truck having a short wheel-base, a center bearing - bolster, electric motors sleeved at one end on the axles, the bars 23 supported by brackets 21, bars 20 supporting said brackets and they in turn supported by
 25 inturned ends 18 of duplex end beams 7, other ends of the motors being supported by bars 23.

2. In a car-truck having a short wheel-base, a center bearing - bolster, electric motors
 30 supported by brackets 21, bars 20 supporting said brackets and they in turn supported by inturned ends 18 of duplex end beams 7; other ends of the motors being supported by bars

23, and cross-bars 19 secured to the outside of said inturned ends. 35

3. In a car-truck, the combination with the side frames, transverse beams riveted to the lower members of the side frames, and spiral springs seated in sockets on the upper mem-
 40 bers of the said side frames, said transverse beams and springs being located at the center of the wheel-base, of a pair of elliptic springs secured to said transverse beams, a car-body-supporting bolster resting on said spiral springs and suitable connections be- 45
 tween the elliptic springs and bolster.

4. In a car-truck, the combination with the side frames and a pair of elliptic springs mounted on transverse beams connected to the lower members of said side frames, of a
 50 car-body-supporting bolster provided with cross-bars at its extremities, guide-bolts seated in brackets secured to the side frames and passing through the ends of the cross-bars at the ends of the bolster, spiral springs seated 55
 in pockets on the upper members of the side frames, and appliances connecting the elliptic springs with the bolster.

Signed at New York, in the county and State of New York, this 10th day of September, 60
 1897.

EDGAR PECKHAM.

Witnesses:

C. L. MALCOLM,
 J. E. M. BOWEN.