

No. 760,293.

PATENTED MAY 17, 1904.

W. S. ADAMS.
MAXIMUM TRACTION TRUCK.
APPLICATION FILED AUG. 29, 1903.

NO MODEL.

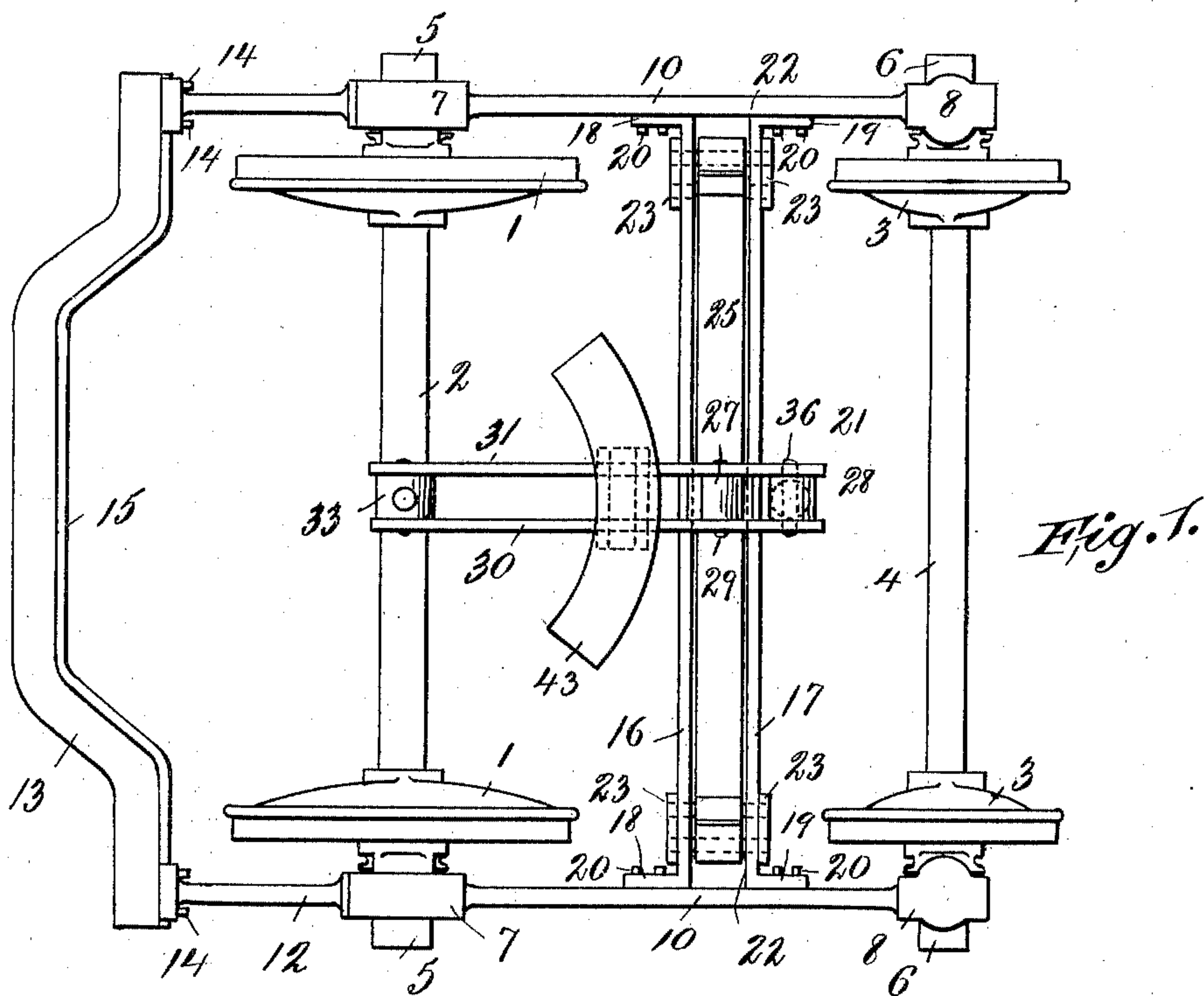


Fig. 1.

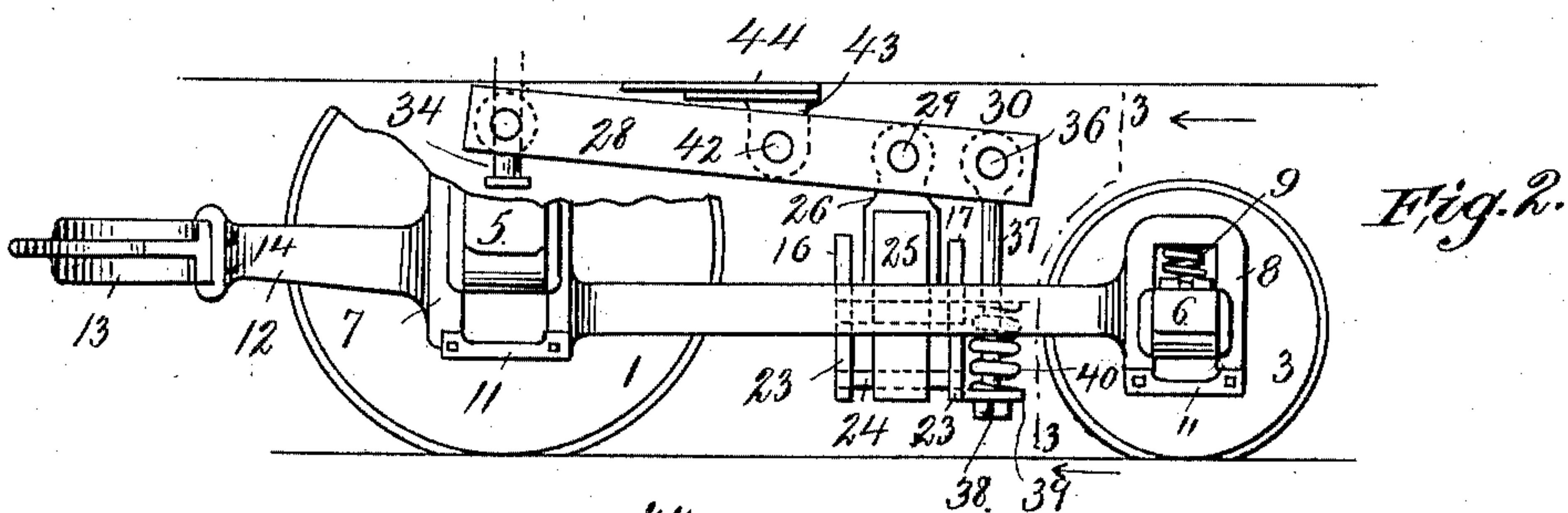


Fig. 2.

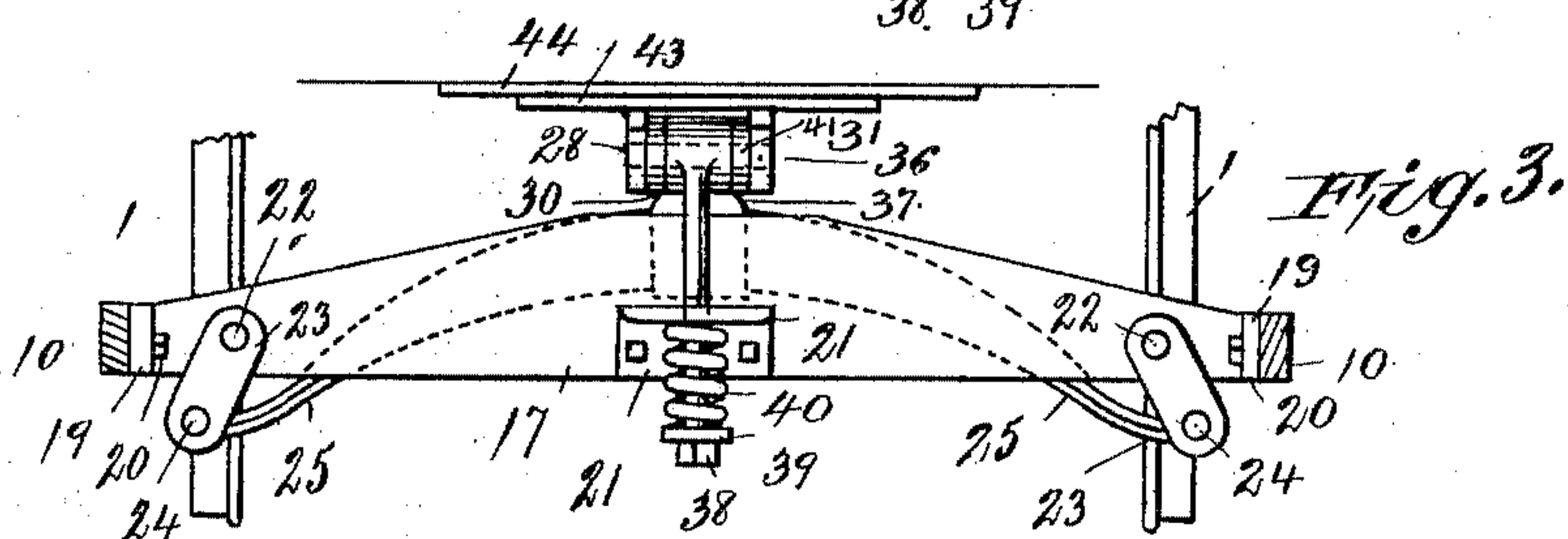


Fig. 3.

Witnesses
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MAXIMUM-TRACTION TRUCK.

SPECIFICATION forming part of Letters Patent No. 760,293, dated May 17, 1904.

Application filed August 29, 1903. Serial No. 171,223. (No model.)

To all whom it may concern:

Be it known that I, WALTER S. ADAMS, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Maximum-Traction Truck, of which the following is a specification.

The object of my invention is to construct a truck of this class that will be simple, efficient, and durable and better adapted for certain classes of service than any heretofore made.

For a more particular description of one embodiment of my invention reference is to be had to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a plan view of a truck embodying my invention. Fig. 2 is an elevation of the same, a part being broken away to more clearly disclose the structure. Fig. 3 is a sectional view taken on the line 3-3 of Fig. 2 looking in the direction of the arrows.

Throughout the various views similar reference characters designate similar parts.

The truck is provided with the usual large or driving wheels 1, which are connected by an axle 2, and the small or trailing wheels 3, which are connected by the axle 4. The axles 2 and 4 are journaled in axle-boxes 5 and 6, which sustain the pedestals 7 and 8 by springs 9, and the pedestals 7 and 8 are connected by the chords 10, which form, with the pedestals, the side frames of the truck. The lower arms of the pedestals are united by tie-bars 11.

From the outer arms of the pedestals 7 extend arms 12, to which a crossing 13 is secured by bolts 14. This crossing is preferably bent outwardly in its central portion 15 to provide a suitable motor-support. The chords 10 are united at any suitable place by means of transoms 16 and 17, the upper edges of which are upwardly arched, and their ends are bent at right angles to form projections 18 and 19, which are secured to the chords 10 by bolts 20.

A centrally-located and perforated bracket 21 is bolted to the transom 17 about its longitudinal center, as will hereinafter appear. Adjacent to each end of the transoms are rods 22, which form pivots for depending links 23,

which are united by rods 24, which support an upwardly-arched semi-elliptic spring 25 in the usual way. The links 23 are preferably placed outside the transoms 16 and 17, so that the spring 25 will always be adjacent to their inner walls, and the tie-band or band 26 of this spring will be guided by said transoms, while free to move vertically between them. The upper portion of the band 26 is extended to form a head 27, to which the draw-bar 28 is pivoted by means of a rod 29.

The draw-bar 28 comprises two parallel bars 30 and 31, which are connected at one end by a swivel 33, which is adapted to engage the king-bolt 34 of the car at a point substantially above the axle 2, and at their other ends the bars 30 and 31 are connected by a rod 36, which engages an eyebolt 37, which passes through the bracket 21 and is provided at its lower end with a nut 38 and washer 39. A spring 40 is placed on said rod and interposed between the said bracket 21 and the washer 39.

A bracket 41 straddles the bars 30 and 31 and is pivoted to them by means of a pivot-pin 42. The upper surface 43 of the bracket 41 forms a rub-plate, which engages and rubs against a corresponding rub-plate 44, fixed to the bottom of the car-body, which is supported on the truck through them. These rub-plates form a wearing which may be located at any desired point, and the amount of tension placed on each spring will vary with the location of this bearing, because when pressure is applied to the bearing the semi-elliptic spring 25 will be played downwardly and outwardly and the coiled spring 40 will be compressed and each spring will be distorted in proportion to the relative distances between the pins 42, 29, and 36. From this it is obvious that stresses put on each spring may be apportioned according to its strength and that the car-body will be properly supported.

The draw-bar 28, which engages the head 27, will be put in tension through the transoms 16 and 17, which the band 26 engages, and these transoms extend far enough on each side of the band 26 to prevent torsional strains on the semi-elliptic spring 25.

In the above is described an embodiment of

my invention which is cheap, durable, and simple in its construction and readily accomplishes the purposes for which it is intended. It is obvious that my invention is not limited to this structure, but may be embodied in many other equivalent forms.

Having thus described my invention, what I claim is—

1. In a maximum-traction truck or similar device, the combination with the wheels, axles, axle-boxes and side frames, of transoms, a semi-elliptic spring suspended between said transoms, a draw-bar pivotally connected with said semi-elliptic spring and with a second spring which coöperates with said semi-elliptic spring.

2. In a maximum-traction truck or similar device, the combination with the wheels, axles, axle-boxes and side frames of transoms, a semi-elliptic spring suspended between said transoms, a draw-bar pivotally connected to said spring, a second spring pivotally connected to said draw-bar, and a rub-plate also pivotally connected to said draw-bar.

Signed in the city and county of Philadelphia, State of Pennsylvania, this 27th day of August, 1903.

WALTER S. ADAMS.

Witnesses:

H. A. HEULING,
TERRENCE McCUSKER.