

No. 773,402.

PATENTED OCT. 25, 1904.

P. A. LINDROSE.  
VEHICLE.

APPLICATION FILED MAY 14, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1

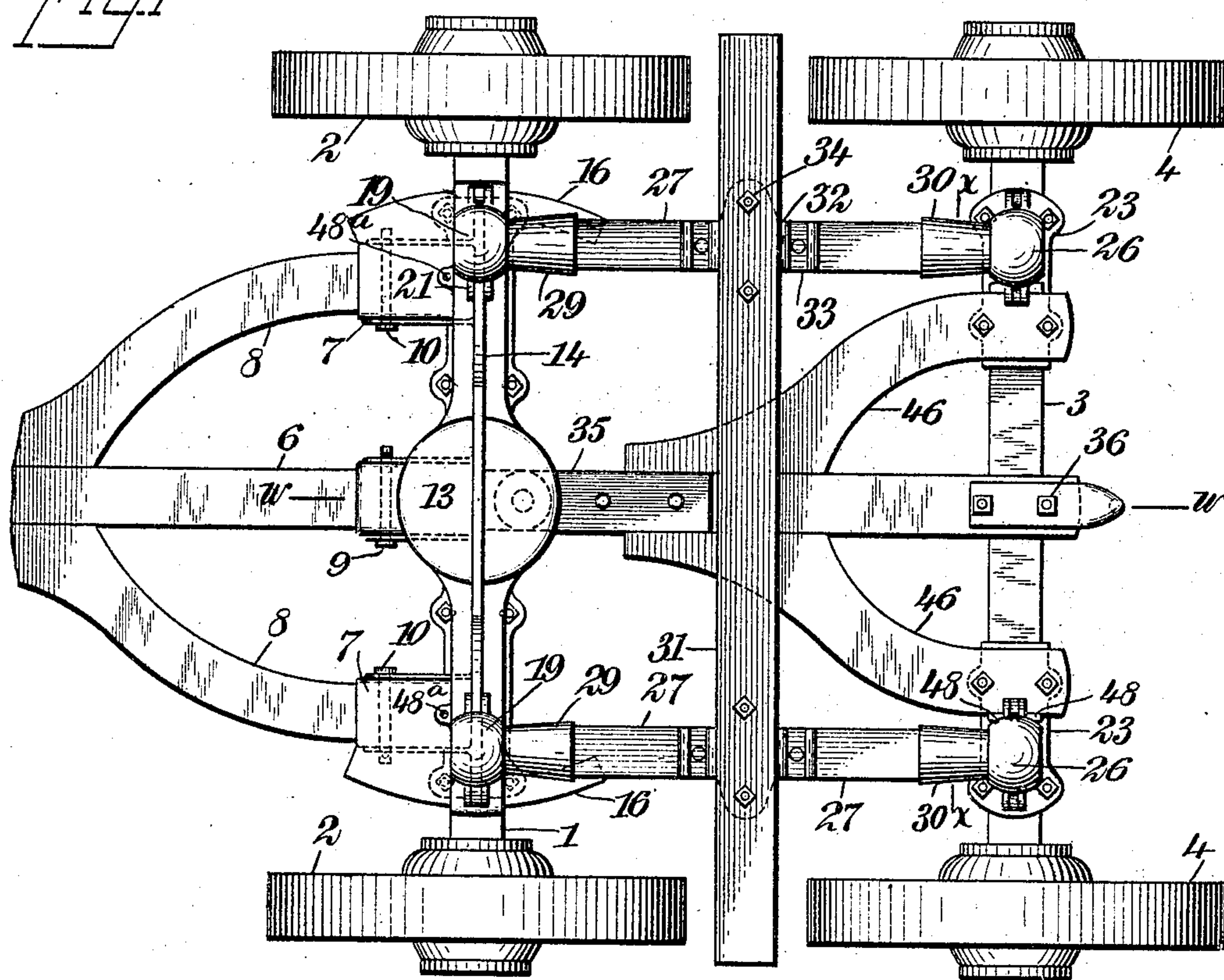
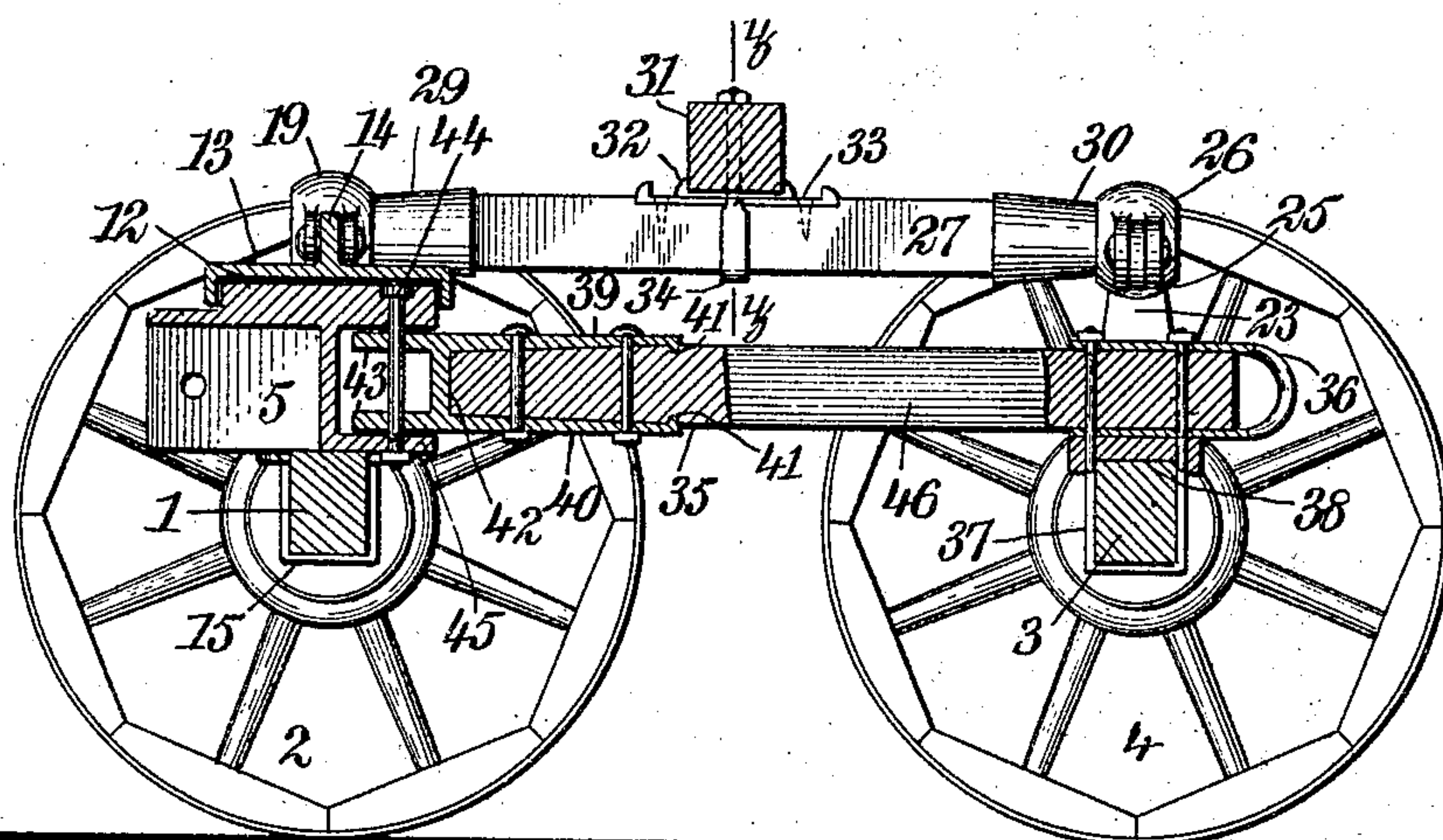


Fig. 2



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2 SHEETS—SHEET 2.

Fig. 3

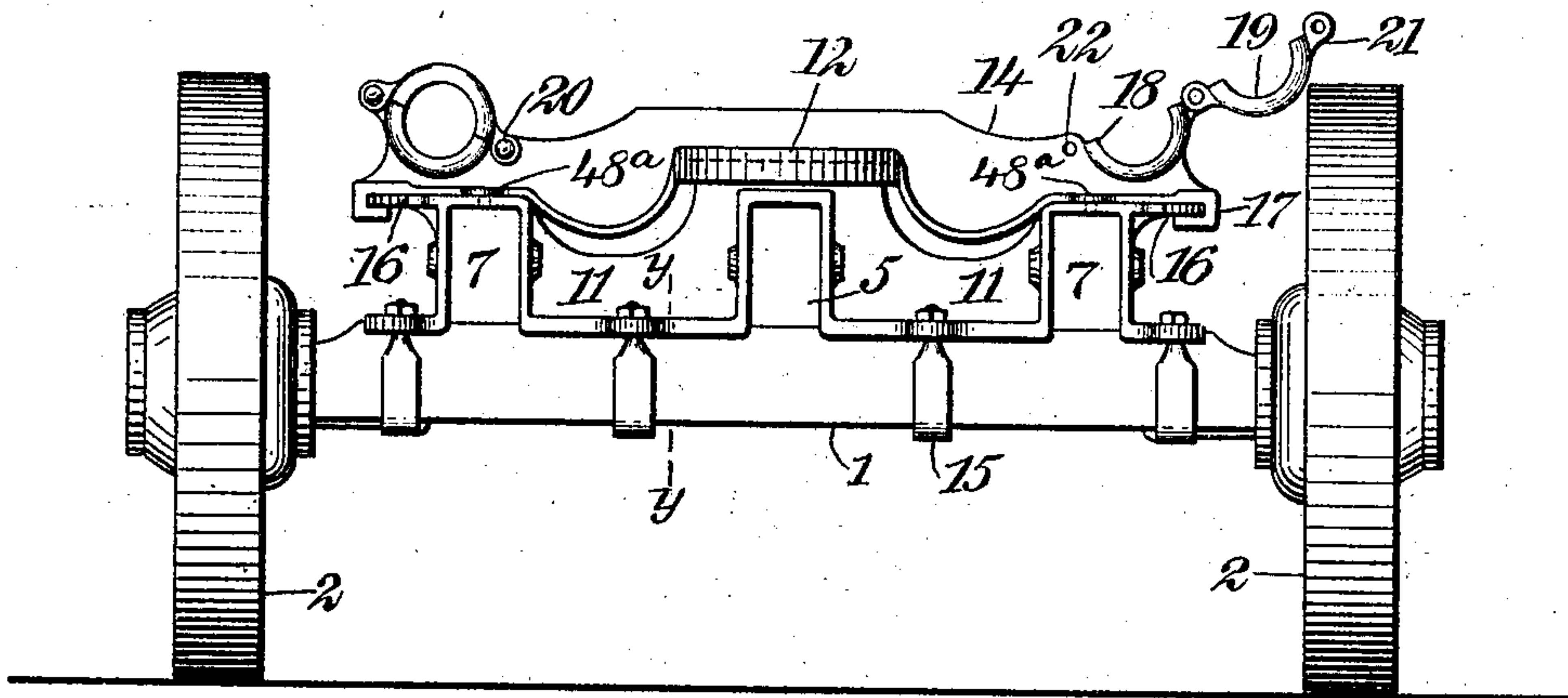


Fig. 4

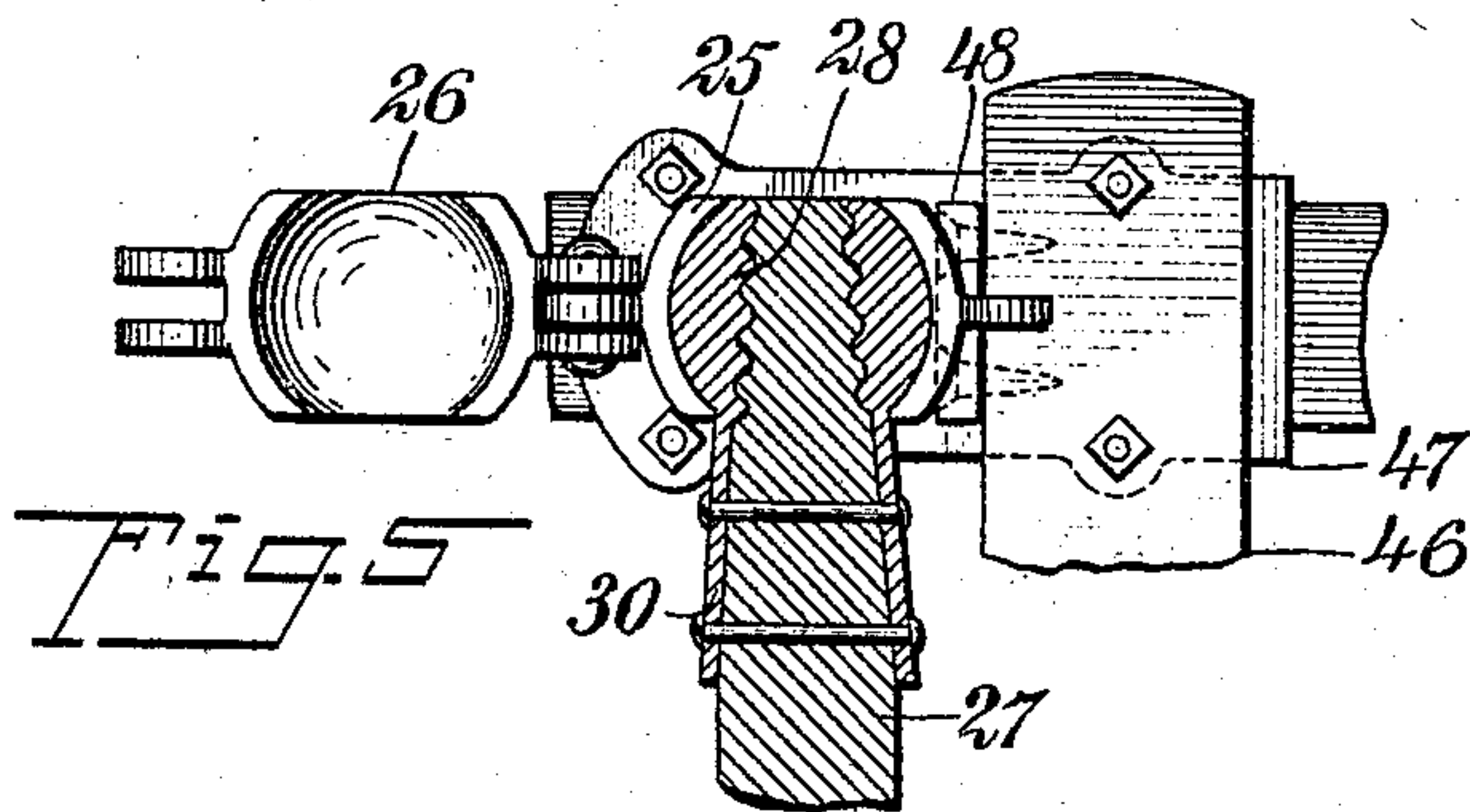
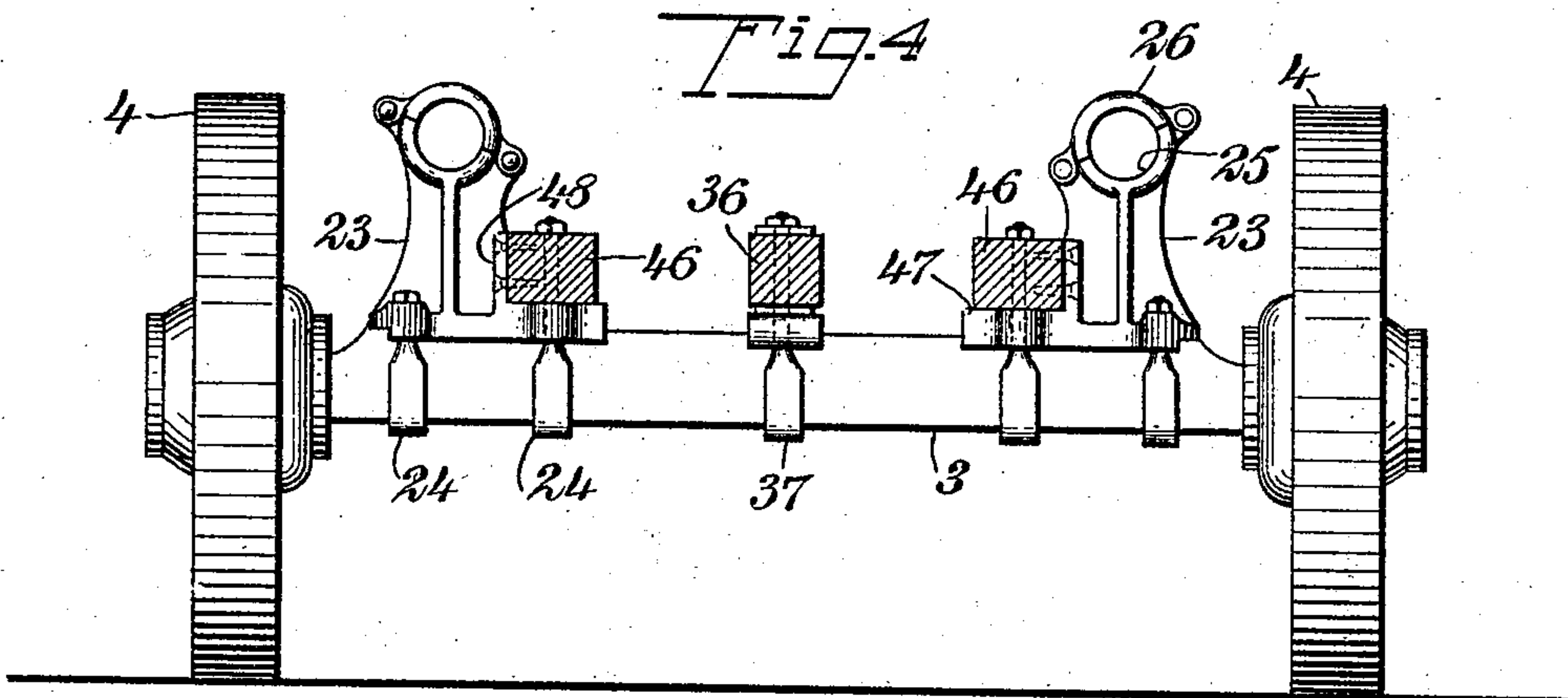
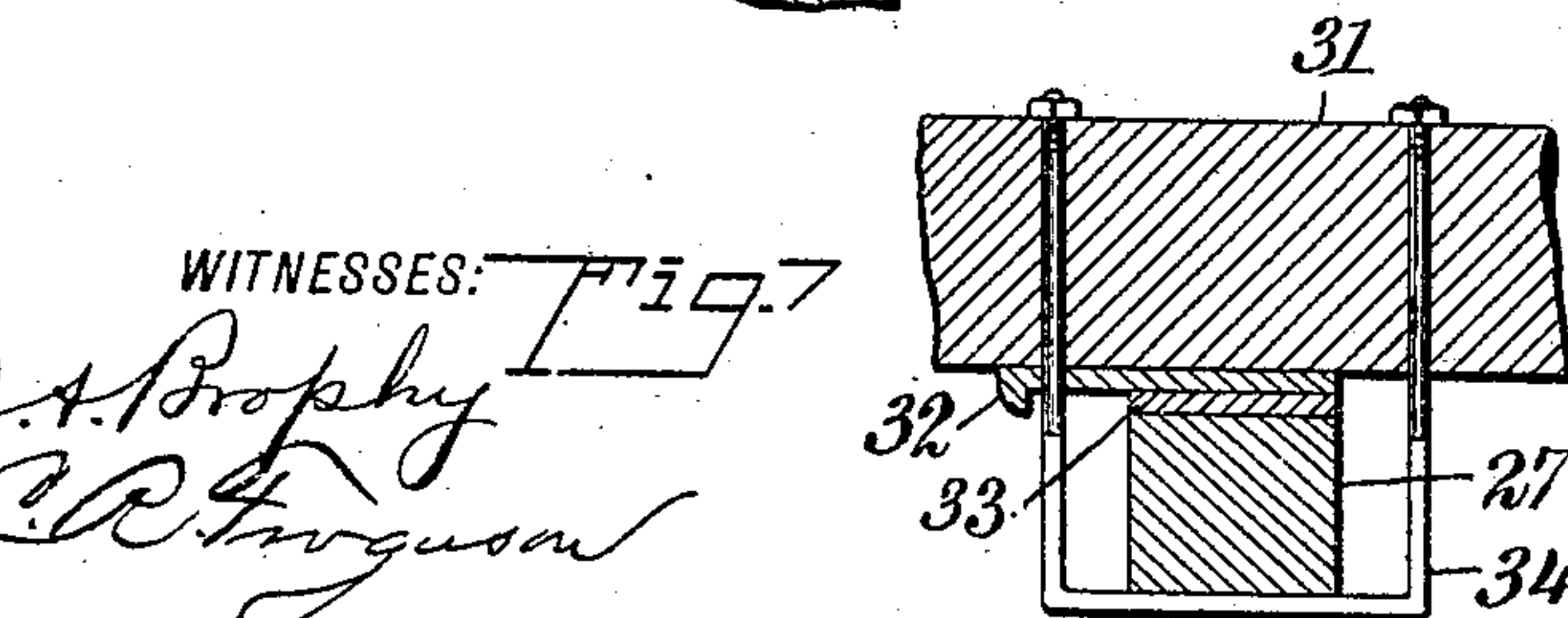
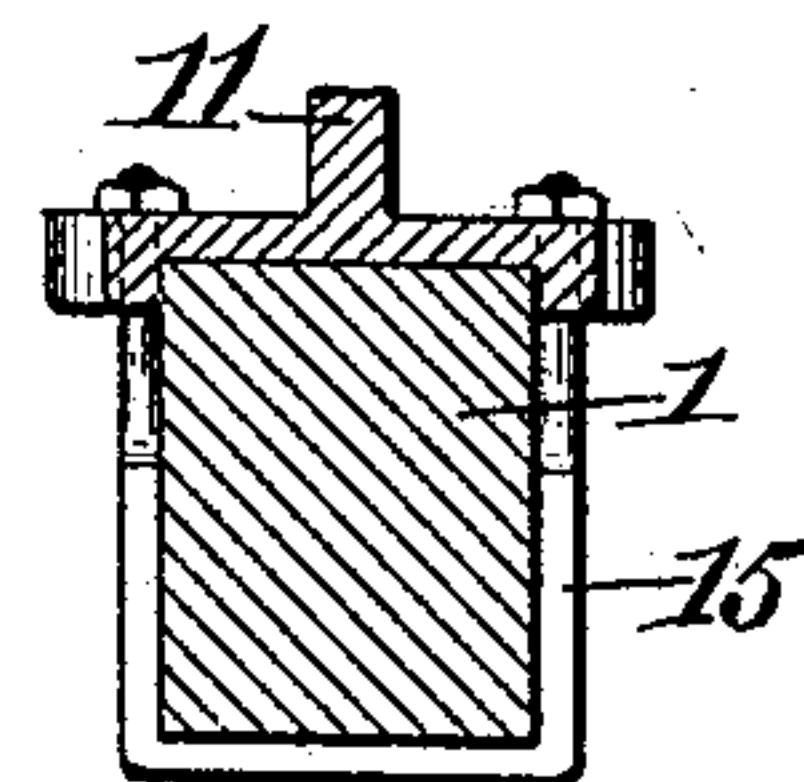


Fig. 6



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# UNITED STATES PATENT OFFICE.

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## VEHICLE.

SPECIFICATION forming part of Letters Patent No. 773,402, dated October 25, 1904.

Application filed May 14, 1904. Serial No. 207,931. (No model.)

*To all whom it may concern:*

Be it known that I, PIERE ADEN LINDROSE, a citizen of the United States, and a resident of Hattiesburg, in the county of Perry and State of Mississippi, have invented a new and Improved Vehicle, of which the following is a full, clear, and exact description.

This invention relates particularly to improvements in trucks to be used as a part of an eight-wheel wagon for carrying heavy loads, such as timber and the like, an object being to provide a truck that will be very strong and serviceable and of a comparatively simple construction.

Other objects of the invention will appear in the general description.

I will describe a vehicle embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a truck embodying my invention. Fig. 2 is a section on the line *ww* of Fig. 1. Fig. 3 is a front elevation with the tongue and hounds removed. Fig. 4 is a section on the line *xx* of Fig. 1. Fig. 5 is a detail plan showing one of the ball-and-socket joints employed. Fig. 6 is a section on the line *yy* of Fig. 3, and Fig. 7 is a section on the line *zz* of Fig. 2.

Referring to the drawings, 1 designates the front axle of the truck, on which the wheels 2 are mounted to rotate, and 3 is the rear axle, having wheels 4. Mounted on the front axle 1 is a steel casting having at its front and extended forward therefrom a boxing 5 for receiving the rear end of the tongue 6, and near the sides are boxings 7 for receiving hounds 8. The tongue swings on a bolt 9, while the hounds swing on bolts 10. Between the center boxing and the end boxing is a web 11, the center of which extends above the center boxing and has a circular plate 12, with which an inverted-cup-shaped plate 13 on a cast-steel bolster 14 is mounted to turn, thus forming

a center-bearing or fifth-wheel. The casting having the boxing is secured to the axle 1 by means of U-bolts 15, the upper ends of which pass through lateral flanges of said casting. On the ends of said casting are segment-plates 16, with which overturned ends 17 of the bolster engage, thus permitting the turning movement of the bolster, but preventing its detachment from the center-bearing, and these segment-plates are of sufficient length to prevent the bolster from being turned off the ends of said plates, as before it reaches the ends one end of the bolster will engage against one of the draw-bars, to be hereinafter described.

On the ends of the bolster 14 are socket members each comprising a semicircular transversely-curved section 18, formed integral with the bolster and coacting with an upper member 19, mounted to swing on the outer end of the section 18, and when in closed position the member 19 may be locked by passing a bolt 20 through a perforation in a projection 21 on the swinging member and through a perforation 22 in the bolster.

On the rear axle 3 are standards 23, consisting, preferably, of cast-steel, and these standards are secured to the axle by means of yoke or clip bolts 24, passing through perforations in flange portions at the bases of the standards. At the upper end of each standard is a socket member consisting of an integral section 25 and a swinging section 26, these parts being similar to the socket members first described.

Wooden draw-bars 27 have ball-joint members 28 for engaging in the front socket members, and these ball-joint members are cast integral with sleeves 29, bolted to the front ends of the draw-bars. Similar ball-bearings engage in the sockets and are formed integral with sleeves 30 on the rear ends of said draw-bars. By these ball-and-socket connections the front and rear axles are permitted vertical movement to a certain extent one relatively to the other in passing over rough ground or the like. Transversely ar-



ranged on the draw-bars is a load-bearing bar 31. As here shown, this bar 31 has on its under side bearing-plates 32, which engage on bearing-plates 33, mounted on the draw-bars. U-shaped bolts or clips 34 pass around the draw-bars and through the bearing-bar. The vertical members of the clips are spaced slightly from the draw-bars, so that there may be a slight movement of the bearing-bar thereon.

A reach 35 has its rear end extended into a metal loop-plate 36 and is secured to the rear axle by means of a loop bolt or clip 37, which passes around the said axle and through the reach, and the members of the loop-plate engage against the upper and lower sides thereof. As here shown, a wear-plate 38 is arranged between the lower member of said loop-plate and the axle, said wear-plate having flanges at its front and rear edges which engage against the front and rear of the axle. Bolted to the front end of the reach, is a casting consisting of an upper member 39, engaging on the upper side of the reach and a lower member 40, engaging against the lower side of the reach, and preferably the rear ends of these plates will have inwardly-extended flanges 41 for engaging in recesses formed in the reach, thus adding somewhat to the strength of the connection between the parts. At the front end the plates 39 40 are connected by a plate 42, which engages against the front end of said reach, and extending forward at the upper and lower portions of this plate 42 are plates 43, which are provided with perforations to receive a king-bolt 44, which passes through the center bearing-plate 12 and also through a flange 45 at the lower side of the casting secured to the front axle. Secured to the reach 35 are hounds 46, which have their rear ends mounted on plates 47, extended inward from the lower ends of the standards 23 and formed integral therewith, and it will be noted that the clips 24 pass through these plates and through the hounds. The hounds are further secured to the standards by means of screws passing through lateral flanges 48 at the inner sides of the standards and into said hounds. The loop-plate 36 is provided, so that a truck similar to the one above described may be hooked thereto, thus forming an eight-wheel wagon adapted for carrying long timbers or the like.

In backing it may be necessary to lock the bolster 14 to prevent its turning. For this purpose I have provided the bolster with perforated lugs 48<sup>a</sup>, through which pins may pass into perforations in the top walls of the boxings 7.

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

1. In a truck, a front axle, a metal casting secured thereto and having at its front box-

ings for receiving a tongue and tongue-hounds, a bearing-plate at the center of said casting, a cast-metal bolster having a bearing-plate for engaging on the first-named bearing-plate, segment-plates on the ends of said casting, and turned ends on the ends of said bolster for engaging with said segment-plates.

2. In a truck, a cast-metal bolster having a center bearing-plate, and socket members at its ends, each socket member consisting of a semicircular fixed portion and a semicircular swinging portion.

3. In a truck, a front axle, a casting secured thereto and having at its front boxings for receiving the end of a tongue, and the rear ends of tongue-hounds, segmental plates on the ends of said casting, a center bearing-plate on the casting, a bolster having an inverted-cup-shaped bearing-plate for engaging on the first-named bearing-plate, turned ends on said bolster for engaging with the segment-plates, and socket members on the bolster, each consisting of a semicircular portion integral with the bolster, and a semicircular portion having swinging relation to the fixed portion, each of said portions being transversely concaved at the inner side.

4. In a truck, a front axle, a rear axle, socket members mounted on the front axle, socket members mounted on the rear axle, and draw-bars having ball-socket members at its ends for engaging in said socket members.

5. A truck comprising front and rear axles, socket members mounted on the axles, wooden draw-bars, metal sleeves secured to the ends of said draw-bars, and balls formed on said sleeves for engaging in said socket members.

6. A truck comprising front and rear axles, draw-bars having ball-and-socket connections with the axles, and a bearing-bar mounted on the draw-bars.

7. A truck comprising front and rear axles, a reach secured at its rear end to the rear axle, a loop-plate on the rear end of the reach, a casting secured to the front end of the reach and comprising plates for engaging respectively against the upper and lower sides of the reach, flanges on the plates engaging in the reach, forward extensions from said plates provided with perforations, a casting on the front axle, and a king-bolt passing through said casting and through said forward projections.

8. In a truck, a rear axle, metal standards secured to said axle and having inwardly-extended plates at the lower ends on which hounds may be secured, and socket members carried by the standards, each socket member consisting of a semicircular transversely-curved portion formed integral with the standards, and similarly-shaped portions mounted to swing on the standards.

9. In a truck, the combination with a rear

axle consisting of wood, of a metal standard  
having an inwardly - extended plate at the  
lower end, laterally - extended flanges at the  
inner edge provided with perforations, and a  
5 ball-socket member on the standard consist-  
ing of a fixed section and a swinging section.  
In testimony whereof I have signed my name

to this specification in the presence of two sub-  
scribing witnesses.

PIERE ADEN LINDROSE.

Witnesses:

JNO. C. STEVENS,  
P. B. McLEOD.