

No. 656,878.

Patented Aug. 28, 1900.

J. A. BRILL.
CAR TRUCK.

(Application filed Dec. 18, 1899.)

(No Model.)

3 Sheets—Sheet 1.

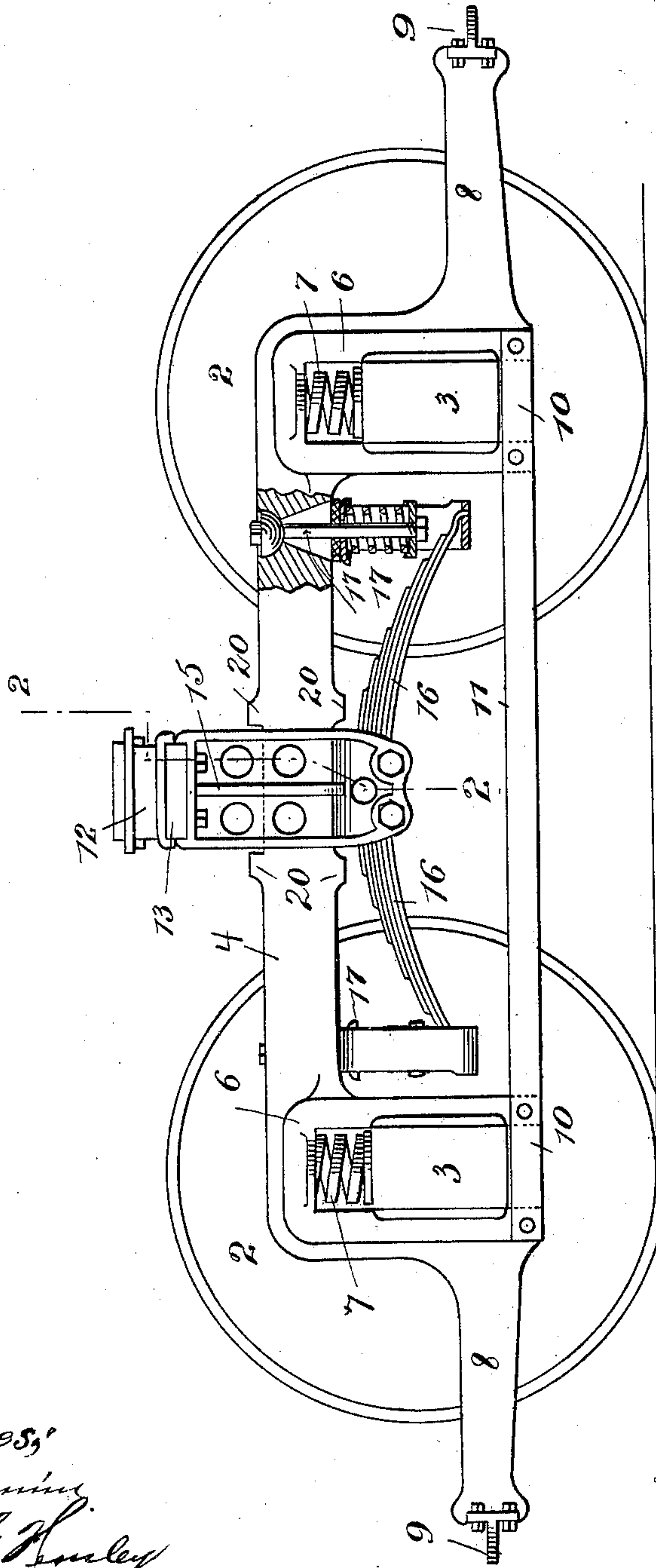


Fig. 1.

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att'y

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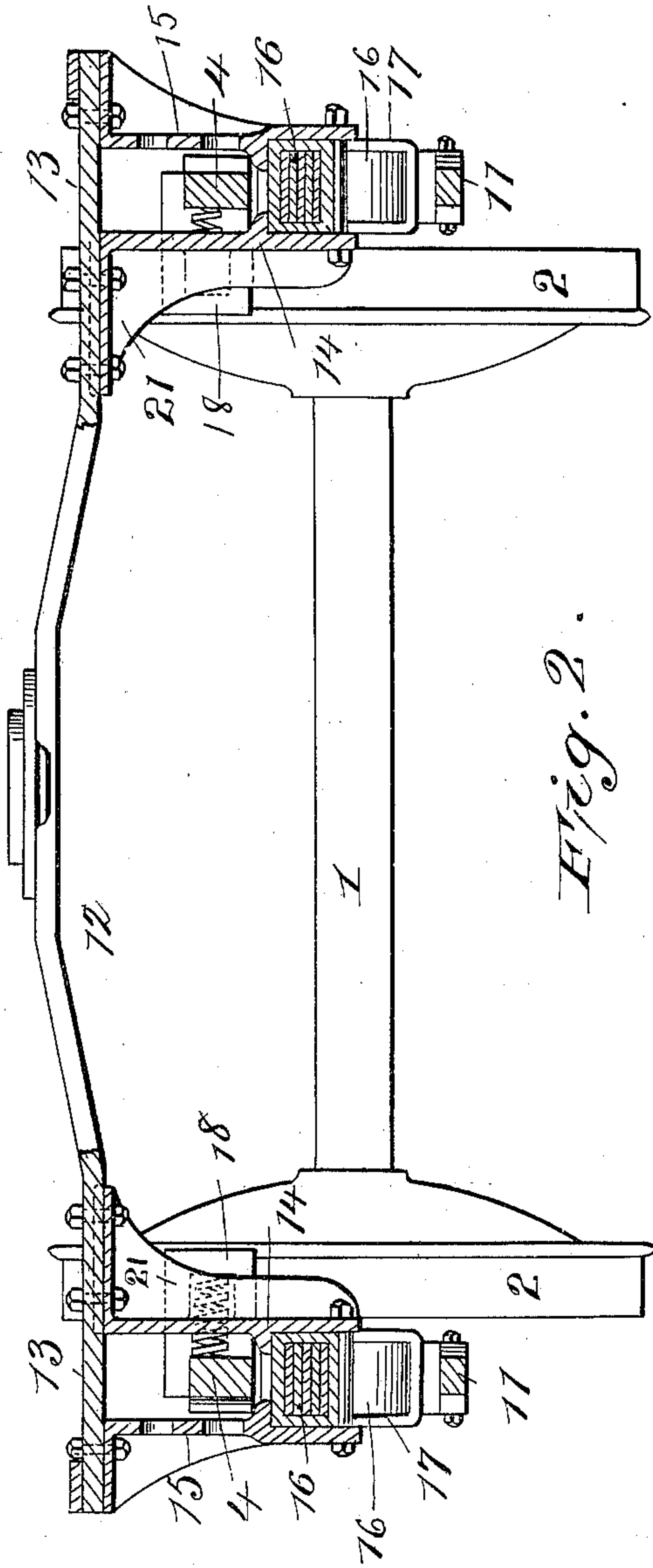
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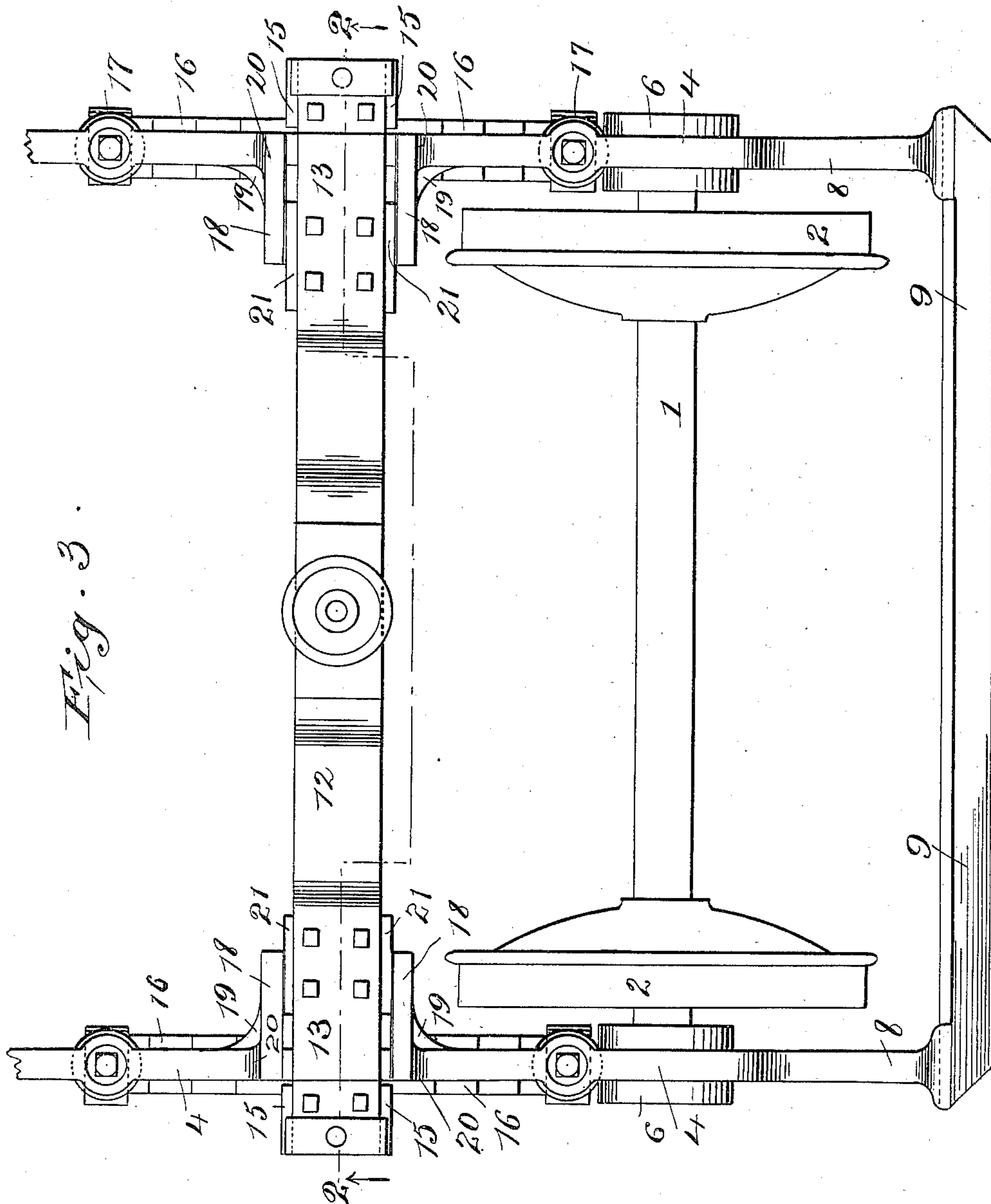
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3 Sheets—Sheet 3.



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UNITED STATES PATENT OFFICE.

JOHN A. BRILL, OF PHILADELPHIA, PENNSYLVANIA.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 656,878, dated August 28, 1900.

Original application filed May 15, 1899, Serial No. 716,884. Divided and this application filed December 18, 1899. Serial No. 740,637. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. BRILL, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have made certain new and useful Improvements in Car-Trucks, of which the following is a specification.

The object of my invention is to improve the construction of pivotal trucks where a movably-suspended bolster is employed and also to provide extra clearance for motors; and to this end my invention consists in a construction whereby the usual bolster-transoms which extend between the side frames are dispensed with and said transoms formed by inwardly-extending brackets either secured to or formed integrally with the side frames, such as shown in my application for patent, Serial No. 716,884, filed May 15, 1899, patented February 6, 1900, No. 642,956, of which this application is a division.

My invention further resides in the constructions and combination of parts hereinafter described, and further pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a side elevation of a car-truck embodying in part my improvements. Fig. 2 is a sectional elevation transversely of the truck, the section being taken substantially on the lines 2 and 2, Figs. 1 and 3. Fig. 3 is a plan view of a little more than half of the truck.

As my present improvements embrace certain features of construction of the herein-illustrated trucks, I shall describe only those portions which are related more intimately to those claimed.

In the drawings, 1 indicates the axles; 2, the wheels; 3, the axle-boxes; 4, the side bars of the side frames; 6, the axle-box yokes on pedestals; 7, the axle-box springs; 8, the yoke-arms extending out beyond the wheels; 9, the cross-bars tying the extensions together, so as to form with the side frames a complete truck-frame, embracing the wheels; 10, the yoke cross-bars, and 11 the pedestal tie-bar.

In the illustrated embodiment both side frames are constructed alike.

At 12 is the bolster, comprising the flat arched bar, having secured to its ends 13 the

paired and pendent bolster-brackets 14 15, embracing the side bars, which brackets engage on each side of the truck the semi-elliptic springs 16, which springs are movably suspended from the side bars 4 by the extensible spring-links 17, all as described in my application for patent previously referred to.

As the bolster construction and the construction of the truck generally form no part of the present invention, the same may be modified without departing from the spirit thereof.

To form the transoms, I have cast or otherwise produced upon the side bars the inwardly-extending brackets 18, which are clearly shown in Fig. 3 disconnected from each other transversely, the brackets being connected by a strengthening-web 19 to the side bar, and in order to give ample vertical bearing to resist the longitudinal and vertical movements of the bolster the side bar has been enlarged vertically where the brackets extend therefrom to form lugs 20, which extend vertically the limits of the brackets up and down, as clearly shown in Fig. 1, the movements of the bolster being taken on the side webs 21 of the inner bolster-brackets, thereby forming efficient means for hauling and otherwise restraining the action of the bolster.

It will be noticed that the transom which has previously extended between the side frames adjacent to the bolster has been removed and utilized for the purpose of connecting the truck-frame transversely outside of the wheels instead of between the wheels, as previously employed, and that the cross-bar 9 in this its new relation to the peculiar combination herein described takes the place of the usual cross-transom, which, among other beneficial results, permits a motor to be located close up to the bolster, this saving several inches in the wheel-base of the truck.

Having described my invention, I claim—

1. In a car-truck, the combination of the side frames, axles and wheels, and axle-boxes, the side frames having axle-box pedestals, arms extending from the pedestals beyond the wheels, cross-bars connecting the arms transversely outside of the wheels, the paired brackets 18 extending inwardly from the side

frames, and transversely disconnected from each other, and a bolster movably suspended in part within said brackets.

2. In a car-truck, the combination of the 5 side frames having inwardly - extending spaced brackets, such as 18, and a bolster movably suspended between and guided by said brackets, substantially as described.

3. In a car-truck, the combination of the 10 side frames having inwardly - extending spaced brackets, such as 18, a bolster having pendent elements thereon, and located between said brackets, and means for movably supporting said bolster, substantially as de- 15 scribed.

4. In a car-truck, the combination of the side frames having the side bars 4, the brackets 18, extending inwardly from the side bars, a bolster, paired inner and outer brackets, 14,

15, disposed at each side of the bar 4, said 20 brackets being secured to the bolster above said bar 4, means for supporting said brackets from the bar 4, the inner bracket 14 lying between the brackets 18, which latter act as transoms for said inner brackets, substan- 25 tially as described.

5. In a car, the side frames having the paired and alined lugs 20, the brackets 18, extending inwardly from said lugs, and a bolster movably supported between and guided by 30 said brackets, substantially as described.

Signed at the city of Philadelphia, county of Philadelphia, State of Pennsylvania, the 14th day of December, 1899.

JOHN A. BRILL.

Witnesses:

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