

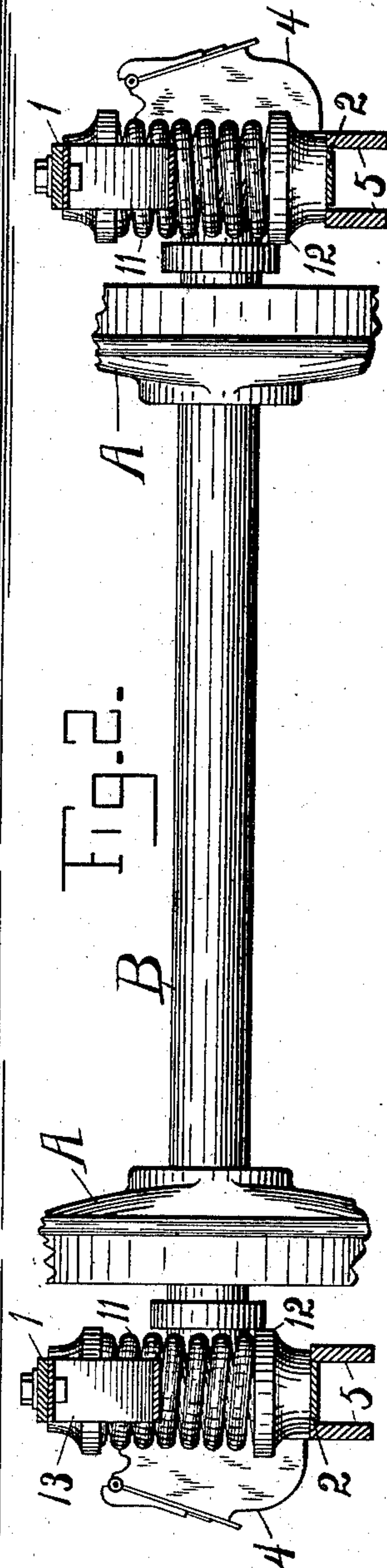
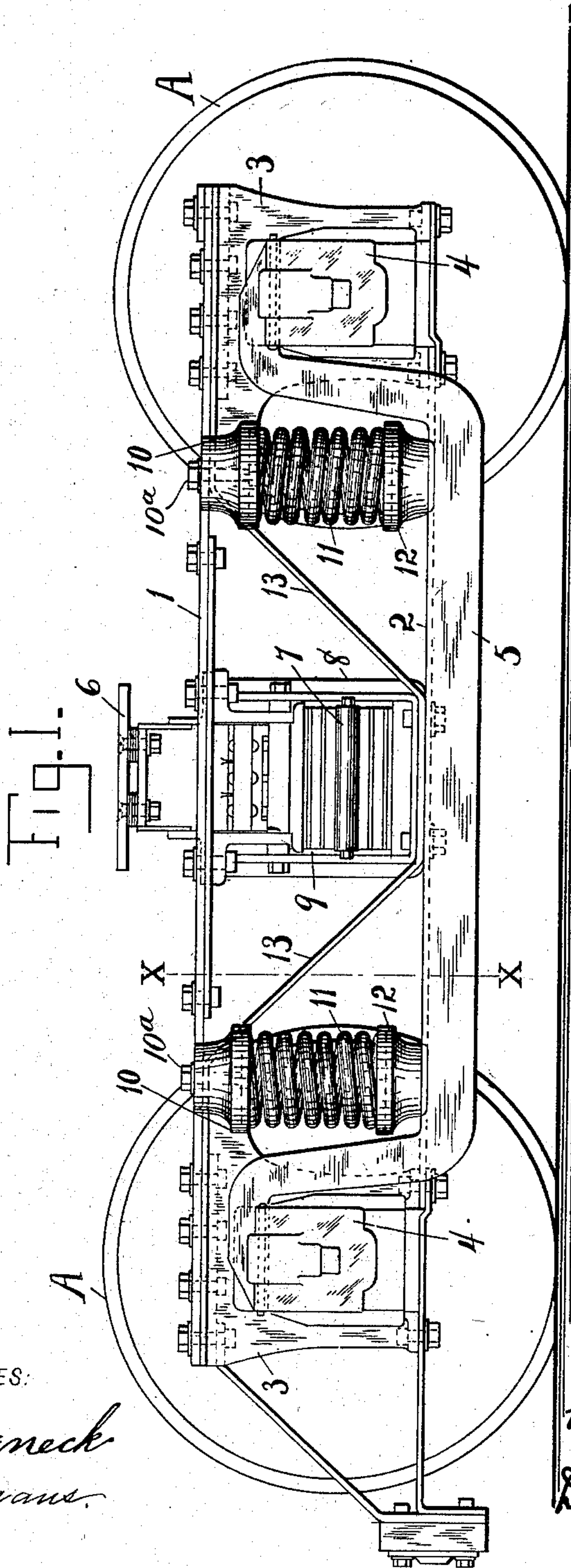
No. 752,799.

PATENTED FEB. 23, 1904.

W. G. PRICE.  
TRUCK.

APPLICATION FILED MAR. 13, 1903.

NO MODEL.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM G. PRICE, OF KINGSTON, NEW YORK, ASSIGNOR TO JOHN A. BRILL, OF PHILADELPHIA, PENNSYLVANIA.

## TRUCK.

SPECIFICATION forming part of Letters Patent No. 752,799, dated February 23, 1904.

Application filed March 13, 1903. Serial No. 147,574. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM G. PRICE, residing at Kingston, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Trucks, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to trucks; and its object is to improve the efficiency, strength, and durability thereof.

The invention accordingly consists in the features of construction, combination of elements, and arrangement of parts, as will be hereinafter fully set forth, and the novel features thereof pointed out in the claims.

In the accompanying drawings, which illustrate an embodiment of the invention, Figure 1 is a side elevation of the truck constructed in accordance with my invention. Fig. 2 is a cross-sectional view on the line  $x-x$  of Fig. 1, partly broken away.

Similar reference characters refer to similar parts throughout the several views.

The general construction of the truck shown herein is that of the Master Car-Builders' type shown in patent to Edgar Peckham, No. 681,342, issued August 27, 1901, and my pending application, Serial No. 140,973, and the present invention is in the nature of an improvement on the trucks shown in said patent and application. Only so much of the truck will be described herein as is necessary for a full understanding of the present invention.

The wheels are indicated at A, one of the axles at B. The truck-frame comprises upper chords 1 and the lower chords 2. Connected to the upper chord are the pedestals 3, which straddle the axle-boxes 4. Upon the axle-boxes are supported the ends of equalizing-bars 5, such equalizing-bars being of duplicate construction with one on each side of the pedestals, as in the usual construction. The upturned ends of the equalizing-bars are given a substantially vertical use, so as to bring them very close to the axle-boxes. The bolster, of any desired construction, is provided by springs 7, which are pivotally suspended

from the side frame by means of the links 8. The U-shaped brace or bolster-pedestal 9 acts as a strengthening or compression member between the two chords of the frame and the tension member to be described.

Integral with the inner upper ends of the pedestals 3 are inwardly-extending spring-caps 10, formed integrally with the pedestals and which provide housings for the upper ends of the equalizing-springs 11, the lower ends of which rest in seats 12, supported upon the equalizer-bars.

A tension member or diagonal truss-bar 13, which may be designated the "arch-bar," passes between the lower chord 2 and the brace 9 and is secured to both elements and in addition is secured to the top chord above the spring-cap 10 by the bolt 10<sup>a</sup>, its ends being preferably extended to the ends of the frame between the upper chord and the pedestals and there bolted, as shown. The caps are recessed to receive the tension members and top chord.

It will be seen that with this construction the weight which is carried primarily by the bolster is transferred thence to the top frame, from the top frame through the springs 11 to the equalizing-bars, and thence to the axle and wheels.

One advantage of the present construction resides in the fact that the spring-cap which rests upon the equalizer-springs is integral with the pedestal, so that there is a rigid connection between the top frame, the pedestal, and the spring-cap. While the integral construction of pedestal and spring-cap is preferable, it is of course obvious that such parts might be made in separate pieces rigidly secured together.

In order to construct a very strong truss-frame truck with the least weight of material, it is desirable to extend the arch-bar or diagonal brace 13 in a straight line from the center brace 9 to the top of the pedestal. In the former construction the equalizer-bars were shorter and the spring-caps differently located. The present construction makes room for a long equalizer-spring or variations in number of coils and permits the upper end



of this spring to be located at a point sufficiently high with reference to the other parts of the truck that rocking of the frame and car-body on an uneven track is prevented or materially lessened. With this construction the strength of the end of the truck-frame is sufficient to withstand the strain of lifting the truck and car-body by means of a jack for purposes of repairs, replacing on track when derailed, and under other similar circumstances. Where the spring-cap 10 is not rigidly connected with the pedestal 3, the top frame between the spring-cap and the pedestal is easily bent upwardly or buckled when a jack-screw is placed under the end of the frame and the truck is raised thereby. Also the location of the equalizing-springs closely adjacent the pedestals gives greater longitudinal stability to the truck through the longitudinal extension of the equalizing-spring base, and greater rigidity and strength is secured by connecting the tension member, the top chord, spring-caps, and pedestals together. The employment of two equalizing-bars spaced apart gives great lateral stability of the support of the equalizing-springs.

I claim—

1. In a truck, the combination of the side frames each comprising pedestals, a top and bottom chord secured to said pedestals, axle-boxes in the pedestals, inwardly-extending spring-caps formed integrally with the pedestals and located beneath the top chord, a tension member secured to said caps and top chord, a bolster-pedestal extending between the tension member and top chord, a plurality of equalizing-bars having their ends resting on the axle-boxes, and equalizing-springs ex-

tending between said equalizing-bars and spring-caps.

2. In a truck, the combination of the side frames each comprising pedestals, a top and bottom chord secured to said pedestals, axle-boxes in the pedestals, inwardly-extending spring-caps formed integrally with the pedestals and located beneath the top chord, and a tension member secured to said caps and top chord, a bolster-pedestal extending between the tension member and top chord, a plurality of equalizing-bars having their ends disposed substantially vertically located closely adjacent and resting on the axle-boxes, and equalizing-springs extending between said equalizing-bars and spring-caps closely adjacent the pedestals.

3. In a truck, the combination of the side frames, each comprising pedestals, a top and bottom chord secured to said pedestals, axle-boxes in the pedestals, inwardly-extending spring-caps formed integrally with the pedestals and located beneath the top chord, a tension member secured to said caps and top chord, a bolster-pedestal extending between the tension member and top chord, a plurality of equalizing-bars having their ends resting on the axle-boxes between said equalizing-bars and spring-caps, the lower chord being vertically disposed between the equalizing-bars and secured to the diagonal tension member and bolster-pedestal.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM G. PRICE.

Witnesses:

ERNEST E. WHITNEY,  
CHARLES S. KEEFE.