

No. 753,627.

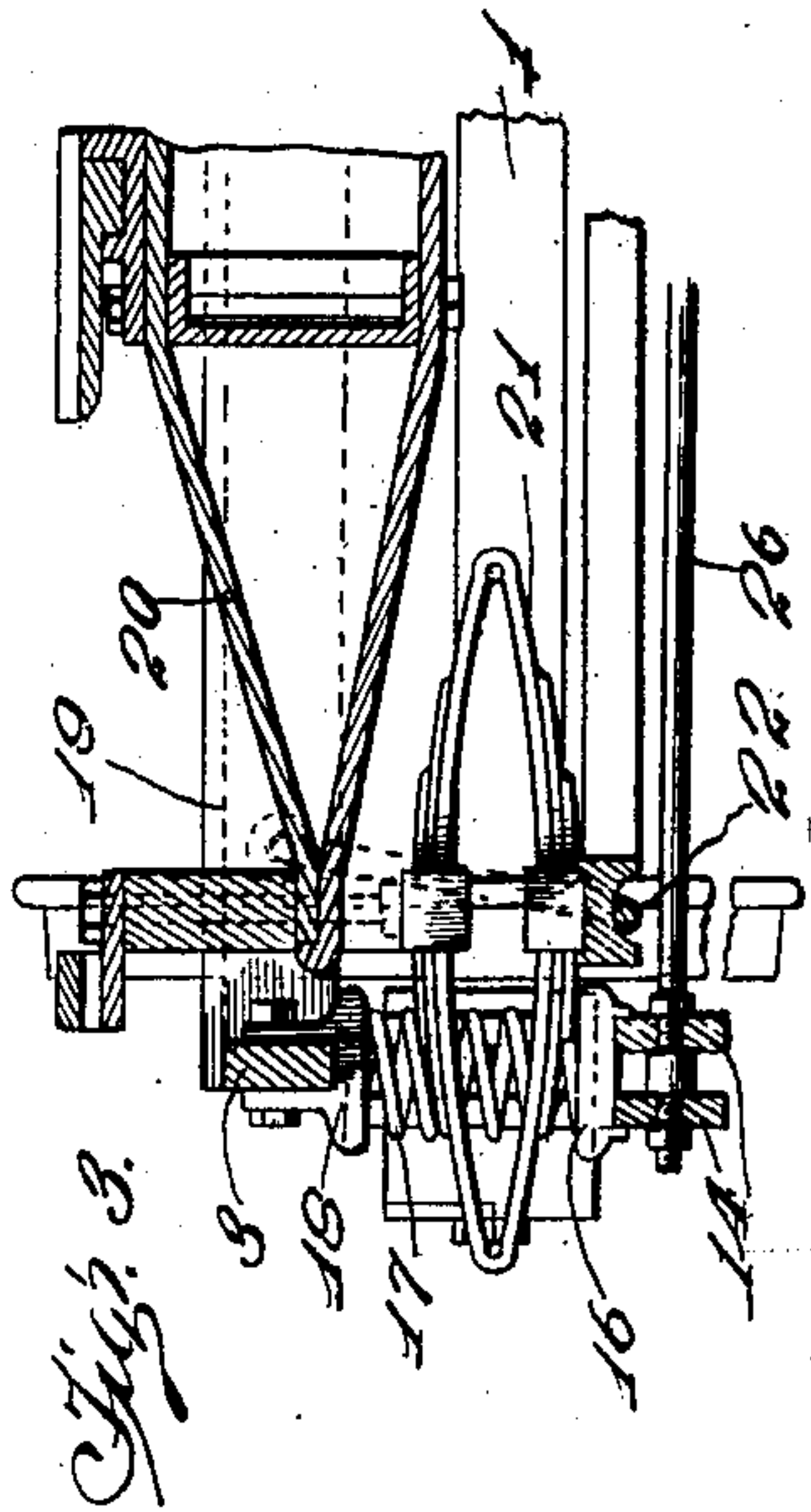
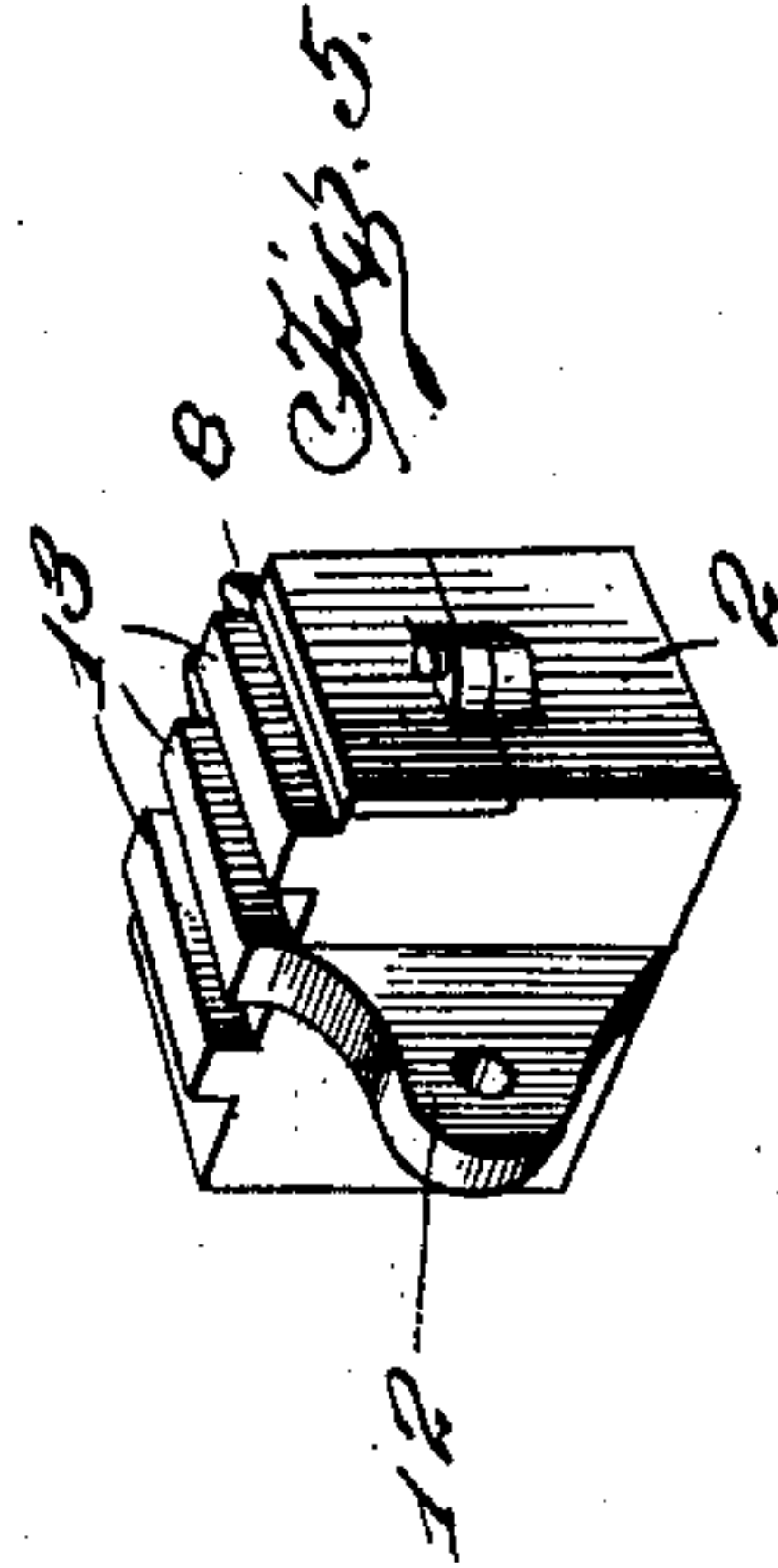
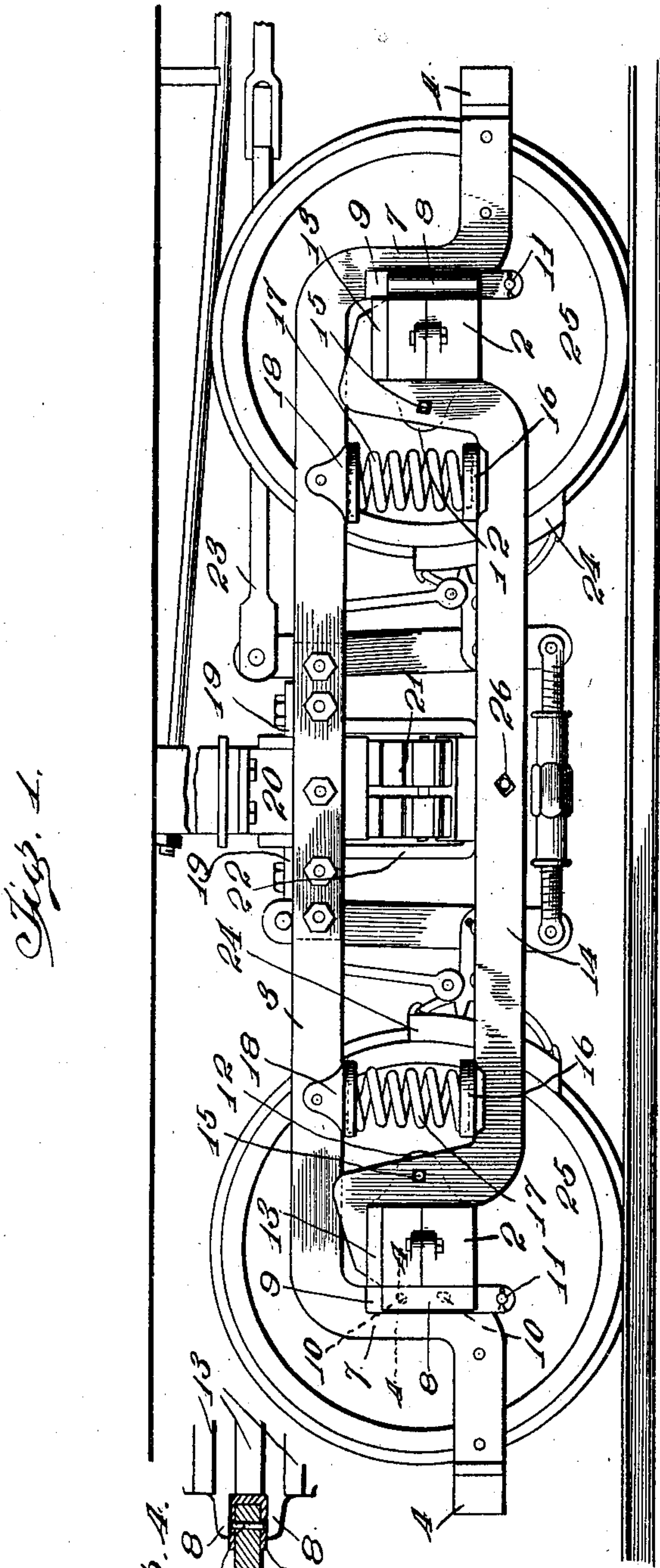
PATENTED MAR. 1, 1904.

W. G. PRICE.
TRUCK.

APPLICATION FILED SEPT. 24, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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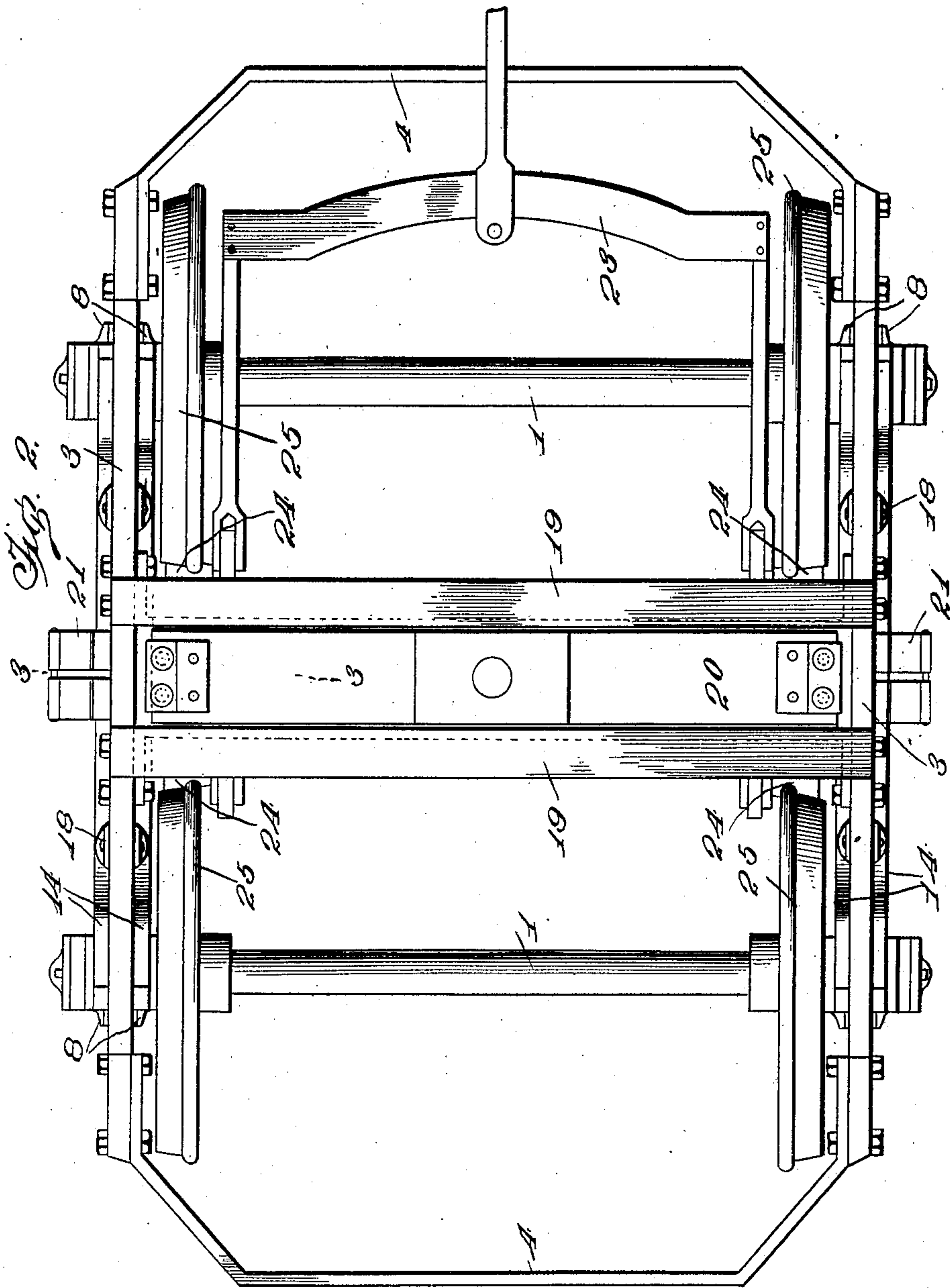
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

WILLIAM G. PRICE, OF KINGSTON, NEW YORK.

TRUCK.

SPECIFICATION forming part of Letters Patent No. 753,627, dated March 1, 1904.

Application filed September 24, 1903. Serial No. 174,497. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. PRICE, a citizen of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Trucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-
 10 pertains to make and use the same.

The present invention relates to car-trucks, and particularly to such as are adapted especially for use with street-railway cars; and the object in view is the provision of means
 15 for tying the journal-boxes together for efficiently guarding against longitudinal separation and at the same time provided with means for permitting sufficient vertical movement of the parts for absorbing vibration.

With this and further objects in view the invention consists, in combination with suitable axles and journal-boxes inclosing the ends of the same, of equalizer-bars connecting the sets of boxes upon the respective ends
 25 of said axles, each bar being constructed of a plurality of separate strips of material, a lug projecting from each of said boxes between said strips, means connecting the strips together and to said boxes, and car-body-supporting means carried by said equalizer-bars.
 30 It further consists in certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 represents a view in side elevation of a car-truck embodying the features of the present invention. Fig. 2 represents a top plan view of the same. Fig. 3 represents a fragmentary
 40 view in transverse vertical section taken on the plan of line 3 3 of Fig. 2. Fig. 4 represents an enlarged detail horizontal section taken on the plan of line 4 4 of Fig. 1. Fig. 5 represents an enlarged detail perspective
 45 view of one of the journal-boxes.

In the present application I propose to present certain improvements over the structure disclosed in my application filed on the 28th day of May, 1903, and designated by Serial
 50 No. 159,140. It will therefore be understood

that the present improved truck relates to the same art and contemplates, if possible, producing a more efficient structure than heretofore known.

For a complete understanding of the truck reference is had to the accompanying drawings by numerals, in which—

1 1 indicate axles, each carrying at each end a journal or bearing box 2, the boxes 2, carried by the ends of axles 1 at one side of the truck, forming a set or pair and the corresponding boxes on the opposite side of the truck forming a similar set or pair. Each set of boxes 2 is inclosed by a yoke-shaped side frame 3, connected at their ends by end
 60 frames 4 4 and provided near each end with a vertical pedestal 7, slidably engaging the side of the respective box 2. Laterally-projecting flanges 8 8 extend from each box 2 upon each side of each pedestal 7 for limiting the frame 3 against lateral play. Each pedestal
 70 7 carries a wearing-strip 9, U-shaped in transverse section, surrounding that edge of the pedestal lying within the plane of flanges 8 and extending below the lower ends thereof. Suitable rivets 10 10 or other securing means
 75 retain the wearing-strip in proper position relative to the pedestal 7, so that said strip moves with said pedestal, and the lower end of said strip projecting below the flanges 8 is provided with a limiting bolt or bar 11, extending transversely through such strip and adapted when the frame 3 is raised to the uppermost limit of its vertical movement to
 80 contact with the flanges 8 and prevent further upward movement of said frame 3. The flanges 8 extend from the outer side of each box 2, and each of said boxes is provided on the opposite or inner side with a centrally-positioned inwardly-extending lug 12 and on its
 90 upper surface with upwardly-extending transversely-positioned bars or lugs 13, one of said bars being arranged centrally of the upper surface of the box and the other bars being spaced laterally therefrom.

Each set of boxes 2 is connected by an equalizer-bar 14, each bar comprising two parallel strips spaced apart a distance equal to the thickness of side frame 3 and extending between the boxes 2 in a horizontal plane ap-
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proximately the same as that occupied by the lower surface of said boxes, the ends of said strips being bent upwardly in position for resting on top of the box within the grooves formed between the bars or lugs 13, the lug 12 extending between the strips composing the bar 14 and spacing the same apart. A suitable bolt or other securing means 15 is passed through the strips composing each bar 14 and through the respective lugs 12 for retaining the equalizer-bar rigidly in position relative to box 2, the ends of the strips composing bars 14 being preferably of sufficient width to extend slightly above the horizontal plane of the lower edge of frame 3 upon each side of said frame for assisting in guiding the same in its vertical movement. A suitable cap 16 is carried by each bar 14, near each end of the lower horizontal portion thereof, and each of said caps is adapted to retain the lower end of a suitable spring 17, each spring having its upper end engaging a cap 18, carried by frame 3, whereby said frame may be supported and cushioned in its movement.

The side frames 3 are preferably connected by suitable transoms 19 19, spaced apart for the reception of any suitable car-body-supporting bolster 20, said bolster being preferably hung within said transoms upon elliptic springs 21 21, carried by U-shaped bars 22, pivotally engaging the transoms 19. Said bolster 20 is thereby supported upon cushions 21 and at the same time permitted to have a slight endwise movement. Any suitable brake-rigging 23 may be carried by the truck for applying suitable brake-shoes 24 to the wheels 25, carried by axles 1.

In order to prevent lateral play of the central portion of bars 14, I preferably provide a tie rod or bar 26, which extends transversely across the truck centrally thereof, engaging at its ends the bars 14 and locking the same against spreading laterally apart or having any independent lateral movement.

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

1. In a car-truck, the combination with axles, and bearing-boxes therefor, of lugs projecting from said boxes, equalizer-bars rigidly connecting the boxes, means fixing said bars to said lugs, side frames movably engaging said boxes, and means carried by said equalizer-bars supporting said side frames.

2. In a car-truck, the combination with axles and journal-boxes therefor, of lugs projecting from said boxes, a plurality of strips forming equalizer-bars connecting said boxes, said strips extending upon opposite sides of said lugs, means connecting the strips to said lugs, side frames inclosing said boxes, and means carried by said equalizer-bars supporting said side frames.

3. In a car-truck, the combination with axles and journal-boxes therefor, of a plurality of

strips forming an equalizer-bar connecting each set of boxes carried by the ends of said axles at one side of said truck, lugs carried by said boxes spacing said strips apart, means securing said strips together and attaching the same to said boxes, a side frame extending between and above the strips comprising each equalizer-bar, and means carried by said equalizer-bar supporting its respective side frame.

4. In a car-truck, the combination with axles and journal-boxes therefor, of strips forming side frames connecting the respective pairs of boxes at each side of the truck, lugs or bars projecting from the upper surface of each of said boxes and spaced apart a distance equal to the thickness of the respective strips and receiving the strips therebetween, means connecting said strips to said boxes, and car-body-supporting means carried by said equalizer-bars.

5. In a car-truck, the combination with axles and journal-boxes therefor, of strips of material forming an equalizer-bar upon each side of the truck, each connecting the set of boxes upon its respective side, each of said strips extending in approximately the same horizontal plane as that occupied by the lower surface of the respective boxes and being bent at the ends upwardly in contact with the inner side of the respective box, and again bent to a horizontal plane in position for resting on top of the respective box, a lug projecting from each box between the said strips, means connecting said lug and strips together, and car-body-supporting means carried by said equalizer-bars.

6. In a car-truck, the combination with axles and bearing-boxes therefor, of equalizer-bars connecting said boxes, side frames supported by said bars, each of said side frames being provided with depending pedestals slidably contacting with the corresponding box, flanges extending from each of said boxes upon each side of the respective pedestal, a bearing-strip inclosing the inner edge of each pedestal and lying between the said flanges and pedestal, and means carried by said wearing-strips for limiting the vertical movement of said side frames.

7. In a car-truck, the combination with axles and journal-boxes carried thereby, of an equalizer-bar connecting each set of boxes at one side of the truck, a yoke-shaped side frame inclosing said boxes, the vertical portions of each frame forming pedestals, flanges projecting from each of said boxes and partially inclosing the respective pedestals, a wearing-strip interposed between each pedestal and its flanges projecting below the flanges in the vertical plane thereof, and engaging means carried by the lower end of each strip and adapted to engage the respective flanges for limiting the side frame in its upward movement.

8. In a car-truck, the combination with axles, and bearing-boxes therefor, of lugs projecting from said boxes, equalizer-bars rigidly con-

necting the boxes, side frames movably engaging said boxes, and means carried by said equalizer-bars supporting said side frames.

5 9. In a car-truck, the combination with axles and journal-boxes therefor, of strips of material forming an equalizer-bar upon each side of the truck, each connecting the set of boxes upon its respective side, each of said strips extending in approximately the same
10 horizontal plane as that occupied by the lower surface of the respective box, and again bent to a horizontal plane in position for resting on top of the respective box, a lug projecting from each box, means connecting said lug
15 and strips together, and car-body-supporting means carried by said equalizer-bars.

10. In a car-truck, the combination with axles and bearing-boxes therefor, of equalizer-bars

rigidly connecting said boxes, side frames supported by said bars, the said bars carried on 20 the top of said boxes, and the said boxes being provided with lugs on their vertical sides, to which the said bars are secured.

11. In a car-truck, the combination with axles, and bearing-boxes therefor, of equalizer-bars 25 rigidly connecting said boxes, side frames supported by said bars, the said bars resting on the top of said boxes, the said boxes being provided with means on their vertical sides for engagement with the said bars. 30

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

WILLIAM G. PRICE.

Witnesses:

S. E. KINGMAN,

A. J. HARCOURT.