

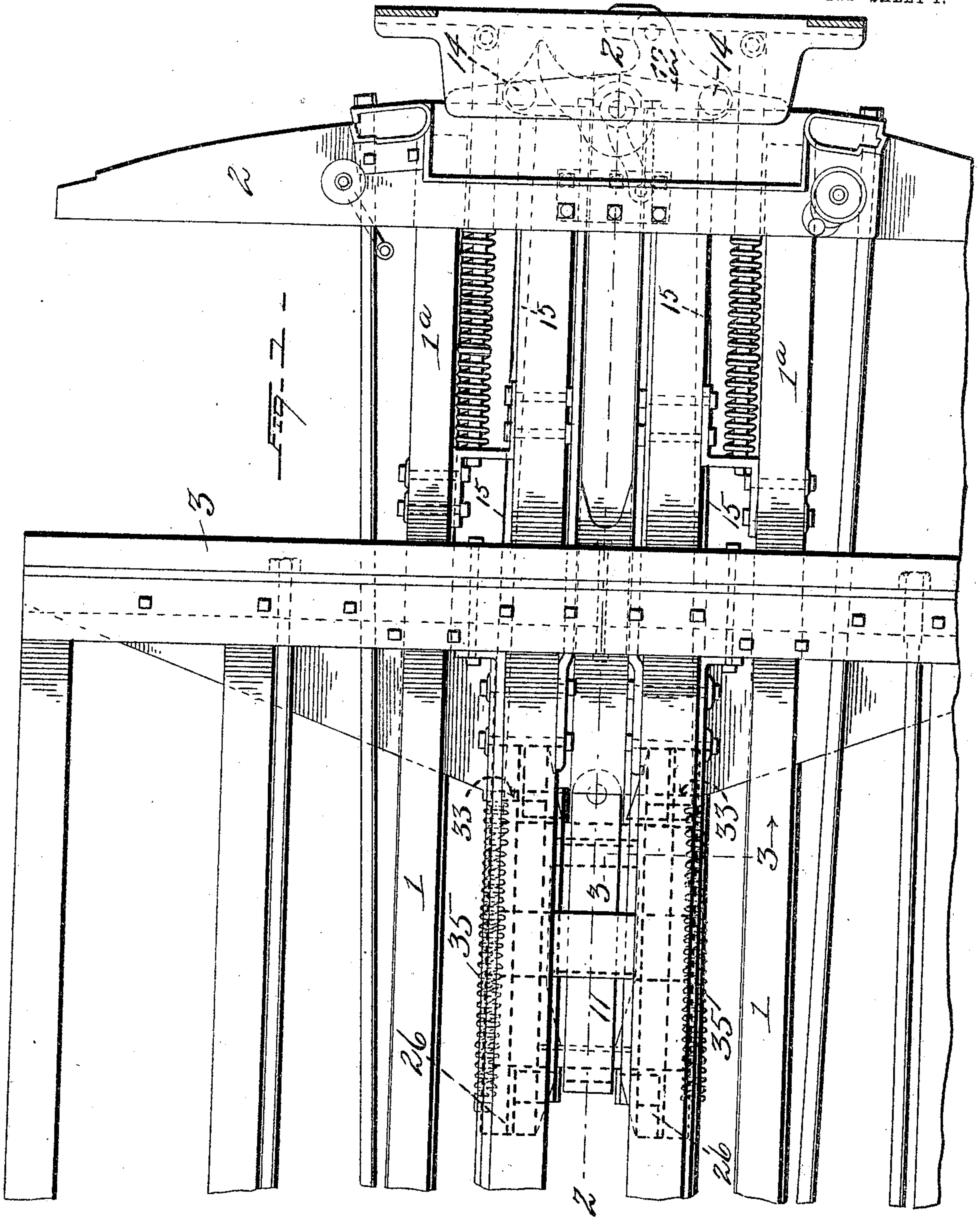
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PATENTED FEB. 13, 1906.

B. S. BROWN.
DRAFT RIGGING MECHANISM FOR CARS.

APPLICATION FILED NOV. 14, 1905.

2 SHEETS—SHEET 1.



WITNESSES

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Fig. 3—

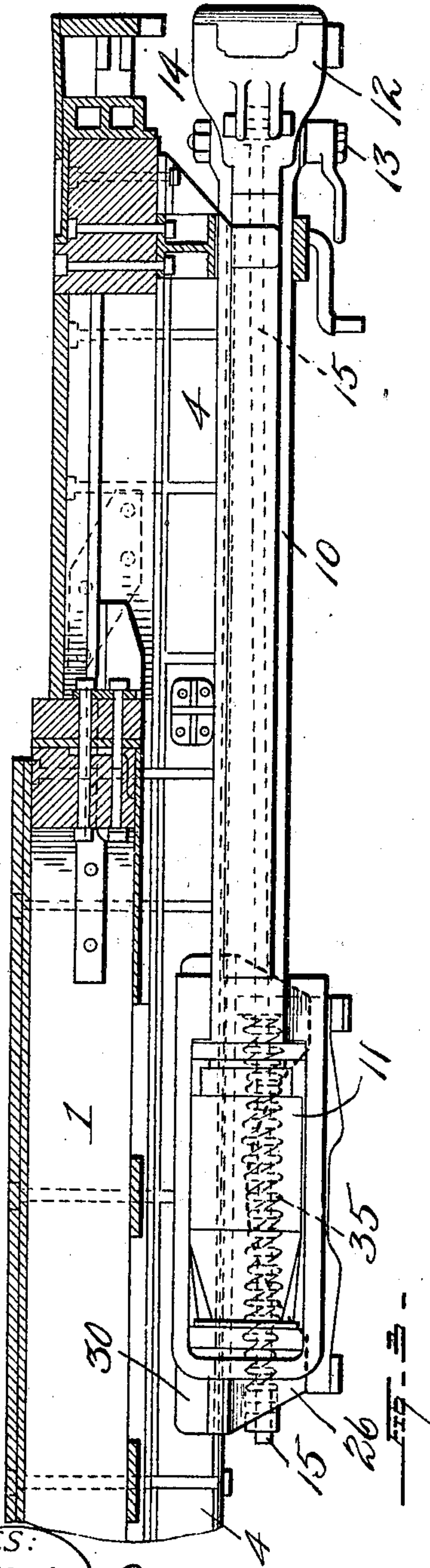
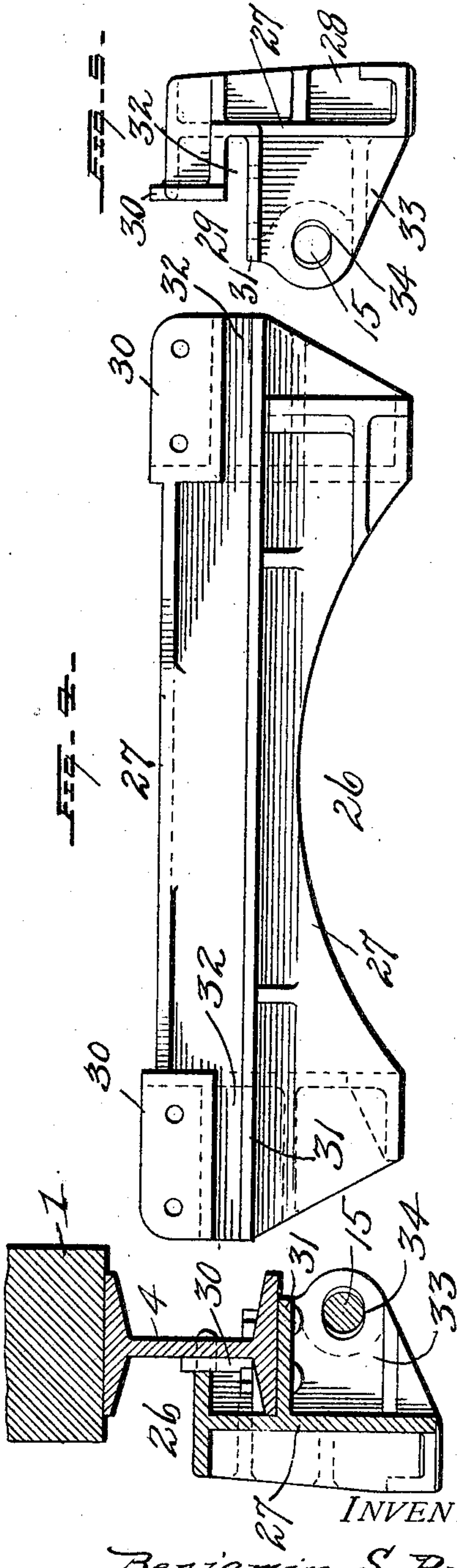


Fig. 4—



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BENJAMIN S. BROWN, OF ALTOONA, PENNSYLVANIA.

DRAFT-RIGGING MECHANISM FOR CARS.

No. 812,721.

Specification of Letters Patent.

Patented Feb. 13, 1906.

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To all whom it may concern:

Be it known that I, BENJAMIN S. BROWN, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Draft-Rigging Mechanism for Cars, of which the following is a specification.

This invention relates to car-body details, and has particularly in view certain new and practical improvements in the draft-rigging mechanism which possess special utility in connection with the modern type of steel-reinforced car-body bases employed in the construction of Pullman and vestibuled passenger coaches.

To this end the invention specifically contemplates an improved and practical construction of side-stem-centering bracket, in combination with the parts related thereto.

With these and other objects in view, which will readily appear to those skilled in the art as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

The essential features of the invention are necessarily susceptible to structural change without departing from the spirit or scope thereof; but a preferred embodiment of the invention is shown in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of the frame or framework of a car-body base, showing the relative arrangements of the parts contemplated by the present invention. Fig. 2 is a longitudinal sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail cross-sectional view on the line 3 3 of Fig. 1, showing more clearly the mounting and relative positioning of one of the side-stem-centering brackets. Figs. 4 and 5 are detail side and end views, respectively, of one of the side-stem-centering brackets.

Like reference-numerals designate corresponding parts in the several figures of the drawings.

The improvements contemplated by the present invention are specially applicable to the modern type of steel-reinforced framing for car-body bases, such as found in Pullman and similar cars. So, for illustrative purposes, there is shown in the drawings a car-body base embodying in its general organization a plurality of longitudinally-arranged

frame-stringers 1, extending the full length of the car-body base and also having the end platform extensions 1^a, supporting and carrying at their outer extremities the usual outer end platform-sill 2, which is arranged beyond and in substantially parallelism to the main car-body end sill 3. The longitudinally-arranged frame-stringers 1 have associated therewith steel reinforce-girders 4, arranged beneath and in parallelism thereto and extending the full length of the said stringers and their platform extensions, as plainly indicated in Fig. 2 of the drawings. In this form of construction the steel reinforce-girders preferably consist of I-beams of standard or suitable dimensions, which beams are braced and fastened to the framing or framework of the car-body base in a manner common to this form of construction to provide a strongly reinforced and trussed car-body capable of withstanding severe shocks and strains without weakening or otherwise impairing the strength and stability of the car-body.

In the car-body construction shown the center stem or draw-bar member 10 has associated with the rear end thereof the usual draft-gear 11, and the front end of the said bar 10 pivotally supports thereon a horizontally-swinging coupling-head 12. This coupling-head 12 has a vertical pivot connection 13 to the front end of the center stem 10, and to diametrically opposite sides of the coupling-head 12, as at 14, are pivotally connected the front ends of the side centering-stems 15, the functions of which will be presently referred to in connection with the novel means contemplated by the present invention for supporting and guiding said stems as a part of the draft-gear construction.

Referring particularly to the mounting of the side centering-stems 15, the said stems, as usual, extend rearwardly from their pivotal point of connection 14 with the coupling-head 12 to points in the horizontal plane of the main draft-gear 11. Each of the stems 15 at opposite sides of the vertical plane of the draft-gear 11 for the center stem 10 is associated with a car-body detail, technically known as a "combined draft-casting and side-stem-centering bracket," but referred to herein as a "side-stem-centering bracket." The said stem-centering brackets are made in rights and lefts, so as to be mounted on the car-body base, respectively, at the right and left hand sides of the main draft gear or rig-

ging for the center stem 10, and as both of the said brackets are of duplicate construction a description of one will suffice for the other.

5 Heretofore it has been the practice to construct the side-stem-centering brackets and the abutment-lugs for one end of the centering-spring of separate pieces; but the present invention consolidates these elements in
10 a single casting, besides providing a construction of bracket especially adapted for a base-frame having reinforce-girders or I-beams of the character indicated.

Each side-stem-centering bracket is designed in its entirety by the reference character 26, and the same essentially consists of a
15 one-piece casting having a vertically-arranged body-plate 27, formed at one side with a plurality of integrated reinforcing-webs 28 to give strength and rigidity thereto. At the
20 side of the body-plate 27 opposite the webbed formation 28 the said plate is formed at the top thereof with a hanger-saddle 29, embodying a vertically-disposed web-attaching flange
25 30 and a horizontal fastening-base 31, both said flange and base being provided with bolt-holes for the reception of suitable fastening-bolts. In addition to the right-angularly-related elements 30 and 31 the hanger-saddle
30 29 includes a horizontal flange-receiving socket 32, which structure, including the elements 30 and 31, corresponds to the configuration of a bottom half portion of one of the
35 reinforce-girders or I-beams 4. In this connection it will be observed by reference to Fig. 3 of the drawings that the saddle 29 fits
40 over one side and the bottom of an I-beam 4, the flange 30 being secured by bolts to the web of the beam or girder and the base 31 also by means of bolts to the base-flange of
45 the beam or girder. In addition to the elements specified the bracket-casting 26 is provided at or contiguous to one end and below the plane of the saddle 29 with an integral
50 offset abutment-lug 33, constituting a reinforcing-web between the base 31 and the vertical body-plate 27 and provided therein with a guide-opening 34, receiving a side centering-
55 stem 15. Upon this side centering-spring 35, one end of which bears against the abutment-lug 33, so as to normally place the said spring under a tension for centering the coupling-head 12.

From the foregoing it is thought that the construction, use, and advantages of the

herein-described improvements will be readily apparent to those familiar with the art without further description.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a car-body, a base-frame having girders, a center stem carrying a pivotal coupling-head, side centering-stems connected
65 with the coupling-head, and a side-stem-centering bracket associated with each stem and having integral therewith a hanger-saddle embracing a girder of the frame, and a perforated abutment-lug for the stem and the
70 spring thereof.

2. In a car-body, the base-frame having I-girders, the center stem carrying a pivotal coupling-head, the side centering-stems connected with the coupling-head, and a side-
75 stem-centering bracket associated with each stem and consisting of a single casting having a socketed hanger-saddle fitting and secured to an I-girder, and a perforated abutment-lug for the stem and the spring thereof. 80

3. In a car-body, the combination with the base-frame having I-girders, a center stem carrying the pivotal coupling-head, and the
85 side centering-stems connected with the coupling-head, of a side-stem-centering bracket associated with each stem consisting of a single casting having a perforated abutment-lug for the stem and its spring, said casting
90 being also provided with a web-attaching flange to be secured to the web of an I-girder, and a horizontal fastening-base secured to the base-flange of the same girder.

4. In a car-body, the combination with the base-frame having I-girders, the center stem carrying the coupling-head, and the side
95 stems connected with said head, of a side-stem-centering bracket associated with each stem and consisting of a single casting having a vertically-arranged body-plate provided at one side with a plurality of inte-
100 grated reinforcing-webs, and at the top with a socketed hanger-saddle fitting over and fastened to an I-girder, said body-flange being further provided with a perforated abutment-lug for the stem and its spring.

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

BENJAMIN S. BROWN.

Witnesses:

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