

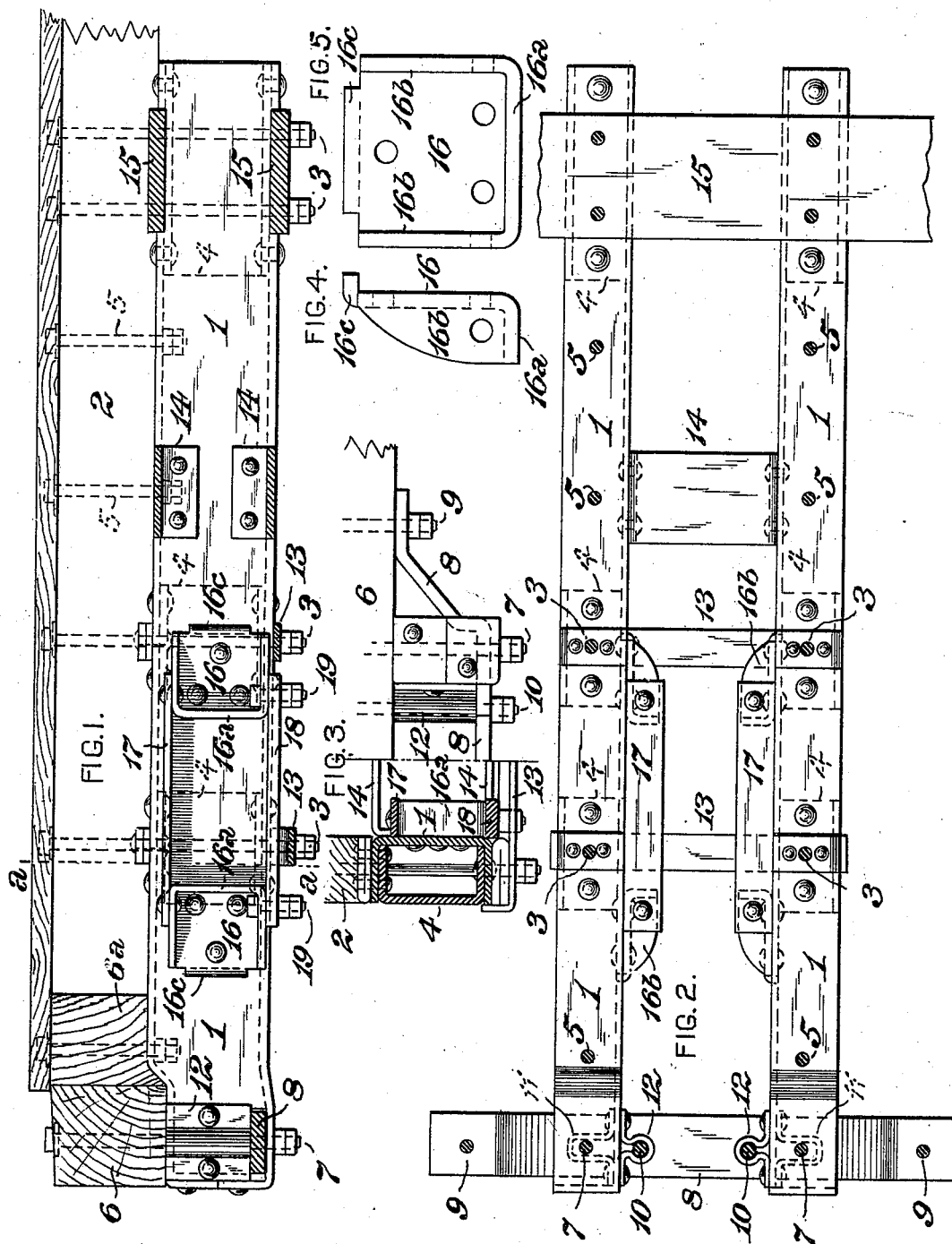
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Patented May 8, 1900.

B. HASKELL.
DRAFT BEAM.

(Application filed Feb. 5, 1900.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

BRODERICK HASKELL, OF SAGINAW, MICHIGAN, ASSIGNOR OF ONE-THIRD
TO GEORGE B. MALTBY, OF SAME PLACE.

DRAFT-BEAM.

SPECIFICATION forming part of Letters Patent No. 649,206, dated May 8, 1900.

Application filed February 5, 1900. Serial No. 3,955. (No model.)

To all whom it may concern:

Be it known that I, BRODERICK HASKELL, of Saginaw, E. S., in the county of Saginaw and State of Michigan, have invented a certain new and useful Improvement in Draft-Beams, of which improvement the following is a specification.

The object of my invention is to provide a support and abutment for the draft appliances of a railroad-car which shall present the advantages of strength, lightness, and simplicity and which shall be of comparatively-inexpensive construction and be readily applicable in connection with car-frames of the ordinary type.

To this end my invention, generally stated, consists in certain novel combinations, comprising two sheet or plate metal draft-beam side members of channel-section, cross-ties connected to the side members, distance-pieces interposed between the webs of the opposite side members, draw-bar stops or draft-lugs connected to and engaging openings in the side members, and compression-plates of channel-section interposed between the flanges of the side members.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a vertical longitudinal central section through a portion of a railroad-car frame, illustrating an embodiment of my invention; Fig. 2, a plan or top view of the draft-beam structure; Fig. 3, a view partly in section at the line *a a* of Fig. 1 and partly in front elevation; Fig. 4, a plan view, on an enlarged scale, of a draft-lug; and Fig. 5, a view in elevation of the same.

In the practice of my invention I provide two sheet or plate metal draft-beam side members 1 1, which are pressed or shaped in a die or mold into channel-section, their upper flanges being adapted to abut against the lower sides of the center sills 2 of a car-frame, to which they are secured by bolts 3, passing through the upper and lower flanges of the side members and through compression-plates or distance-pieces 4 of channel-section, which are interposed between and riveted to said flanges, against which and against the webs of the side members their own flanges abut,

so as to form box or rectangular sections at the different points at which they are inserted. The side members 1 1 are also connected by bolts 5, passing through their top flanges only, to the center sills 2. The side members are bent downward at their front or draw-bar ends sufficiently far to fit against the lower side of the dead-wood 6, to which they are connected by bolts 7, passing through their flanges and through a carry-iron 8. The carry-iron passes through openings in the webs of the side members and is bent upwardly to fit against the dead-wood 6 by flat portions at and adjacent to its ends, which flat portions are secured to the dead-wood by bolts 9. The carry-iron may thus be depended upon to support the weight of the draw-bar without strain upon the bolts which connect the side members to the sills, and it is also connected to the dead-wood independently of the side members by bolts 10. The bolts 7 pass through sockets 11, which are connected to the webs of the side members and serve as distance-pieces between their flanges, and the bolts 10 pass through sockets 12, connected to the inner sides of the webs of the side members and serving as distance-pieces between the bottom portion of the carry-iron and the dead-wood.

While I have herein illustrated the carry-iron as connected to the dead-wood, which is of course in turn connected in the ordinary manner to the end sill 6^a, it will be obvious that, if preferred, the carry-iron may be connected directly to the end sill without departure from the essential features of my invention.

The side members are connected one to the other by tie-bars 13 13, each of which is secured to them by two of the longer bolts 3, which pass through both flanges of the side members and through the center sills 2 and are also connected, between their rear ends and the tie-bars 13, by distance-pieces 14, having end flanges which abut against and are riveted to the webs of the side members. Two of the compression-plates 4 before described are interposed between and riveted to the flanges of the side members at and adjacent to their rear ends, their webs being set outwardly, so as to form box-sections simi-

lar to that shown in Fig. 3, and the top and bottom plates of the body-bolster 15 pass through openings cut in the flanges of the side members and fit on the outer sides of the flanges of the distance-pieces. Four of the longer connecting-bolts 3 pass through the bolster-plates and the distance-pieces, and thereby secure the inner ends of the side members to the bolster-plates, as well as to the center sills 2.

The draw-bar stops or draft-lugs 16 are formed of plate or sheet metal pressed or molded into the form shown in Figs. 4 and 5—that is to say, having a flat body portion which abuts against and is riveted to the inner side of the web of a side member, an abutment-plate 16^a to serve as a stop for a follower-plate of the draft-gear, upper and lower flanges 16^b for the attachment of a follower-plate guide and a follower-plate support, and a tongue 16^c, which engages an opening in the web of the adjacent side member. The draw-bar stops 16 are riveted to the side members at a proper distance from their front ends to accommodate the draft-gear, and their tongues are engaged with the openings in the side members, thereby proportionately relieving strain on the rivets. A follower-plate guide 17 is riveted to the upper flanges of the draw-bar stops of each side member, and a follower-plate support 18 is connected by bolts 19 to the lower flanges of said draw-bar stops. The draw-gear is fitted between the draw-bar stops, guides, and supports in the ordinary manner.

My improvement provides a draft-beam structure which is composed entirely of wrought metal and which may be readily and inexpensively assembled and firmly connected to the sills of an ordinary car-frame. The members of the structure are also rigidly connected one to the other, and by the removal of the supports 18 the draw-gear may be inserted and removed as desired.

I claim as my invention and desire to secure by Letters Patent—

1. The combination of a sheet or plate metal

draft-beam side member, of channel-section, and a compression-plate or distance-piece, of channel-section, interposed between and connected to the flanges of the side member and forming therewith a rectangular or box section for a portion only of its length.

2. The combination, with a car-frame, of a sheet or plate metal draft-beam side member, of channel-section, compression-plates or distance-pieces, of channel-section, interposed between the flanges of the side member and forming therewith rectangular or box sections at detached portions of its length, and bolts passing through the distance-pieces and the flanges of the side member, and connecting the same to the car-frame.

3. The combination, with a car-frame, of two sheet or plate metal side frame members, of channel-section, distance-pieces of channel-section interposed between and connected to the webs of the side members, and transverse tie-bars connected to the lower flanges of the side members.

4. The combination, with a car-frame, of two sheet or plate metal side frame members, of channel-section, a carry-iron passing through openings in the webs of the side members, bolts connecting the carry-iron to a transverse end member of the frame independently of the side members, and bolts connecting the side members to the center sills of the frame independently of the carry-iron.

5. The combination, with a car-frame, of two sheet or plate metal side frame members, of channel-section, distance-pieces of channel-section interposed between and connected to the webs of the side members at and near their inner ends, a body-bolster having upper and lower plates fitting against the flanges of the distance-pieces, and bolts passing through the bolster-plates and the flanges of the distance-pieces and connecting the same to the car-frame.

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Witnesses:

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