No. 658,787. Patented Oct. 2, 1900.

G. I. KING.

DRAFT RIGGING.

(Application filed May 7, 1900.)

(No Model.)

Fig. 1.

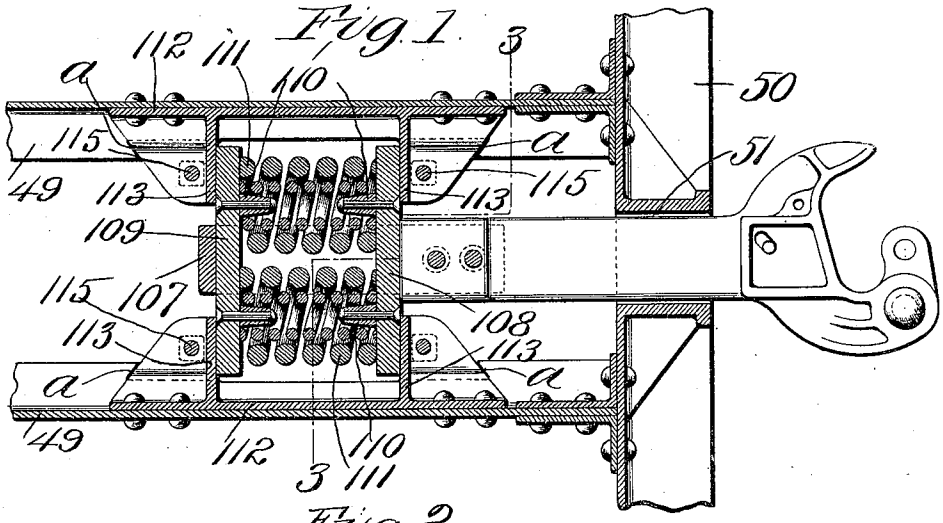


Fig. 2.

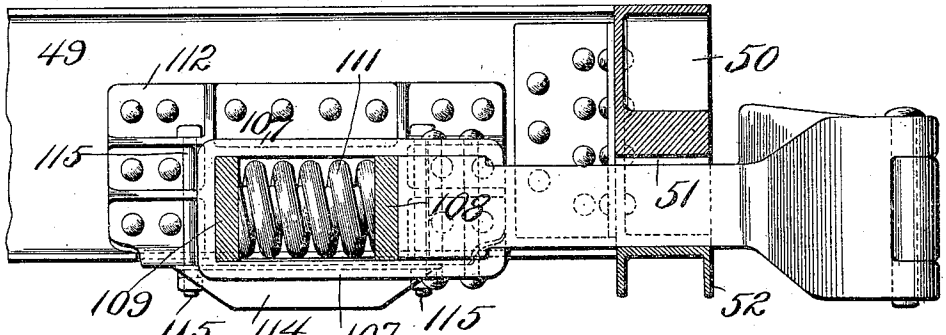
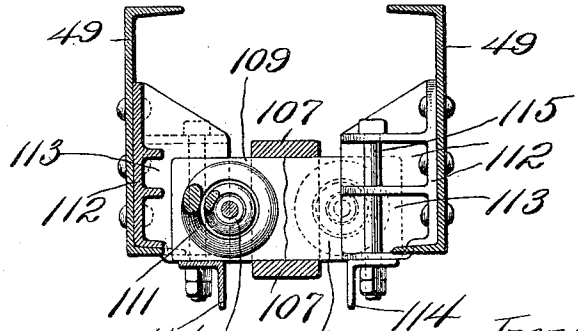


Fig. 3.



Attest
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UNITED STATES PATENT OFFICE.

GEORGE I. KING, OF DETROIT, MICHIGAN, ASSIGNOR TO THE AMERICAN CAR AND FOUNDRY COMPANY, OF ST. LOUIS, MISSOURI.

DRAFT-RIGGING.

SPECIFICATION forming part of Letters Patent No. 658,787, dated October 2, 1900.

Original application filed February 26, 1900, Serial No. 6,534. Divided and this application filed May 7, 1900. Serial No. 15,816. (No model.)

To all whom it may concern:

Be it known that I, GEORGE I. KING, a citizen of the United States, residing at the city of Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Draft-Rigging, 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, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a horizontal sectional view through my improved draft-rigging. Fig. 2 is a vertical sectional view through the same; and Fig. 3 is a cross-sectional view on line 3 3, Fig. 2.

This invention relates to a new and useful improvement in draft-rigging, the object being to construct a device of the character described in a simple manner, so as to render the parts accessible for the purpose of making repairs, the simplicity of the arrangement not sacrificing the strength of the structure.

This present application is divided from a parent case entitled "Hopper-bottom car," filed by me February 26, 1900, Serial No. 6,534, this construction being shown and described in said former application.

In the drawings, 50 indicates the end sill, which is formed with an opening 51 for the passage of the shank of the coupler, while a bar or angle-plate 52, bolted to the lower side of the end sill, forms one wall (the lower) of the opening 51 and serves the purpose of a carry-arm. The rear end of the coupler is provided with the usual yoke 107, through which passes the front and rear follower-plates 108 and 109, respectively. Instead of having a tail-bolt and a single set of draft-springs encircling said tail-bolt I prefer to arrange projections 110 in line with each other and extending from the inner faces of the front and back follower-plates for supporting two sets of draft-springs 111. These draft-springs are further held in place by castings 112, bolted or riveted to the draft-sills and extending toward each other and partially embracing the draft-springs. Vertical flanges 113 are provided in the castings 112, in front of and behind the front and back follower-plates. It is obvious that a cross-key (not shown) can pass through the rear end of the coupler-shank, to which cross-key could be connected the rods of the well-understood "continuous draft-rigging."

In order to enable the draft-springs to be inserted between the ends of the follower-plates from beneath, I provide removable plates, preferably in the form of angle-plates 114, which are designed to be secured to the bottoms of the castings 112 by bolts 115. Should it be necessary to repair the draft-rigging at any time, the parts would be readily accessible by the removal of these plates.

As shown in Figs. 1 and 3, the bottom flanges of the channel-beams forming the center sill are cut away, as at *a*, to permit the bottoms of the castings 112 to dip beneath the plane of the sills. The shoulders thus formed in the flanges of the beams 49 offer a firm bearing for the castings and relieve the rivets passing through the webs of the channels and the castings from undue strain. It will also be observed that the lower edges of the follower-plates are on a plane beneath the lower flanges of the beams 49, so that the strain on the castings communicated through these plates is taken directly by the beams through these shoulders on the flanges.

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

1. The combination with commercially-rolled center sills whose lower flanges extend inwardly, of a coupler-shank, a yoke on the end of the shank, follower-plates extending through said yoke, draft-springs interposed between the follower-plates, castings secured to the inner faces of the center sills and projecting over the draft-springs, the lower flanges of said sills being cut away to receive said castings, and a removable plate secured to the lower faces of the castings for forming the bottom walls thereof; substantially as described.

2. The combination with channel-beam center sills, of a coupler-shank, a yoke on the end of said shank, follower-plates extending

through said yoke, draft-springs interposed between the ends of the follower-plates, castings secured to the inner faces of the center sills and provided with abutting shoulders for coöperating with the ends of the follower-plates, draft-springs interposed between said follower-plates, the lower flanges of said channel-beams being recessed to permit the castings to extend below the plane of the sills so that the strain communicated through the follower-plates, which extend below the plane of the sills, will be placed directly upon said sills, and bottom walls for said castings, upon which said follower-plates move; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 26th day of April, 1900.

GEORGE I. KING.

Witnesses:
WM. H. SCOTT,
GEORGE BAKEWELL.