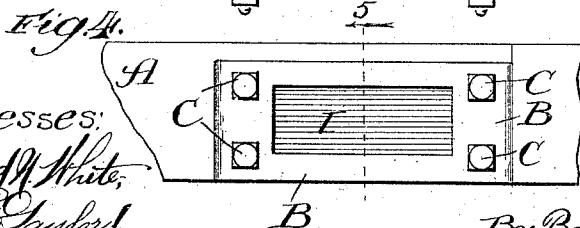
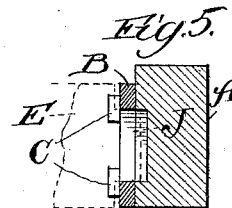
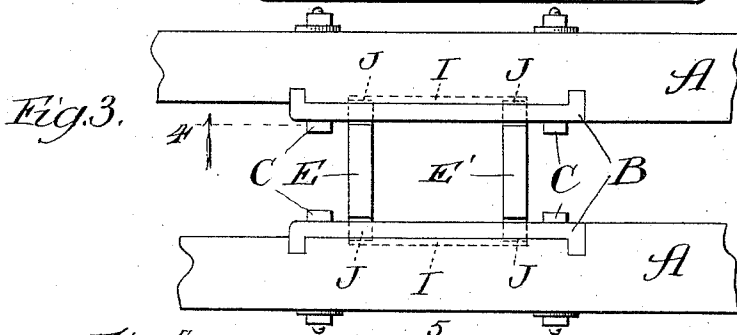
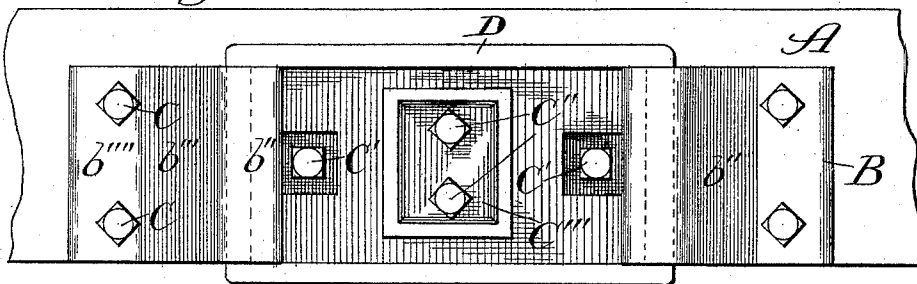
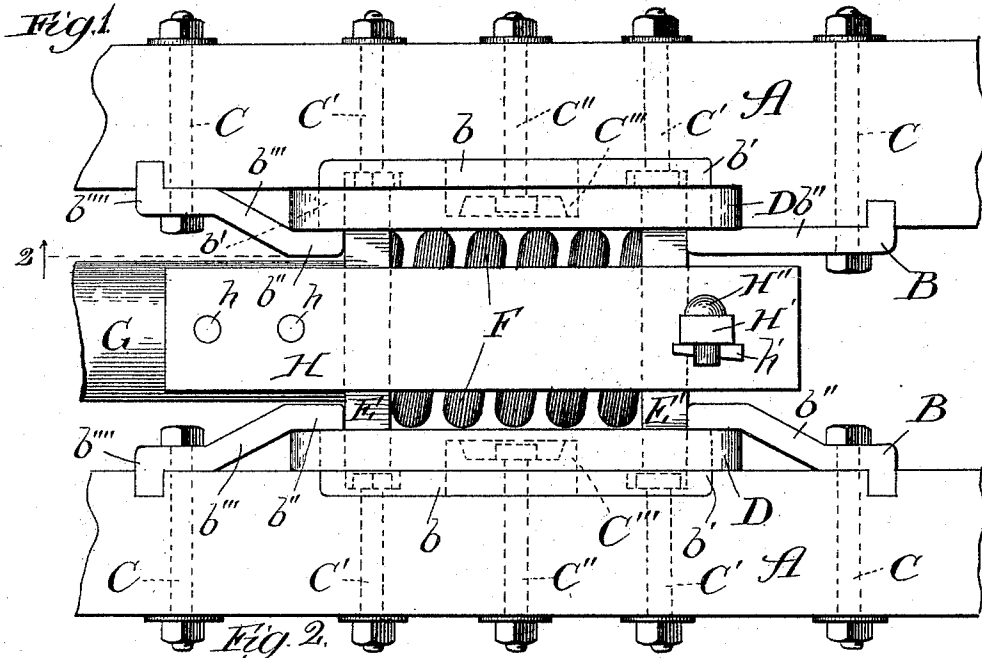


(No Model.)

J. A. HINSON.
DRAFT RIGGING FOR RAILWAY CARS.

No. 487,269.

Patented Dec. 6, 1892.



Witnesses:
Clifford M. White,
Geo. Gaylord.

Inventor,
James A. Hinson,
of Banning, Payson
Utah's

UNITED STATES PATENT OFFICE.

JAMES A. HINSON, OF CHICAGO, ILLINOIS.

DRAFT-RIGGING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 487,269, dated December 6, 1892.

Application filed January 9, 1892. Serial No. 417,469. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. HINSON, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Draft-Rigging for Railway-Cars, of which the following is a specification.

This draft-rigging has heretofore been made in a great variety of forms; but so far as I am aware all of these forms have been open to objections more or less serious in their character, arising chiefly from the manner in which such rigging apparatus has been constructed. One of the commonest defects to be found in the previously-existing devices was that they were composed of a somewhat large number of parts, thereby rendering such devices expensive in construction and difficult and complex to place in position upon the car. Furthermore, when the draft-rigging is composed of a considerable number of parts—a great many of them bolts and nuts—it is evident that the liability of fracture or loss of some of these parts increases with the number thereof, so that, if it were practicable, a draft-rigging made in a single piece would—all other things being equal—be preferable to all others. This, however, is of course impossible, and all that can be done in this line is to reduce the number of parts as far as practicable, while still retaining the simple and efficient working of the apparatus.

The object, therefore, of my invention is to improve upon the former methods of constructing such draft-rigging or apparatus, and it has for its special object the simplification of such draft-rigging and the reduction of the number of parts of which the same is composed, no bolts or nuts being used other than those absolutely necessary to secure the rigging to the car-timbers.

As the description of my device proceeds, it will be seen that it is exceedingly simple and easy to construct and apply, and it is, I believe, the most simple and efficient draft-rigging that is known to-day.

My invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of a portion of two of the car-timbers with one form of my improved draft-rigging applied

thereto; Fig. 2, a section on line 2 of Fig. 1, looking in the direction of the arrow; Fig. 3, a plan view of a modified form; Fig. 4, a section on line 4 of Fig. 3, and Fig. 5 a cross-section on line 5 of Fig. 4.

In constructing this rigging the cars with their timbers are made in the ordinary manner, except that such timbers may be cut or recessed to engage or co-operate with the parts of the rigging, as hereinafter described.

A A are the car-timbers, to which are secured wearing-plates B B. These plates are made of wrought-iron or other suitable material and preferably in the form shown in Figs. 1 and 2, wherein they are provided with central depressed portions *b*, adapted to enter a greater or less extent into the mortise or recess of the face of the car-timber, if desired, although I do not consider this essential. From this central depressed portion the plates are bent inward substantially at right angles, as shown at *b'*, and are then bent parallel to the car-timber, as shown at *b''*, then at an angle thereto, as shown at *b'''*, and again parallel to the car-timbers, as at *b''''*, in a plane adapted to rest against the surface of such timbers. If desired, the ends of the plates may then be bent at right angles and inserted into gains or recesses in the car-timbers for the purpose of more securely locking or anchoring the plates in place. These plates, however, will be held in place with sufficient firmness by means of bolts C C'. In place of the bolts C', I may, if desired, use bolts C'', passing through the car-timber, the depressed portion of the plates, and a block C'''. The depressed portion of these plates is preferably inserted into the car-timber to such an extent that the inner surface of such depressed portion coincides with the plane of the face of the car-timber. Around the portions *b'* of the plates pass straps D, made of any suitable material and dimensions. By means of these straps and the portions *b b'* of the plates pockets or depressions are formed, in which slide the follower-plates E E', no bolts or nuts being used in the construction of such pockets. Furthermore, the straps serve the purpose of binding together and strengthening the plates. If preferred, however, the plates B may be formed, as shown, at the right-hand end of the upper plate in Fig. 1, where the car-timber is more

deeply recessed and the plate is first bent, as shown at *b'*, substantially at right angles until it reaches the outer surface of the car-timber, after which it is bent, as shown at *b''*, and carried along resting against the surface of this timber. In this construction the timber is, of course, suitably recessed to receive the strap D, which in the other form rests between the timber and the portion *b''* of the plate.

The follower-plates are made of any desired shape and dimensions that will enable them to engage with a slide in the sockets, and between them is placed a spring F, and the draft-bar G is connected to these plates by means of bolts or straps H, which are riveted or bolted to the draft-bar, as shown at *h*, and extend back above and beneath the spring to a point beyond the follower-plate E', behind which plate a bar H' passes through, the plates H being held in place by means of a pin H'' and cotter *h'*. When the blocks C''' are used, they engage with the forward follower-plate as it moves back and takes a portion of the strain off the rear plate.

In the last three figures of the drawings I have shown a modified form, wherein I still further reduce the number of parts by dispensing with the straps D, previously described. When made in this form, the plates B rest in the redesses of the car-timbers, the ends of the plates being preferably turned at right angles and sunk into these timbers for the purpose already described. These plates are secured to the timbers by means of suitable bolts C. In the center of these bolts are formed openings I, which register with the mortises I' formed in the timbers, thereby forming pockets or depressions corresponding to the pockets formed by the plates and straps shown in the first two figures. The follower-plates used for this form are provided with lugs J, adapted to fit into the pockets I to hold the plates in place and allow them to slide back and forth, as desired. The other parts of the draft-rigging used in this form may be made as already described, and it is therefore unnecessary to duplicate that description. By this means I provide a draft-rigging composed of a far less number of parts than any form of rigging with which I am acquainted. Furthermore, my rigging may be cheap in manufacture, is easily applied to the car, and when so applied found extremely efficient in operation. The number of the component parts of the apparatus is so small and such parts in themselves are so simple as to greatly decrease the liability of loss or

breakage of any of these parts, and in every respect it is my judgment that a draft-rigging so constructed will give the utmost efficiency and the most satisfactory practical results in practice.

While I have described more or less precise forms, I do not intend to limit myself thereto, but contemplate changes in form and proportions and the substitution of equivalent members, as may be desirable or necessary.

I claim—

1. A draft-rigging for railway-cars, comprising wear-plates adapted to be secured to the car-timbers, each of which plates consists of two parts forming suitable pockets or depressions, follower-plates sliding in such pockets, a spring placed between such follower-plates, and a draft-bar engaging with such plates, substantially as described.

2. In a draft-rigging for railway-cars, the combination of a wearing-plate provided with a depressed portion and a strap encircling such portion, such plate and strap forming a pocket to receive the follower-plates, substantially as described.

3. A draft-rigging for railway-cars, comprising wearing-plates secured to the car-timbers and provided with recessed portions, straps embracing such portions, and follower-plates sliding within the pockets formed by such straps and depressed portions, substantially as described.

4. In a draft-rigging for railway-cars, the combination of wearing-plates provided with openings registering with mortises in the car-timbers and follower-plates provided with lugs sliding in the pockets formed by such orifices, substantially as described.

5. A draft-rigging provided with suitable pockets, such pockets being formed by means of depressions in the wearing-plates, and straps encircling such depressions without the use of bolts or nuts, substantially as described.

6. In a draft-rigging for railway-cars, the combination of wearing-plates secured to the car-timbers, follower-plates sliding between such wearing-plates, and blocks C''', aiding to secure the wearing-plates in place and engaging with the forward follower-plate as it moves back, thereby taking part of the strain off of the rear follower-plate, substantially as described.

JAMES A. HINSON.

Witnesses:

GEORGE S. PAYSON,
SAMUEL C. HIBBEN.