UNITED STATES PATENT OFFICE.

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FRICITION DRAFT-RIGGING FOR RAILROAD-CARS.


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To all whom it may concern:

Be it known that I, JOHN J. HENNESSEY, a citizen of the United States, residing in Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Friction Draft-Rigging for Railway-Cars, of which the following is a specification.

My invention relates to friction draft-rigging for railway-cars, and more particularly to the construction of the side plates or stop-castings employed therein.

The object of my invention is to provide a friction draft-rigging of a simple, strong, and durable construction, in which the opposing or engaging surfaces between the transversely or vertically movable friction-block and the side plates or stop-castings shall be composed of suitable metals of different kinds or characters to secure proper wearing and friction surfaces and increase the durability of the draft-rigging as a whole.

My invention consists in the novel construction of parts and devices herein shown and described and by which this object or result is accomplished.

In the accompanying drawings, forming a part of this specification, and in which similar letters of reference indicate like parts throughout the several figures, Figure 1 is a vertical section of a friction draft-rigging embodying my invention, taken on line 11 of Fig. 2. Fig. 2 is a plan view, partly in horizontal section, the sectional part being on line 2 2 of Fig. 1. Fig. 3 is an enlarged detail horizontal section of one of the side plates or stop-castings. Fig. 4 is a side elevation of the same. Fig. 5 illustrates a modification, and Fig. 6 illustrates my invention as applied to a side plate or stop-casting for use in a friction draft-rigging having two transversely arranged springs and friction-blocks arranged tandem.

In the drawings, A represents the draft-timbers, A the center sills, A the cross-sill, A the buffer-block, A the buffer-plate, B the carry-iron, B the draw-bar, and B' the coupler, these parts being all of any suitable construction.

D is the sliding friction-draw-bar extension or draft-iron, the same being directly in line with the draw-bar and connected thereto by a clip or yoke b, passing through an eye d in the draw-bar extension or draft-iron. The draft-iron D has a straight friction-face e at one side, preferably its upper side, and double friction-faces e and e on its opposite or lower side.

F F are the side plates or stop-castings of the draft-rigging, the same being formed between the draft-timbers and being securely attached thereto by bolts f. The straight friction-face e of the draft-iron is in sliding frictional engagement with the stationary friction face or plate G on the stop-castings F, the same being preferably formed in a separate piece therefrom, but securely anchored thereto.

H is the transversely movable friction-block, the same having double-inclined friction-faces h and h', engaging corresponding friction-faces e and e on the draft-iron. The friction-block H is also provided with an integral downwardly-projecting flange or cup k to receive and guide the spring K, which acts against the block H and is supported in a removable spring seat or cup K, secured to the stop-castings F by cotter-bolts K. The vertically or transversely movable friction-block H is guided in its transverse or vertical movement and held from longitudinal movement by vertical guides or shoulders e on the side plates or stop-castings F, which are also provided with inserted wearing pieces or blocks f of different material from the side plates or stop-castings and from the transversely movable block H to increase the wearing qualities and durability of the parts. The inserted pieces or blocks f are secured in place by rivets f and are preferably of the form illustrated in Figs. 3 and 4 for a single-spring draft-rigging or in Fig. 6 for a double-spring draft-rigging, so as to give a wearing-face of different material for both corner-plates of the block H and also a wearing-face f for the vertical face of the draft-iron. If desired, however, the inserted wearing pieces or blocks f may be of simple angle form, (illustrated in Fig. 5), in which case the side plate F is provided with a shoulder or rib f' to form a recess or socket to receive the inserted piece f'. As illustrated
in Figs. 3, 4, and 6, the inserted pieces have a flange or shoulder to embrace the upright guide of the side plate or stop-castings.

The draft-iron D is provided with shoulders or stops, which engage corresponding shoulders or stops on the side plates or stop-castings to limit the longitudinal movement of the draft-iron and draw-bar connected thereto.

1. In a friction draft-rigging, the combination with a draw-bar, of a draft-iron in line therewith, having a straight friction-face on one side and double-incline friction-faces on the opposite side, a transversely-movable friction-block having double-incline friction-faces engaging the double-incline friction-faces on the draft-iron, a transversely-arranged spring acting against said friction-block, and side plates or stop-castings having a straight friction face or plate with which the straight friction-face on the draft-iron is in sliding frictional engagement, and provided with upright or transverse guide-surfaces for said transversely-movable friction-block of different material from the side plates or stop-castings, substantially as specified.

2. In a friction draft-rigging, the combination with a draw-bar, a draft-iron in line therewith having a straight friction-face on one side and double-incline friction-faces on the opposite side, and a transversely-movable friction-block, of side plates or stop-castings secured to the draft-timbers and having guides extending transversely to the draft-iron for said friction-block provided with inserted wearing pieces or blocks of different material, substantially as specified.

3. In a friction draft-rigging, the combination with a draft-iron having a straight friction-face on one side and double-incline friction-faces on the opposite side, of side plates or stop-castings secured to the draft-timbers and provided with guides extending transversely to the draft-iron having inserted wearing faces or blocks of different material, substantially as specified.

4. In a friction draft-rigging, the combination with a draft-iron having a straight friction-face on one side and double-incline friction-faces on the opposite side, of a transversely-movable friction-block having double-incline friction-faces, a transversely-arranged spring acting against said block, side plates or stop-castings, a stationary friction face or plate thereon engaging the straight friction-face of the draft-iron, and provided with upright guides for said transversely-movable friction-block, said guides having inserted wearing pieces or blocks of different material, furnished with a face engaging the vertical side of the draft-iron, substantially as specified.

Witnesses:

JAMES E. MEHAN,

AUGUST HESS.