J. O. JONES.

CAR COUPLING LIFTING DEVICE.

APPLICATION FILED JAN. 9, 1913.

1,097,643. Patented May 26, 1914.

Fig. 1

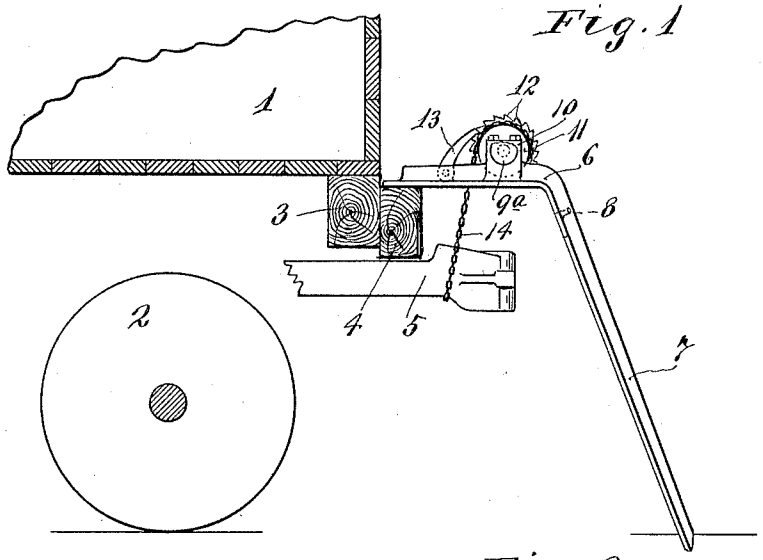


Fig. 2

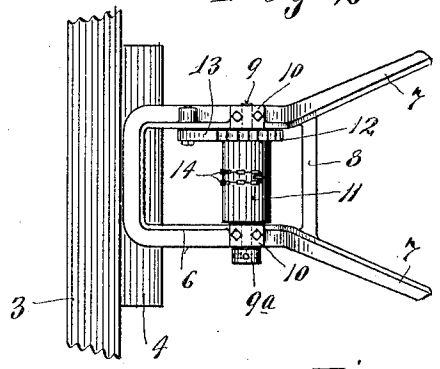
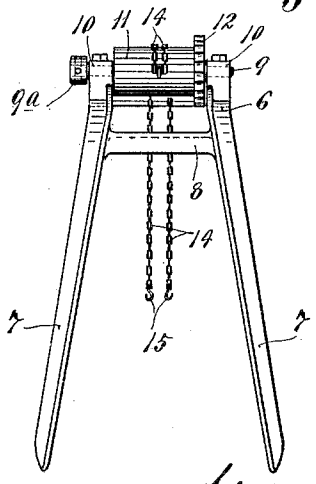


Fig. 3



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UNITED STATES PATENT OFFICE.

JOHN O. JONES, OF NORTH LA CROSSE, WISCONSIN.

CAR-COUPLING-LIFTING DEVICE.

1,097,643. Specification of Letters Patent. Patented May 26, 1914.

Application filed January 9, 1913. Serial No. 741,004.

To all whom it may concern:

Be it known that I, JOHN O. JONES, a citizen of the United States, residing at North La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Car-Coupler-Lifting Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a simple and highly efficient coupler lifting device, by the use of which, car couplers may be easily and safely lifted into position for application to the car or removed therefrom.

Hitherto, it has been the custom to employ jack screws in railroad yards and repair tracks for taking down broken coupler draw bars and for lifting others up to replace them. These draw bars usually weigh about six hundred pounds, and even with jack screws, the lifting thereof to place or the removal thereof, is a matter of considerable difficulty, and there is considerable danger of persons being hurt in operating the jack screws.

This improved coupler lifting device, which is in the nature of a hoisting windlass and supporting frame, is capable of being easily used either in connection with wooden or with metal cars, and by the use thereof, the lifting of the draw bar to working position, or the removal of a broken draw bar may be very easily and quickly accomplished by two men.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a view partly in vertical section, and partly in side elevation, some parts being broken away, and some parts being removed, showing the improved coupler lifting device in operating position; Fig. 2 is a plan view of the lifting device shown in Fig. 1, showing also a portion of one end of the car; and Fig. 3 is a front elevation of the coupler lifting device.

Referring to Fig. 1, the numeral 1 indicates the car body, the numeral 2 the wheels, the numerals 3 and 4, end sills of the car body, and the numeral 5 the coupler and draw bar. The framework of the coupler lifting device, as preferably constructed, has an approximately U-shaped horizontal body portion 6 with inclined legs 7 extended from the ends of its open side. The upper portion of these legs 7 are shown as also connected by a small tie bar 8. Both the legs 7 and body portion 6 are preferably flanged or made angular in cross section. A short windlass shaft 9 is journaled in the bearings 10 on the sides of the U-shaped body portion 6, and the shaft is provided at one end with a radially perforated head 9^a adapting it to be rotated by a suitable bar applied in the perforations thereof. Rigidly secured to the shaft 9 between the sides of the yoke 6 is a windlass drum 11 having at one end a ratchet wheel 12 that is normally engaged by a gravity-held retaining dog 13. A pair of hoisting cables or chains 14 are attached at their upper ends to the windlass drum 11, and at their free ends, are shown as provided with hooks or couplers 15 adapting the two chains to be coupled together under the draw bar, as shown in Fig. 1.

The points of the frame legs 7 are preferably slightly sharpened, so that they will enter the ground and not slip when the back of the frame yoke 6 is placed on one of the end beams or directly against the vertical face of the end of the car body. Where the car body is provided at its end with a member such as the beam 4, the frame yoke may very naturally be placed directly on the same, as shown in Fig. 1, but when applied to a metal car body, or to one not having the end beam, the derrick frame may be supported just as securely, simply by placing the flanged end of the frame yoke against the vertical face of the end of the car. The downward pull on the windlass frame in lifting or lowering the coupler, will pull, not only downward on the upper portion of the said frame, but will force the same tightly against the car body. The lifting device is thus securely held to the car body without having any actual connection therewith, except that due to pressure. The device does not, therefore, deface the car body, nor does it rely on any clamps or other devices for securing the windlass to the car body.

The device is simple, of comparatively small cost, and as strong, durable and generally efficient for the purposes had in view.

What I claim is:

A car coupler lifting device comprising a frame made from a metallic bar bent to form two depending legs and an approximately horizontal yoke-like body portion adapted to rest upon or against the end of a car above the car coupler, a windlass drum journaled to and extended transversely across the said yoke-like portion of said frame, a cable attached to said drum and engageable with a coupler, and means for securing said drum against rotation to hold the coupler in an elevated position.

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

JOHN O. JONES.

Witnesses:
JOS. P. GOHRES,
ROBT. B. LOWRY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."