

(No Model.)

J. W. WILKS & C. WHITUS.
PIN LIFTER FOR CAR COUPLINGS.

No. 483,193.

Patented Sept. 27, 1892.

Fig. 1.

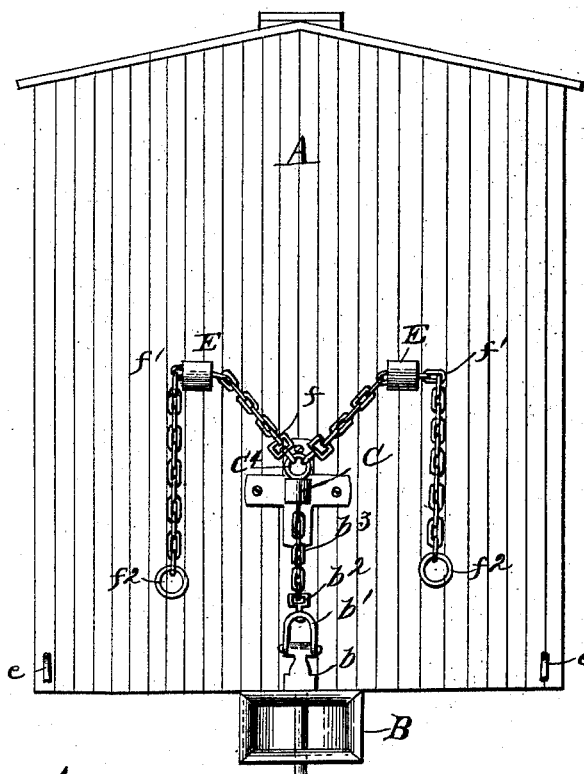


Fig. 2. A

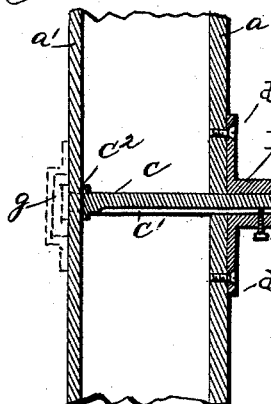
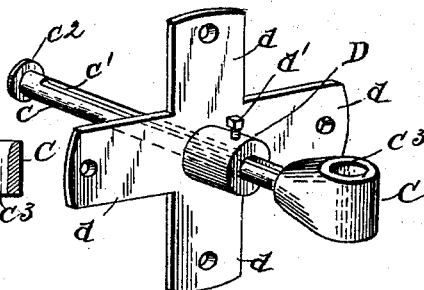


Fig. 3.



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PIN-LIFTER FOR CAR-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 483,193, dated September 27, 1892.

Application filed January 13, 1892. Serial No. 417,968. (No model.)

To all whom it may concern:

Be it known that we, JOHN W. WILKS, residing at Wilksburg, and CHARLES WHITUS, residing at Chester, in the county of Chester, State of South Carolina, citizens of the United States, have invented certain new and useful Improvements in Pin-Lifters; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention has relation to car-coupling pin-lifters; and it consists in the novel construction and arrangement of its parts, hereinafter set out in this specification and the claims hereto attached.

In the accompanying drawings, Figure 1 is an end view of a car with our invention attached thereto. Fig. 2 is a part vertical section view of one end of a car with a part of our invention attached thereto, also shown in section. Fig. 3 is an inverted perspective view of part of our invention, hereinafter described.

Our invention is adapted to any pin-and-link car-couplers, and is described as follows:

A is one end of a coach. a , Fig. 2, is the front wall, and a' is the rear wall, of the same.

B is the front end of a bumper secured under the coach.

b is a coupling-pin having pivoted to its head a link b' .

C is a sleeve secured to the outer end of pin c , having on its face a groove c' , and on the rear end of said pin is a nut c^2 . The lower edge of the opening c^3 in said sleeve is sharp, while its upper edge is flared.

To the outer face of the outer wall of the car is secured a sleeve D, provided with perforated arms d . Said grooved rod c works through said sleeve and is held in place and kept from turning by means of a set-screw d' . Above said sleeve D, and on the right and left thereof and against the end of the said car are secured sleeves E, both ends of their perforations being flared, and to the front end of said car and to each lower corner are secured hooks e . In the U-bend of the link

b' is a swivel b^2 , to which is secured a chain b^3 . Said chain passes through the sleeve C and has on its upper end a ring c^4 large enough to keep it from falling down through the sleeve C. To said ring is secured swivels f , to which are secured chains f' , which pass through the sleeves E and have pendent on their ends rings f^2 . The distance between the upper end of the link b' and the lower part of the sleeve C is a fraction less than the distance between the upper face of the bulk-head B and the lower end of the pin b , so that when the pin is drawn up it cannot be drawn entirely out of the pin-hole in said bulk-head.

The openings in the sleeves E E are flared at either end, so that the chains f and f' may run easily, and the upper end of the opening in the sleeve C is flared for the same purpose; but the lower end is made sharp, so that it may strip from the chain or cable any ice or foreign substance that may have collected thereon. The swivels are to keep the chains from kinking.

To raise the pin, we take hold of either one of the rings f^2 and pull upon the chain, and to hold the pin up we hook the ring over either one of the hooks e , and, as will be seen, the pin may be operated from either side of the coach without going between the cars.

The distance between the outer face of the outer wall of the end of the car and the pin-hole in the bulk-head varies from about one to five inches, so as to meet the difficulty in plumbing the coupling-pin immediately over the pin-hole. We have also invented our device shown in Fig. 3, and by means of the arms d it is secured to the outer wall of the coach, and through the sleeve D works the grooved pin c . This pin is five inches long in the clear, and has secured on its outer end the sleeve C and on its inner end the nut c^2 , so that by no possibility it may slip through the perforation in the front wall of the coach. The distance between the front wall a and rear wall a' is five inches, so that there is sufficient room to allow us to adjust our sleeve C immediately over the pin-hole in the bumper; but should we meet with a car having a less space than five inches between the said two walls, not allow-

ing room to plumb the said sleeve immediately over said pin-hole, we make a perforation between the inner wall and put over the same a cap *g* of sufficient depth to allow
 5 for such adjustment. We do not confine ourselves to using chains, as shown in the drawings, but use any kind of cable or cord best adapted for the purpose intended.

Having described our invention, what we
 10 claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a railway-coach and draw-head, of the pin *b*, link *b'*, pivoted to the head of said pin, chain *b³*, secured to
 15 the upper end of said link and passing through the sleeve *C* and having on its upper end a ring *c⁴*, sleeves *E*, secured to the end of said coach, hooks *e*, secured at each lower corner of said coach, chains *f'*, having one
 20 end attached to said ring *c⁴* and their other ends adapted to be hooked over the hooks *e*, and a sleeve *C*, secured to the end of said coach, the distance between the lower end of said sleeve and the link *b'* being such that
 25 the pin cannot be entirely drawn out of the pin-hole by pulling on the chains *f'*, substantially as shown and described, and for the purposes set forth.

2. The combination, with a railway-coach and draw-head, of the pin *b*, link *b'*, pivoted to the head of said pin, chain *b³*, secured to
 30 the upper end of said link and passing through the sleeve *C* and having on its upper end a ring *c⁴*, sleeves *E*, secured to the end of said coach, hooks *e*, secured at each lower corner of said coach-chains *f'*, having one
 35 end attached to said ring *c⁴* and their other ends adapted to be hooked over the hooks *e*, sleeve *D*, having the arms *d* and secured to
 40 the front end of said coach, grooved pin *c*,

having secured on its front end the sleeve *C* and on its rear end the nut *c²*, set-screw *d'*, working through said sleeve *D* and in the groove *c'*, the distance between the lower end of the sleeve *C* and the link *b'* being such
 45 that the pin *b* cannot be drawn out of the pin-hole by pulling on the chains *f'*, substantially as shown and described, and for the purposes set forth.

3. The combination, with the front end of
 50 a coach *A* and draw-head *B*, of pin *b* and means for lifting the same, the sleeve *C*, secured on the outer end of the pin *c*, pin *c*, having the groove *c'* and on its inner end the nut *c²*, sleeve *D*, having the arms *d* and
 55 adapted to be secured to the end of the coach *A*, set-screw *d'*, working through the sleeve *D* and into the groove *c'*, substantially as shown and described, and for the purposes set forth.

4. The combination, with the front end of
 60 a coach *A* and draw-head *B*, of pin *b* and means for lifting the same, the sleeve *C*, secured on the outer end of the pin *c*, pin *c*, having the groove *c'* and on its inner end
 65 the nut *c²*, sleeve *D*, having the arms *d* and adapted to be secured to the end of the coach *A*, set-screw *d'*, working through the sleeve *D* and into the groove *c'*, and cap *g*, secured to the inner face of the inner wall *a*, substantially
 70 as shown and described, and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN W. WILKS.
 CHARLES WHITUS.

Witnesses:

J. S. WILSON,
 JNO. F. DOUGLAS.