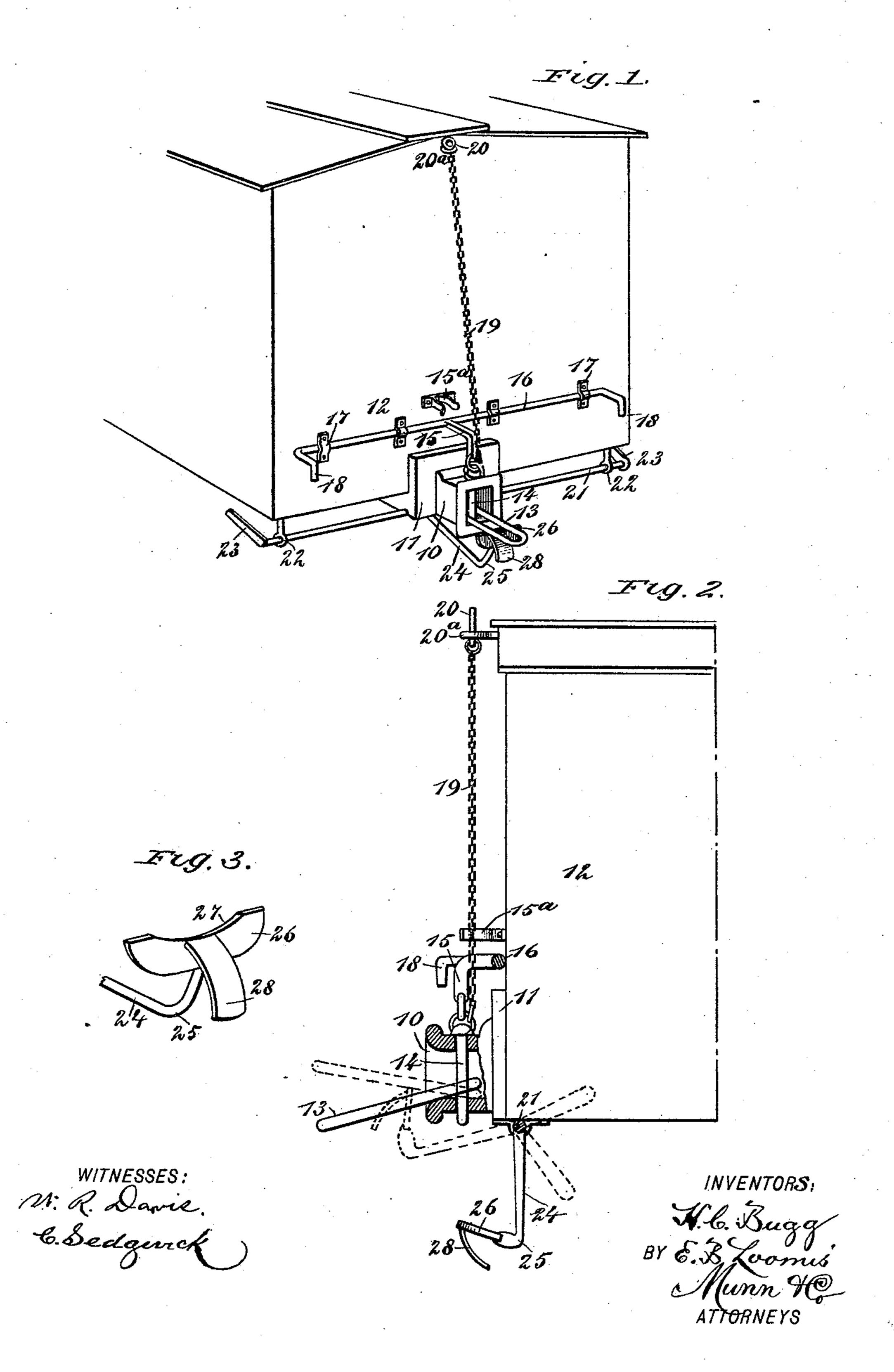
(No Model.)

## H. C. BUGG & E. B. LOOMIS. CAR COUPLING.

No. 461,314.

Patented Oct. 13, 1891.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

HENRY C. BUGG AND EDWARD B. LOOMIS, OF MEMPHIS, TENNESSEE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 461,314, dated October 13, 1891.

Application filed June 2, 1891. Serial No. 394,818. (No model.)

To all whom it may concern:

Be it known that we, HENRY C. BUGG and EDWARD B. LOOMIS, both of Memphis, in the county of Shelby and State of Tennessee, have 5 invented a new and Improved Car-Coupling, of which the following is a full, clear, and ex-

act description.

Our invention relates to improvements in car-couplings, and especially to certain imro provements which may be attached to ordinary car-couplings; and the object of our invention is to produce a simple device which will enable two cars to be easily coupled or uncoupled without endangering the safety of 15 the brakemen.

To this end our invention consists in certain features of construction and combinations of parts, which will be hereinafter de-

scribed and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a front perspective view of a 25 device embodying our invention. Fig. 2 is a broken vertical section of the coupling, showing it applied to a car; and Fig. 3 is a detail

perspective view of the link-lifter.

The draw-head 10 is of the common kind, 30 having the usual recess and a flaring mouth, and it is supported in a buffer-frame 11 upon a car 12 in the usual way. The draw-head is provided with the common link 13 and pin 14, the pin extending vertically through the 35 draw-head, and the pin is connected with a bent arm 15 of a rod 16, extending transversely across the end of a car and turning in suitable bearings 17, the said rod having end cranks 18 adjacent to the sides of the 40 car, and by tipping these cranks the rod may be tipped, thus raising or lowering the link. The link is also connected with a chain 19, which extends to the top of the car through a suitable keeper 20°, and terminates in a ring 45 20, which normally rests upon the keeper, and it will thus be seen that by means of the chain the pin may be operated from the top of the car. When either the chain or rod 16 are moved to raise the pin, it will throw the arm 50 15 back against the front of the car, and a spring-catch 15<sup>a</sup> is arranged at this point, so as to embrace the arm and hold it in a raised position.

A rod 21, which is supported in hangers 22, extends transversely across the car beneath 55 the coupling, and the rod terminates at its ends in crank-handles 23, by means of which it may be oscillated. The rod 21 has centrally thereon a forwardly-extending arm 24, which is thus brought beneath the draw-head 10, and 60 which at its free end is bent upward, as shown at 25, and terminates in a lifting-plate 26, which plate is centrally concaved on its upper edge, as shown at 27, to enable it to easily engage a link, and extending forward and 65 downward from the upper edge of the plate is a lip 28, which thus serves to guide the link of an opposing draw-head into the draw-head 10.

It will thus be seen that this link-lifter provides for coupling cars of very dissimilar 70 heights, as the link 13, striking the inclined lip 28, will be raised at its free end and guided

into the draw-head.

The movement of the lifter is controlled from the sides of the car by means of the 75 cranks 23, as by turning the cranks and the rod 21 the lifter may be brought into the desired position.

Having thus described our invention, we claim as new and desire to secure by Letters 80

Patent—

1. In a car-coupling, the combination, with a draw-head adapted to receive a link, of a crank-rod extending transversely beneath the same, a bentarm extending forward from the 85 crank-rod, a plate secured to the free end of the arm and provided with a concaved upper edge, and an inclined lip extending forwardly and downwardly from the plate, substantially as described.

2. In a car-coupling, the combination, with the draw-head and the coupling-pin, of a crank-rod mounted transversely on the car and provided with the forwardly-projecting arm 15, the outer end of which is secured to 95 the pin, and a spring-catch secured to the car adjacent to and in the rearward path of said arm, so as to engage the arm when raised, substantially as described.

> HENRY C. BUGG. EDWARD B. LOOMIS.

Witnesses:J. P. ALBAN, H. T. THOMS.