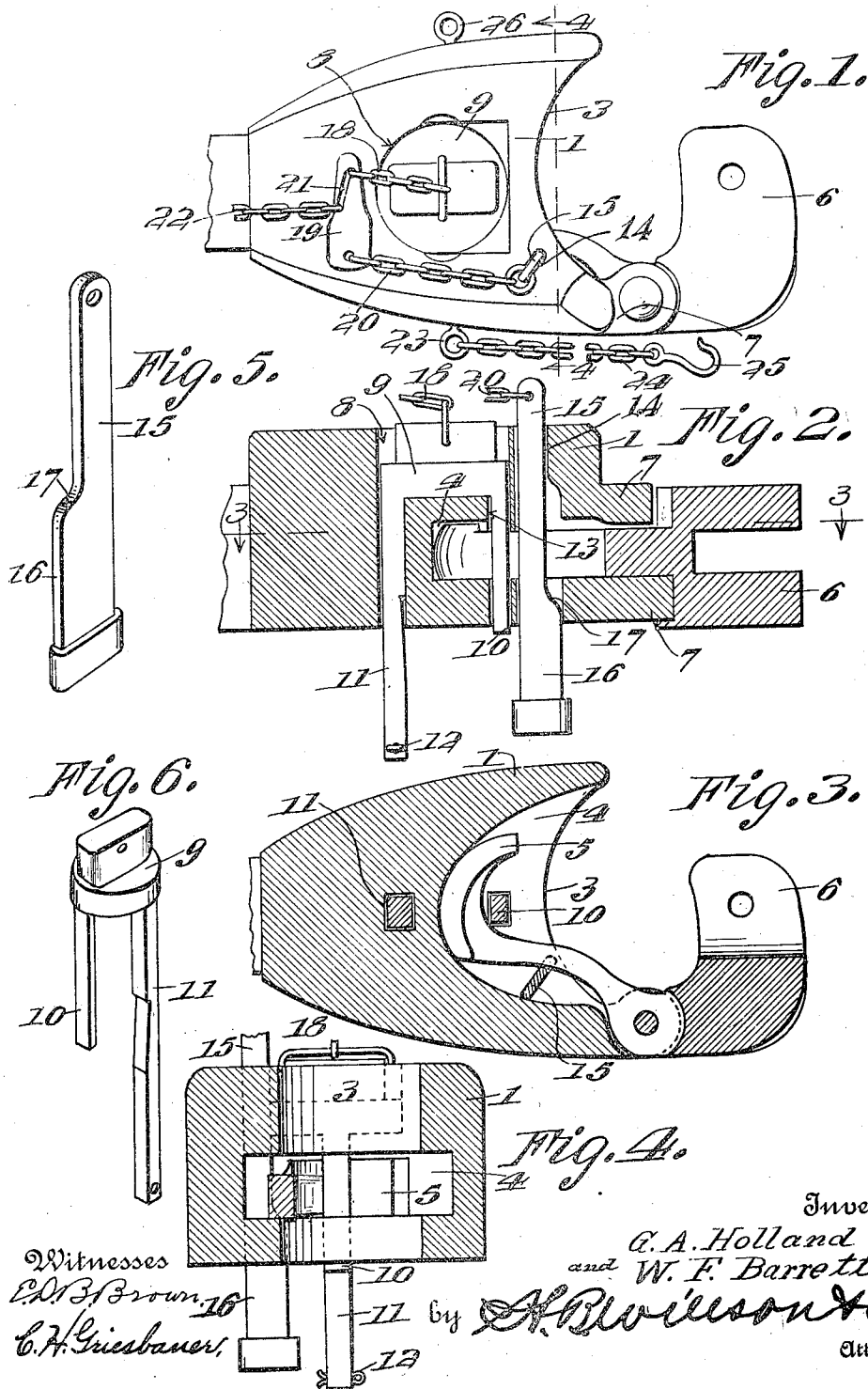


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CAR COUPLING.
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UNITED STATES PATENT OFFICE.

GUSSIE ALLEN HOLLAND AND WILLIAM FRANK BARRETT, OF WOODLAWN, ALABAMA.

CAR-COUPLING.

960,550.

Specification of Letters Patent.

Patented June 7, 1910.

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To all whom it may concern:

Be it known that we, GUSSIE ALLEN HOLLAND and WILLIAM FRANK BARRETT, citizens of the United States, residing at Woodlawn, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Car-Couplers; 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.

Our invention relates to car couplers.

The object of the invention is to provide a simple and efficient coupler whose operation and construction will be such that a brakeman or other attendant operating the same could disconnect or connect the cars without having to step in between them, thereby endangering his life.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claims.

In the drawings: Figure 1 represents a top plan view; Fig. 2 is a vertical longitudinal section taken on an irregular line through Fig. 1. Fig. 3 is a horizontal section on the line 3—3 of Fig. 2. Fig. 4 is a detail transverse section on the line 4—4 of Fig. 1. Fig. 5 is a detail perspective of the disengaging rod; Fig. 6 is a detail perspective of the locking rods.

Referring more especially to the drawings, 1 represents the coupler head and shank by which the head is connected to the drawbar. The head is hollowed out, as is usual on the front side, as shown at 3, to provide a socket for the jaw on the opposite coupling head. Communicating with this socket on each head is a recess 4 which is adapted to receive the actuating tongue 5 of the locking jaw 6, which in this instance is pivoted between the extending lugs 7 projecting from the head and one side of the socket 3.

When the jaw is in locking position, the tongue 5 is seated in the recess 4 so as to be completely hid therein and be adapted to be engaged by a locking rod to be hereinafter described.

On the upper side of the head there is provided a recess or well 8 in which is seated the connecting head 9 of the locking and re-

taining pins or rods 10 and 11. The pin 11 passes entirely through the head and is locked from removal upon the underside of the head by a cotter pin, so as to prevent the complete withdrawal of the locking pin 10, which passes through aligned apertures 13 and overlies the curved end of the locking tongue 5. While this pin is adapted to be withdrawn sufficiently to free the tongue 5, the cotter pin 12 on the retaining rod 11 prevents its complete withdrawal, and maintains the said rod in position to be dropped into locking position when necessary.

Projecting through an aperture 14 is a disengaging rod 15 which has formed on its body a cam 16, which is formed by cutting away, as at 17. When the locking pin is in depressed position, this cut-away portion permits the tongue to be fully swung within the socket 4, but if the locking pin is raised when the locking pin 10 is out of engagement with the tongue the cam 16 engages the rear side thereof and forces the tongue outwardly, so that a positive disconnection of the jaws on the couplers is insured.

Connected at one end to the head 9 by a flexible chain 18 is a connecting link 19, whose opposite end is connected in a similar manner by a chain 20 to the disengaging pin 15. This link is provided with a slot 21 extending diagonally across its body and having one end thereof terminating adjacent the center of the link, where it has passed through it, the connecting clevis for the operating chain 22. This chain is shown suspended in the air, but it will be clearly understood that it may be operated in any suitable manner to raise the head 9 and the disengaging pin 15.

When a pull is exerted upon the operating member or chain 22, the link 19 with its locking and retaining pins 10 and 11 is raised until the cotter pin 12 engages the underside of the coupling head. During this movement the rod 15 remains practically stationary and the connection between the operating member and the link 19 slides in the slot 21 until the rods or pins 10 and 11 reach their limit of upward movement, at which time, if the pull is maintained upon the operating member 22, the rod 15 will be raised to disengage the tongue 5 from its recess 4. When the pull upon the member 22 is slackened, the rod 15 will drop into

place, as shown in Fig. 2, and the pin will subsequently drop into place, with the pin 10 in engagement with the tongue 5.

Connected to one side of the head by a staple or other device 23 is a short chain 24 having secured to its end a hook 25 adapted to engage an eyelet on the side of the adjoining or co-acting coupler. A similar eye is shown at 25 on the opposite side of the head 1, which is adapted to receive the hook of the opposite coupler. These parts are provided should the tongue or a jaw of the coupler become broken.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

Having thus described our invention, what we claim as new and desire to secure by Letters-Patent, is:

1. In a car coupler, a head, a jaw pivoted

to the head, a locking pin for the jaw, a jaw disengaging member, an operating member, flexible members connected to the pin and disengaging member, and a connecting link between the flexible member and the operating members which causes the operation of the pin and disengaging member in sequence.

2. In a car coupler, a head, a jaw pivoted to the head, a locking pin for the jaw, a jaw disengaging member, an operating member, flexible members connected to the pin and disengaging member, and a slotted connecting link having the flexible member carried by the disengaging member connected to one end and the flexible member carried by the pin connected in said slot, and a connection between the operating member which engages and is slidably mounted in the slot.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

GUSSIE ALLEN HOLLAND.
WILLIAM FRANK BARRETT.

Witnesses:

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W. F. CARTER.