

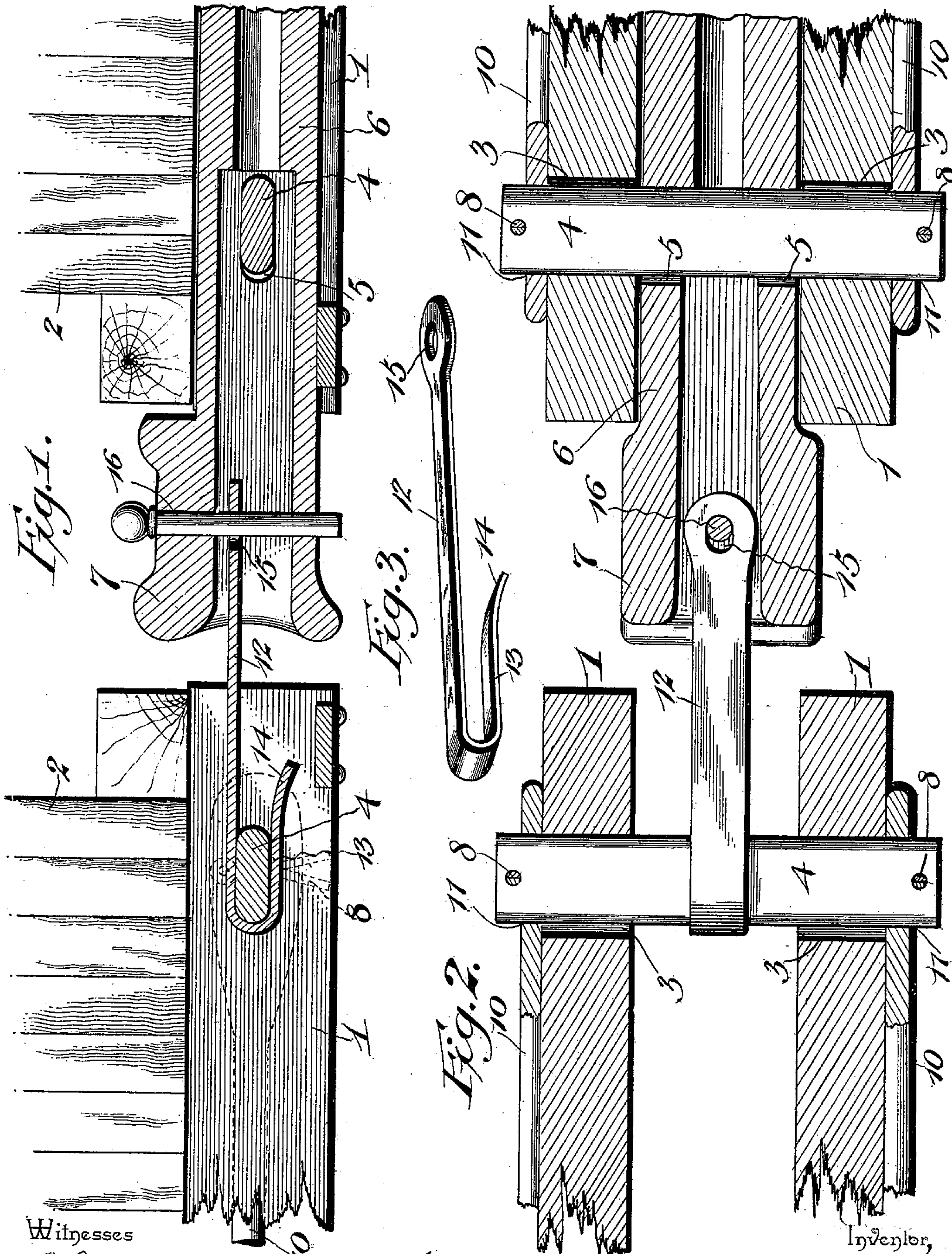
No. 619,827.

Patented Feb. 21, 1899.

W. P. HUGHES.
CAR COUPLING HOOK.

(Application filed Oct. 1, 1898.)

(No Model.)



Witnesses
A. Roy Applegate
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UNITED STATES PATENT OFFICE.

WILLIAM P. HUGHES, OF CHANUTE, KANSAS.

CAR-COUPLING HOOK.

SPECIFICATION forming part of Letters Patent No. 619,827, dated February 21, 1899.

Application filed October 1, 1898. Serial No. 692,369. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. HUGHES, a citizen of the United States, residing at Chanutte, in the county of Neosho and State of Kansas, have invented a new and useful Car-Coupling Hook, of which the following is a specification.

The invention relates to car-coupling hooks.

The object of the present invention is to improve the construction of car-couplings, more especially to provide a simple, inexpensive, and efficient device which in event of the breakage of a draw-bar may be readily substituted for the same and coupled to the draw-head of another car, whereby the heavy inconvenient chain usually employed for this purpose may be dispensed with.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a longitudinal sectional view showing a portion of two cars coupled by my improved hook. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is a detail perspective view of the hook.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 1 designate longitudinal draft-timbers of a car 2, provided at opposite sides with alined slots or openings 3, receiving a transverse key 4, which passes through a slot 5 of the shank or draw-bar 6 of a draw-head 7. The ends of the transverse key 4 extend beyond the draft-timbers and are perforated for the reception of split keys 8 or other suitable fastening devices, which secure draft-rods 10 to the ends of the transverse key. The draft-rods 10 are provided with eyes or openings 11 to receive the transverse key, and they are located at the outer faces of the draft-timbers, as clearly illustrated in Fig. 2 of the accompanying drawings.

In event of the breakage of a draw-bar the broken parts are removed and the transverse key is arranged in the openings 3, as clearly illustrated in Fig. 2 of the drawings, and in order to enable the car having the defective draft mechanism to be readily coupled with a draw-head of another car a hook 12 is em-

ployed. The hook 12, which is constructed of stout metal, is provided with an elongated shank, and the bill 13 of the hook is located beneath the key and extends forward beyond the same, the extended portion 14 being inclined downward, as shown. The shank of the hook is provided with an elongated or elliptical eye 15, adapted to be engaged by a coupling-pin 16 of the draw-head 7, whereby the two cars are coupled. The inclined extremity of the bill of the hook is provided for the purpose of preventing the hook from becoming disengaged from or striking its bill against the keys should there be sufficient play between the cars by reason of an elongated shank to cause the bill of the hook to lie wholly or partially in rear of the transverse key when the cars bump together. When the hook is in this position, its bill will lie below the key, so that it will not strike the same should it be drawn forward or outward; also, if the bill of the hook extends beyond the key a greater distance than the space between two draw-heads it cannot become disengaged from the key by the play of the draw-heads and the vibration of the parts. By having the hook constructed as shown there is no liability of it becoming disengaged from the key when the cars separate again by reason of a strain on the coupling.

The invention has the following advantages: The hook, which is simple and comparatively inexpensive in construction, is adapted to be readily substituted for a broken draw-head. It obviates the necessity of using the heavy chain usually provided for this purpose, and it does not cause the damage which results from the use of a chain. The hook is also much lighter than the chain and may be carried and handled with greater convenience, and it is adapted to operate similar to an ordinary link.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. In a device of the class described, the combination with a car having parallel draft-timbers provided with slots, of a transverse key detachably arranged within the slots and adapted to secure the shank of a draw-head

to the car, and a coupling-hook engaging the key and extending outward beyond the car and provided with an eye or opening adapted to be engaged by a coupling-pin, whereby it
5 is adapted to operate similar to an ordinary link substantially as described.

2. In a device of the class described, the combination of a car provided with draft-timbers having alined slots, a transverse key
10 passing through the slots and projecting beyond the draft-timbers, draft-rods having eyes arranged on the ends of the key at the outer sides of the draft-timbers, fastening devices detachably retaining the draft-rods on
15 the ends of the key, and a coupling-hook engaging the key between the draft-timbers and having an extended shank adapted to couple with a draw-head and operate similar to an ordinary link, substantially as described.

3. In a device of the class described, the 20 combination of a car having draft-timbers provided with slots, a transverse key arranged in the slots and adapted to secure a draw-bar to the car, and a hook engaging the key, provided with an extended shank to 25 couple with the draw-head and having its bill extended and inclined to prevent it from becoming uncoupled and also to prevent the bill from coming in contact with the key, substantially as described. 30

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM P. HUGHES.

Witnesses:

HENRY RICARD,
J. A. WHITE.