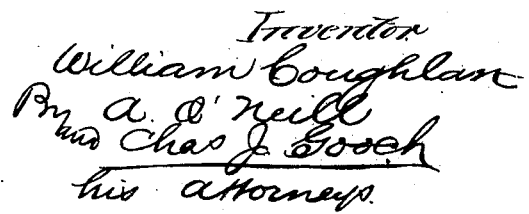


Patented Oct. 3, 1882.



UNITED STATES PATENT OFFICE.

WILLIAM COUGHLAN, OF NEW HAVEN, CONNECTICUT.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 265,248, dated October 3, 1882.

Application filed April 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM COUGHLAN, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Car-Couplings; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention consists in certain improvements in car-couplings, as will be hereinafter described and claimed.

In the drawings, Figure 1 represents a side elevation of my improved coupling. Fig. 2 represents a front elevation of my draw-head and locking device; Fig. 3, a longitudinal section of the coupling. Fig. 4 represents a plan view, showing in dotted lines the position assumed by a portion of the parts on engagement with the coupler.

A represents the draw-head, which is composed of two jaws, B, one on either side, and having inwardly-extending beveled faces *a*. Inwardly-extending lugs *b b* are formed on the inner faces of each jaw of the draw-head, and these lugs are pivoted together at *c* to allow of the jaw B, opening outward, to receive the arrow-head coupling C on a car having such a coupling coming in contact with said jaws. On such a coupling coming in contact with the jaws they will open outwardly, as shown in Fig. 4, and allow the point of the arrow-head to come in contact with a block, D, which is slotted at *d*, and slides horizontally upon an arrow-headed bolt or coupling, C, secured within the draw-head. It is the purpose to place one of the pivoted-jaw draw-heads shown herein on each car end and to secure one of the arrow-headed bolts or couplings C within each draw-head, with the head of each bolt projecting therefrom, as shown, so that on the cars coming together each projecting head will enter between the spring-jaws of the opposing draw-head and press them apart to admit of the entrance of said bolt in the manner indicated in Fig. 4.

E represents a hood or cap whose office it is

to hold or clamp the jaws firmly together. This hood or cap E has a horizontal top, *e*, and downwardly-depending vertical cheeks *f*, and arms or legs *g*, which are slotted at *h* to admit of their sliding upon studs or projections *i*, formed upon or attached to the outer sides of the jaws B. The normal position of this hood or cap E is, as shown in full lines in Figs. 1, 2, and 3, with its top *e* resting upon the top edges of the jaws and its cheeks *f* and legs *g* embracing the sides thereof, in which position said jaws are held firmly in closed position without possibility of being forced outward.

When it is desired to couple two or more cars together a brakeman, by catching hold of the vertical rod *k*, attached at its lower end to the top *e* of the hood E by a staple or other suitable device, and pulling upward thereon, can readily raise said hood until the cheeks *f* are above the sides of the jaws, and in such position, the restraint afforded by said cheeks embracing the sides of the jaws being removed, said jaws B will be free to move outward sideways on a coupling-bolt pressing against them. The vertical rod *k* can be extended to the top of the car, so as to be operated therefrom. Horizontal arms *l* and *m* are, however, secured to said vertical rod *k* to allow of said rod and the cap E, to which it is attached, being raised by any one without ascending to the top of the car. After the hood E has been raised, as shown in dotted lines, Fig. 1, and after the head of the coupling-rod has passed between the jaws B, the rod *k* is released and the hood E will then drop down over and embrace the sides of the jaws and hold them in closed position, thereby securely retaining the coupling-rod within and between said jaws without possibility of its being drawn or jerked out by any amount of jolting of the cars until the hood or cap E is again raised.

When it is desired to uncouple the cars the hood is raised in the same manner as when cars have to be coupled, and the coupling-bolt can then be readily drawn out, as whenever the hood E is raised above the sides of the jaws said jaws are free to open outward upon their pivot *b c*.

A spring, F, is attached at one end to the rear face of the block D, its other end resting against the lugs *b*, in order that on the coup-

ling-bolt C pressing against said block D it will pass rearwardly and allow said bolt C to enter between the jaws B. When the bolt C has entered between the jaws said block will
5 press upon the apex of the arrow-head and force its shoulders *n* against the shoulders *o* of the jaws and hold said coupling-bolt firmly against said jaws, and thereby prevent any movement of said bolt until the jaws B are released. The
10 rear ends, F, of the jaws B are slotted at *p* to allow of the passage therethrough of a forked bar or frame, G, upon which said ends slide rearwardly on the coupling-bolt C entering the forward ends of the jaws, the movement forward of said jaws on the pulling of the cars
15 apart when starting the train being limited by spring-block H I. The rear end of the coupling-bolt C rests within the slot *r* in the block *f*, and is secured to the frame G with capability
20 of independent horizontal movement thereon.

What I claim is—

1. A car-coupling having a draw-head composed of jaws B, adapted to move outwardly in a horizontal direction, and having studs or projections *i* on their outer sides, the cap or
25 hood E, having top *e*, cheeks *f*, and legs *g*, and slotted at *h*, and the rod having arms *l* and *m*, substantially as and for the purpose set forth.

2. A car-coupling having jaws B, pivoted together near their rear ends, the spring-block
30 D, coupling-bolt C, secured between said jaws, and the cap or hood E, substantially as and for the purpose set forth.

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

WILLIAM COUGHLAN.

• Witnesses:

J. H. SMITH,

EDWARD HAMMELL.