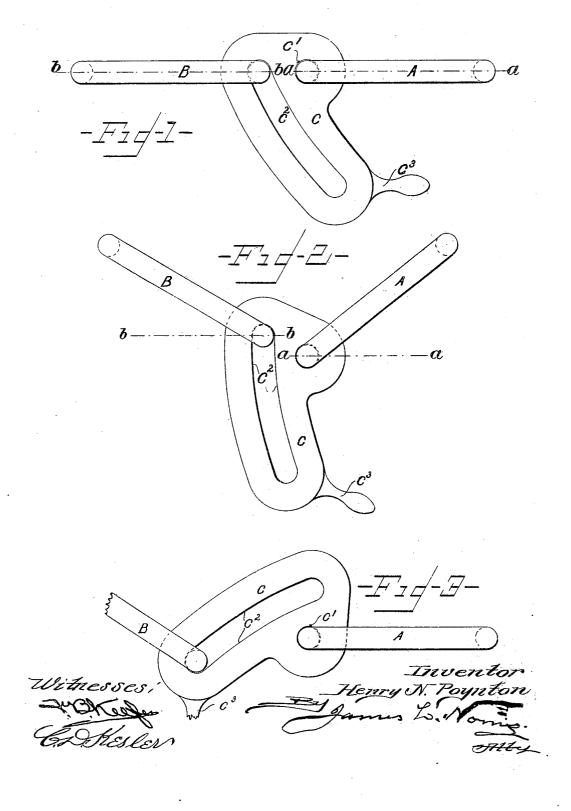
H. N. POYNTON.
CAR COUPLING.
APPLICATION FILED JUNE 12, 1905.



## UNITED STATES PATENT OFFICE.

HENRY NEIL POYNTON, OF SEYMOUR, VICTORIA, AUSTRALIA.

## CAR-COUPLING.

No. 817,665.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed June 12, 1905. Serial No. 264,865.

To all whom it may concern:

Be it known that I, Henry Neil Poynton, engine-driver, of Collas street, Seymour, in the State of Victoria, Commonwealth of Australia, have invented a new and useful Improved Car-Coupling, of which the following in the control of t

ing is a specification.

My invention relates to an improved carcoupling for reducing the slack between to trucks or carriages, and refers more particularly to that kind of coupling known as the "three-link" coupling for use more especially with freight cars or trucks. Couplings of this nature have been designed and 15 used with the center link so shaped that when in its longer or extended position sufficient slack is given to enable the end link to be placed over the draw-bar hook, while when the said center link is in its shorter or 20 contracted position the coupling is reduced in length and the slack thereby correspondingly reduced. It was found in practice, however, that when the trucks or cars were in motion this center link was very liable to 25 assume the longer or extended position and the consequent slack caused the coupling to be subjected to severe sudden strains.

The object of my invention is to provide a link-coupling which is automatically retained 30 in the shorter or contracted position when running, while it is also capable of each extension to the longer position for the purpose of coupling or uncoupling. I accomplish this object by constructing a coupling having a central link peculiarly shaped and attached to two other links, as shown in the accompanying drawings and as hereinafter

 $\operatorname{described}$ .

In order that my invention may be the bet-40 ter understood, I will proceed to describe the same by reference to the accompanying sheet

of drawings, in which-

Figure 1 is a side view of the coupling in its shorter or contracted position while in ten45 sion. Fig. 2 is a side view of the coupling in its shorter or contracted position while not in tension. Fig. 3 is a side view of the coupling in its longer or extended position for coupling or uncoupling, as the case may be.

A and B are the two side links, arranged one upon each side of the central link C. The side link A engages a hole or recess C' in the link C. The side link B engages a quadrant-shaped slot C<sup>2</sup> in the link C. Though 55 the slot C<sup>2</sup> is described as being quadrant-

shaped, it will be well understood that it may be of any suitable shape to allow of the link B sliding in the same and the link C turning over for the coupling to assume its longer or extended position. A handle C³ is pro- 60 vided at the lower end of the link C for the purpose of operating it. It will be well understood that the side links A and B may be in the nature of shackles or may be composed of several links, as best adapted to suit 65 the particular construction of draw-bar.

The quadrant-link C is so shaped that when hanging in its natural position from the links A and B the point of suspension is practically from the link B and the hole or recess C' is 70 lower than the top of the slot C<sup>2</sup>. By reference to Fig. 2 it will be seen that when the link C is suspended from the side links A and B (when not in tension) the horizontal plane of the point of suspension from the side link 75 A (marked a a) is lower than the horizontal plane of the point of suspension from the link B in the top of the slot  $C^2$ , (as marked b b.) In other words, by reference to Fig. 1 it will be seen that when the links are brought in 80 tension with the lines a a and b b in one and the same plane the link A elevates the hole or recess C', and the lower end of this link C is caused to point toward the link A. The link B is thus always maintained in the upper end 85 of the slot C2. When the coupling is temporarily slackened by the compression of the buffers, the links assume the position as shown in Fig. 2 and the coupling is automatically retained in its shorter or contracted 90 position.

By operating the handle C<sup>3</sup> the central link may be thrown over, as shown in Fig. 3, by sliding the link B in the slot C<sup>2</sup> and the coupling extended to its longer position for coupling or uncoupling, as the case may be.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A car-coupling comprising a central link having a hole or recess upon one side engaging a link, and a slot upon the other side engaging another link, said central link with its slot being so shaped that when not in tension and suspended, the said hole or recess is in a lower horizontal plane than the top of 105 the said slot, substantially as set forth.

2. The combination in a car-coupling of a central link (such as C) having a hole or recess (such as C') engaging a link (such as A) and having a slot (such as C<sup>2</sup>) engaging a link 110

(such as B) the said hole or recess and the said slot being so positioned that when not in tension the horizontal plane of the point of suspension from the link A is lower than the forizontal plane of the point of suspension from the link B in the top of the slot C<sup>2</sup>, substantially as set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

HENRY NEIL POYNTON.

Witnesses:

CLEMENT ALFRED HACK, PERCY HEDGES.