

(No Model.)

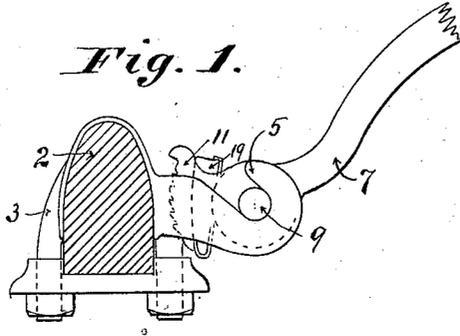
N. W. HAWKENSON.

THRILL COUPLING.

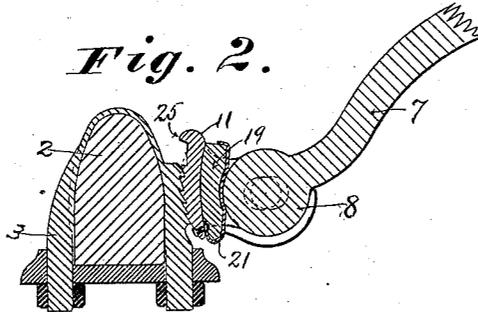
No. 366,314.

Patented July 12, 1887.

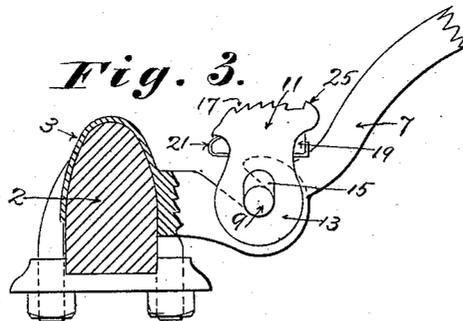
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses*

*R. H. Sanford.*  
*A. M. Gaskell*

*Inventor*

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# UNITED STATES PATENT OFFICE.

NELS W. HAWKENSEN, OF LITCHFIELD, MINNESOTA.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 366,314, dated July 12, 1887.

Application filed May 2, 1887. Serial No. 236,767. (No model.)

*To all whom it may concern:*

Be it known that I, NELS W. HAWKENSEN, of Litchfield, in the county of Meeker, State of Minnesota, have invented certain Improvements in Thill-Couplings, of which the following is a specification.

The object of this invention is to provide an improved coupling, by means of which the thills or poles of carriages may be secured to the running-gear, so that they may be readily removed or secured in place, so that all rattling will be avoided, and so that lost motion occasioned by wear of the parts may be taken up and the coupling at all times made to fit closely together.

My invention consists, generally, in the construction and combination hereinafter described, and pointed out in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of my improved coupling. Fig. 2 is a section of the same. Fig. 3 is a side elevation with the side plate of the clip broken away and with the tightening device released.

In the drawings, 2 represents a portion of a carriage-axle having a clip, 3, secured thereto. This clip forms one member of the coupling, and has projecting from its forward portion two hooks, 5.

7 represents the strap that forms the other member of the coupling, and is secured in any suitable way to the thill or pole of the carriage. The lower end of this strap is in the form of a cylindrical hub, 8, having a pin, 9, projecting from each end thereof. This hub is adapted to fit between the two hooks 5, with the pins 9 engaging the said hooks, as shown in Fig. 1. These devices together form the parts of the coupling proper, the strain being taken by the hooks from the pins 9. I combine with this device a means for locking the parts together while allowing the strap 7 to have an oscillatory movement about the axis formed by the pins 9 and the hooks 5. A substantially wedge-shaped casting, 11, is provided with forwardly-projecting lugs 13, each having an oblong hole, 15, therein. These lugs embrace the ends of the hub 8 inside of the hooks 5, and the pins 9 project through holes 15. The rear face of the block 11 is provided with grooves or serrations 17, and the surface of the clip between the projecting hooks 5 is also provided

with similar grooves. The opposite face of the block 11 has a rubber block, 19, secured thereto. I prefer to secure this rubber in position by means of a piece of thin metal, 21, that is secured at its lower end to the block 11, passes up the face of the rubber, and has its upper end bent over the upper edge of the rubber, as shown in Fig. 2. The holes 15 in the projections 13 are substantially in the direction of the length of the projections, or at right angles to the serrated face of the block 11, as shown in Fig. 3.

The operation of the device will be readily understood. The pins 9 are brought into engagement with the hooks 5, and the serrated block 11 is turned from the position shown in Fig. 3 to the position shown in Figs. 1 and 2. The rubber 19 is thereby closely compressed between the hub 8 and the block 11, and the pins 9 are held forward against the forward parts of the hooks. The serrated face of the block 11 engages the serrations in the face of the clip, and thereby the block is locked in position. While the device is in this position the pins are held closely against the hooks, so that the device cannot become uncoupled, and all rattling of the parts is prevented. As the pins and hooks become worn the block 11 may be forced farther down, and thereby the hub 8 forced farther forward between the hooks. By this means the wear of the parts may be quickly taken up. While the metal strip 21 holds the rubber in place it does not prevent its being compressed or acting as a spring against the rear face of the hub 8. In order to release the locking device I prefer to provide the upper edge of the block 11 with a projecting lug, 25, under which a lever or wrench may be inserted and the block released from the serration on the clip by first further compressing the rubber 19. The oblong holes 15 permit the block to be forced down to any desired point as they ride over the pins 9 and allow further compression of the rubber 19.

The details of construction of the device may be varied considerably without departing from my invention.

I claim as my invention—

1. The combination, in a thill-coupling, with the clip having the open hooks 5, and having the serrated surface between the hooks, of the hub 8, the pins 9, projecting from the opposite

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ends of said hub and adapted to engage said hooks, the serrated wedge-shaped block 11, and the rubber 19, adapted to fit between said hub and the serrated surface of the clip and hold 5 said pins in said hooks and prevent rattling, substantially as described.

2. The combination, in a thill-coupling, with the hooks 5 and the pins 9 fitting therein, of the hub 8, to which said pins are secured, the 10 block 11, having the projections 13, embracing the ends of said hub, and the holes 15 in said projections engaging said pins 9, and the rubber block 19, secured to said block 11, substantially as described.

15 3. In a thill-coupling, the anti-rattling device comprising the block 11, adapted to be pivoted upon the axis of the coupling and hav-

ing a rubber block, 19, secured to one face thereof, substantially as described.

4. The combination, in a thill-coupling, of 20 the clip 3, having the hooks 5 and a serrated surface between said hooks, the hub 8, having the pins 9 engaging said hooks, the block 11, pivoted upon said pins 9 and provided with the serrations 17, and the rubber block 19, se- 25 cured to said block 11, substantially as described.

In testimony whereof I have hereunto set my hand this 27th day of April, 1887.

NELS W. HAWKENSON.

In presence of—

A. C. PAUL,

S. J. BEARDSLEE.