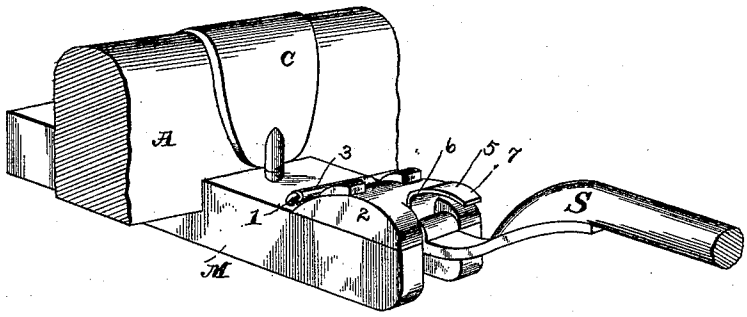
(No Model.)

D. W. TANNER.

THILL COUPLING.

No. 471,199. Patented Mar. 22, 1892.

Fig. 1.



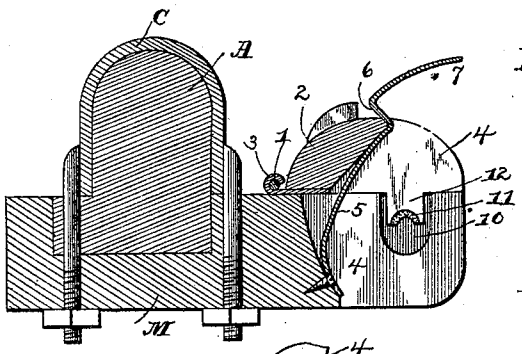
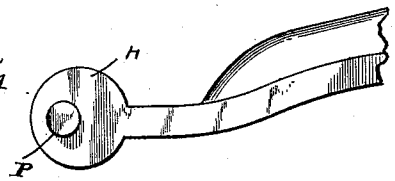


Fig. 2.



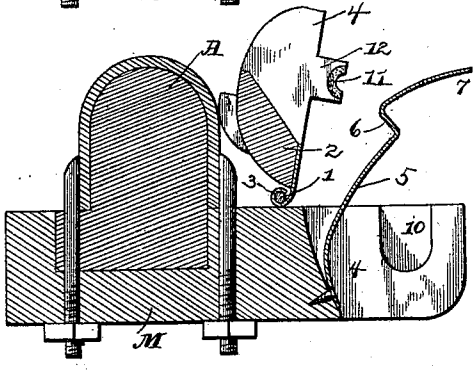


Fig. 3.

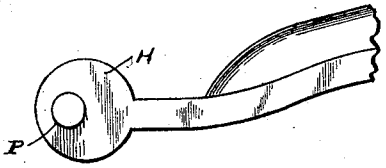
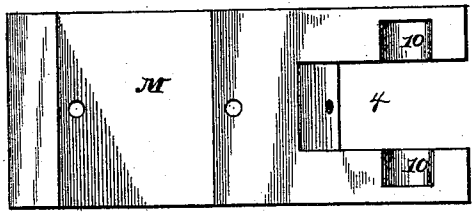


Fig. 4.



Witnesses
B. S. Ober.

Inventor
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By his Attorneys,
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UNITED STATES PATENT OFFICE.

DAVID WILMER TANNER, OF MARLIN, TEXAS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 471,199, dated March 22, 1892.

Application filed June 11, 1891. Serial No. 395,936. (No model.)

To all whom it may concern:

Be it known that I, DAVID WILMER TANNER, a citizen of the United States, residing at Marlin, in the county of Falls and State of Texas, have invented a new and useful Thill-Coupling, of which the following is a specification.

This invention relates to carriages and wagons, and especially to the thill-couplings used therein; and the object of the same is to produce certain improvements in devices of this character.

To this end the invention consists in the specific details of construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a general perspective view of one of my improved thill-couplings. Fig. 2 is a central longitudinal section thereof with the thill-head slightly removed. Fig. 3 is a similar section with the upper member raised. Fig. 4 is a plan view of the lower member.

Referring to the said drawings, the letter A designates the axle, over which is passed a clip C, holding the lower member M of the thill-coupling.

S is one of the shafts, H the enlarged head on the thill-iron and at the rear end thereof, and P a pin through this head, all as is common in devices of this character, with the following exceptions.

To the upper side of the lower member M is secured a staple 1, and 2 is the upper member of my improved thill-coupling, which has an eye 3 at its rear end, whereby it is pivotally mounted on said staple. Both these members are provided with deep notches 4 in their front ends, as seen in the drawings. In the rear end of the notch in the lower member is secured a spring-catch 5, having a shoulder 6 in its body, which engages the upper corner of the notch in the upper member 2 when the latter is down, and above this shoulder the spring-catch curves forwardly, as at 7. By this means when the tip of the catch is drawn forwardly the upper member 2 may be raised, and when it is again pressed down it bears upon the curved portion 7 and presses the spring-catch forwardly, and further downward movement thereof causes the shoulder 6 to engage over the member 2 and hold it in operative position. Each of the side walls formed by the notch in the lower member is provided with a recess 10, closed at its outer end, but opening through the upper side of this member, and in the lower end of this recess may be located leather or rubber packing. Depending from each of the two arms of the upper member is a tongue 12, preferably having a rounded lower face, and when this member is brought down the tongues pass into the upper ends of the recesses 10, as best seen in Fig. 2. The rubber packing 11, above referred to, is shown secured to the lower ends of these tongues, which is its preferred position.

In operation the upper member is raised, the head H is passed between the members and depressed, so that the ends of the pin P will drop into the recesses 10, and the upper member is then brought down until the rubber packing 11 on the curved faces of the tongue 12 bears upon the upper sides of the ends of the pin P, and the latter is thereby held in the thill-coupling very securely, the packing 11 preventing rattling and retaining what oil may be needed to permit a free movement of the parts.

This device may be cheaply constructed and readily applied to any carriage or wagon now in use, and the recesses 10, by extending only part way through the sides of the lower member M and being covered when in use by the upper member 2, will remain for a long time without becoming filled or clogged with dirt. I do not confine myself to the exact details of construction, as various changes may be made therein without departing from the spirit of my invention.

What is claimed as new is—

1. In a thill-coupling, the combination, with a thill-iron having a coupling-pin, of a lower member having at its front end a notch and provided with bearing-recesses at opposite sides of the notch to receive the coupling-pin, an upper member hinged to the lower member and having a notch at its front end and provided with the depending arms arranged in the bearing-recesses to engage the coupling-pin, and the spring-catch secured to the lower member and arranged in the recess thereof and engaging the upper member at the notch thereof, substantially as described.

2. In a thill-coupling, the combination, with the thill-iron having a transverse pin through

its head, of a lower member having a vertical notch of the width of said head, the opposing walls of said notch having recesses closed at their outer ends and opening through the upper side of said member, an upper member hinged at its rear end to the lower and having a similar notch, tongues on the arms of the upper member passing into said recesses and having rounded lower faces with rubber packing secured thereon, and a spring secured in the bottom of the notch of the lower member and having a shoulder in its body passing through and engaging the upper member when the latter is lowered, the upper end of the spring being curved forwardly, substantially as hereinbefore described.

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

DAVID WILMER TANNER.

Witnesses:
M. P. MOODY,
D. J. BYNUM.