

(No Model.)

S. J. VANCE.  
Thill Coupling.

No. 240,788.

Patented April 26, 1881.

Fig. 1.

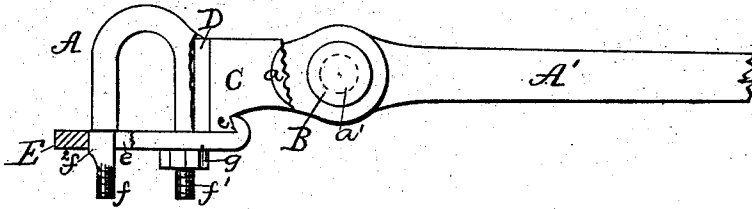


Fig. 2.

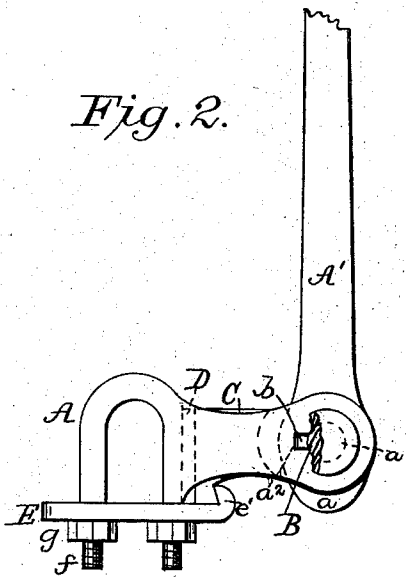
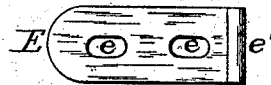


Fig. 3.



Witnesses:

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Inventor:

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att'y

# UNITED STATES PATENT OFFICE.

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## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 240,788, dated April 26, 1881.

Application filed February 9, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL J. VANCE, a citizen of the United States, residing at Waverly, in the county of Morgan and State of Illinois, have invented certain new and useful Improvements in Thill-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, and in which—

Figure 1 is a side elevation, partly broken away, of my improved thill-coupling. Fig. 2 is a similar elevation with the thill in an elevated position. Fig. 3 is a plan view of the securing-plate.

This invention relates to that class of thill-couplings employing a hooked cushion and a plate, which serves to act upon said cushion; and it consists in providing the plate with elongated slots or slot, and the rear side of the rear clip-stud with a projection or shoulder, substantially as hereinafter more fully set forth and claimed.

The objects of this improvement are to effect the convenient holding in place in the thill-clip of the cushion, and in such a manner as to permit of the connecting to, and of the disconnecting from, the clip of the thill without screwing or unscrewing nuts or disturbing the cushion.

Referring to the accompanying drawings, A indicates an ordinary clip for connecting a thill, A', to its axle, there being usually two for the thills or pole of a vehicle. The thill, the inner end of which is provided with a cam-projection or eccentric, *a*, has an eye, *a'*, with a slot, *a''*, as is common, to receive and enable it to be connected to the clip, a pin, B, with a feather or projection, *b*, on it. One of the eyes in the clip also has a slot to allow the passage of the feather or projection on the pin B, when connecting the thill to, or disconnecting it from, the clip.

C is a rubber or elastic cushion inserted into the clip A behind the cam or eccentric *a* upon

the thill. Its object, as is well known, is to prevent the rattling of the parts, it holding them tightly in position, and is adapted, when the vehicle is not in use, to hold the thill in an elevated position. Upon the lower end of the rubber or elastic cushion C is a projection or extension, *c*, with an inwardly-beveled front surface tapering toward its upper end, forming a hooked projection upon said cushion. A wedge or packing, D, fitted behind the cushion C, takes up wear of the cushion.

E is a plate with elongated slots *e*, or a single continuous slot answering to the two slots in it, to adapt it to slide upon the clip-studs *f f'*. The forward end of the plate is provided with a hooked projection, *e'*, pointed inwardly, to adapt it to hook over the hooked projection *c* of the cushion C. The rear clip-stud, *f*, has on its rear side a projection or shoulder, *f''*, the object of which will appear hereinafter.

From the foregoing it will be noticed that the cushion, with its packing, is inserted into the thill-clip from the under side, and the plate is then slipped upon the studs *f f'* with its hook inserted over the hook of the cushion. Then by screwing up the nuts *g* upon the screw-threaded studs *f f'* the plate will be forced upwardly and be permitted by its slots to be carried upon the projection *f''*, which will cause the plate to draw upon and tightly secure the cushion in position. With the cushion thus secured in place the thill, which, preparatory to connecting it to the clip, is placed in an upright position, can be readily connected to and disconnected from the clip without the screwing or unscrewing of nuts, &c., or disturbing the cushion. The pin, with its feather, is inserted in place when the thill is placed in the elevated position, so that its feather will be received into and move downwardly with the lowering of the thill, and be thus carried out of line with the slot in the clip and lock the pin in position, it being capable of withdrawal only when the thill is elevated, which position it cannot have when the horse is hitched thereto.

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

In a thill-coupling, the combination, with

the cushion C, having the hooked projection *c*, of the clip A, having the screw-threaded studs *ff'*, provided with nuts, and the rear stud, having on its rear side a projection, *f*<sup>2</sup>, and the sliding plate E, provided with the hook *e'* and the elongated slots *e*, substantially as shown and described, for the purpose set forth.

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

SAMUEL J. VANCE.

Witnesses:

R. P. MEACHAM,  
A. R. DENNIS.