

(No Model.)

A. Z. FRYBERGER.

THILL COUPLING.

No. 347,291.

Patented Aug. 10, 1886.

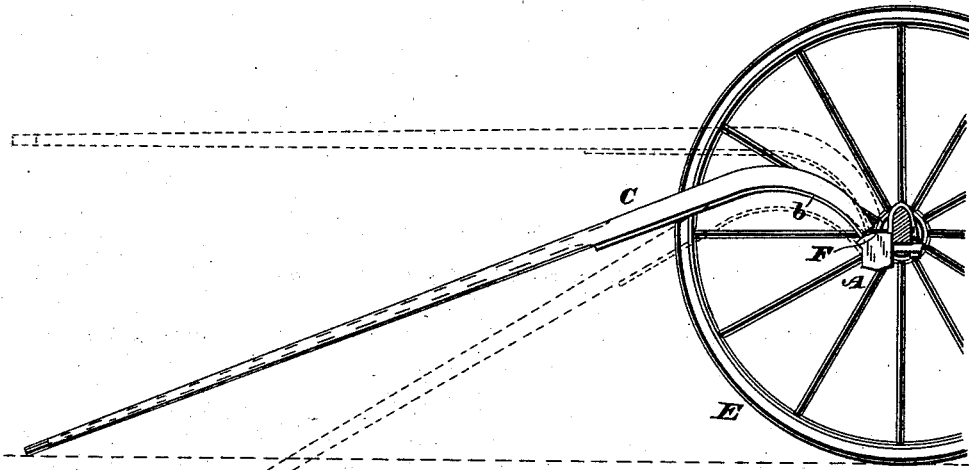


Fig. 1.

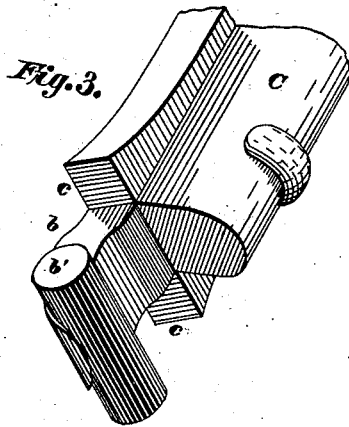


Fig. 3.

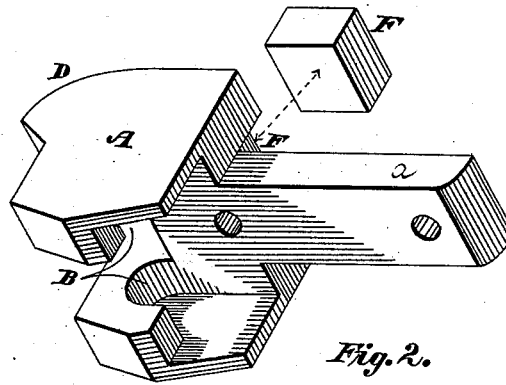


Fig. 2.

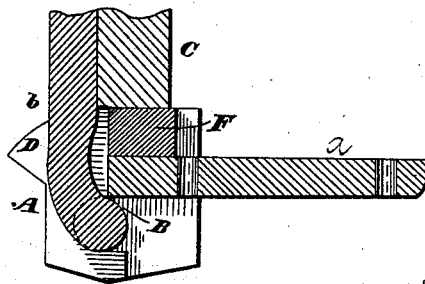


Fig. 4.

WITNESSES

*Harry Freese*  
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INVENTOR,

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By his Attorney,

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# UNITED STATES PATENT OFFICE.

ANTHONY Z. FRYBERGER, OF NEW BALTIMORE, OHIO, ASSIGNOR OF ONE-HALF TO WALDO V. SNYDER, OF SAME PLACE.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 347,291, dated August 10, 1886.

Application filed December 21, 1885. Serial No. 186,268. (No model.)

*To all whom it may concern:*

Be it known that I, ANTHONY Z. FRYBERGER, a citizen of the United States, residing at New Baltimore, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is a view showing the coupling attached to an axle. Fig. 2 is a perspective view of shaft-socket, looking from the under side of the same. Fig. 3 is a perspective view of portions of the shaft and shaft-iron. Fig. 4 is a sectional view showing shaft properly attached to the socket.

The present invention has relation to thill-couplings; and its nature consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the shaft-socket, which may be substantially of the form shown, and, as shown, is provided with the arm or extension *a*, which is for the purpose of attaching the socket A to the front or forward axle of a vehicle in the ordinary manner.

The bottom or under side of the socket A is provided with the recesses or grooves B, which are for the purpose of receiving and holding the shaft-iron *b* by means of the cross-head *b'*. The cross-head *b'* is placed in the opening back of the recesses or grooves B, where it is brought or forced forward until it engages the front or forward end of the recesses or grooves B, when the shaft or thill C is brought up into the position shown in Fig. 1, thereby causing the shoulders *c* to rest on the projections or ears D, which prevents the thill from becoming detached from the socket A.

It will be seen that by my peculiar arrange-

ment the thills C cannot be detached from the socket A unless the front or forward ends of the thills C are lowered sufficiently to bring the shoulders *c* below the extensions or ears D, when said thills C can be forced or pushed back, thereby disengaging the thills C from the sockets A. It will also be seen that in order to detach the thills C their front or forward ends must be brought below the level of the bottom of the vehicle-wheel E, which is done by either placing the vehicle at the top of an incline or raising the front or forward wheels together with their axle.

On the top or upper side of the socket A is located the rubber block F, which is for the purpose of preventing the coupling proper from rattling, and is so arranged that the end of the thills C will abut against the top or upper side of said rubber block F, as seen in Fig. 4, or as indicated by the upper dotted lines in Fig. 1.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the socket A, provided with the recesses or grooves B, located upon the under side of said socket, of the extensions or ears D, located upon the upper front or forward portion of the socket A, of the cross-head *b'*, and the shoulders *c*, all arranged substantially as shown and described, and for the purpose specified.

2. The combination of the socket A, provided with the rubber block F and abutting against the rear end of the thill C, of the shoulders *c*, resting on the top or upper side of the extensions or ears D when the front or forward ends of the thills C are on or above a level with the bottom of the wheels E, of the cross-head *b'*, and the recesses or grooves B, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ANTHONY Z. FRYBERGER.

Witnesses:

W. V. SNYDER,  
FRED W. BOND.