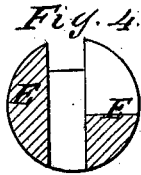
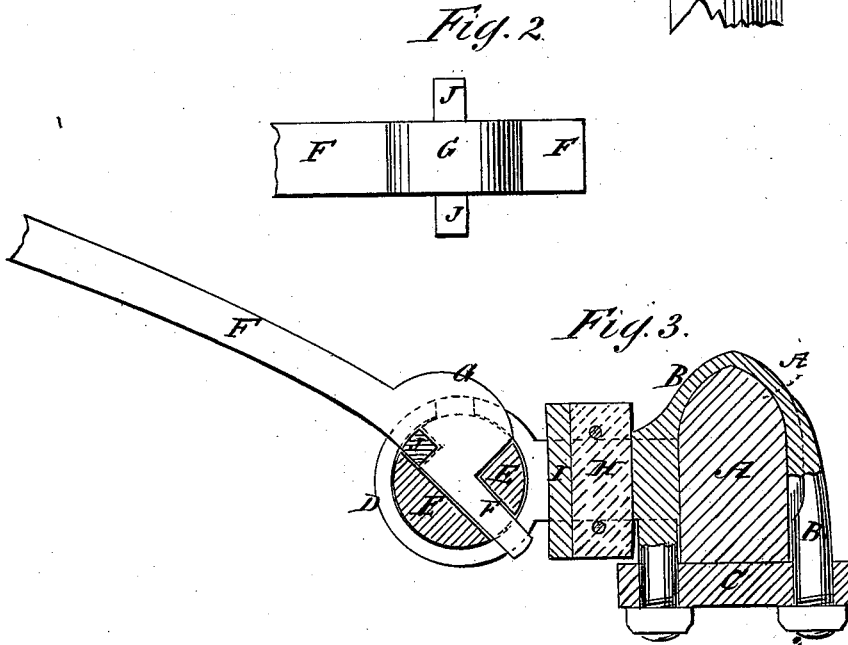
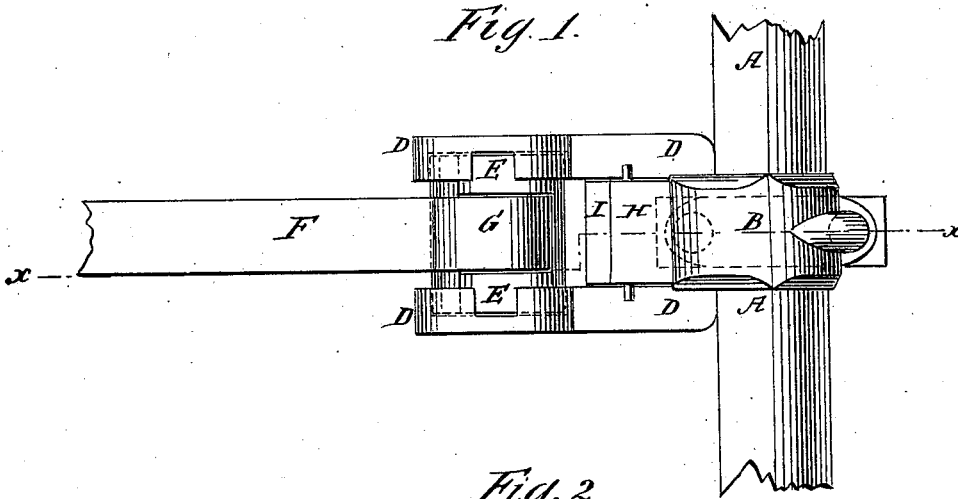


F. C. POTTER.  
THILL-COUPLING.

No. 195,230.

Patented Sept. 18, 1877.



WITNESSES:

*E. Wolff.*  
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BY

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# UNITED STATES PATENT OFFICE.

FREDERICK C. POTTER, OF POUGHKEEPSIE, NEW YORK.

## IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. 195,230, dated September 18, 1877; application filed February 17, 1877.

*To all whom it may concern:*

Be it known that I, FREDERICK C. POTTER, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and useful Improvement in Thill-Coupling, of which the following is a specification:

Figure 1 is a top view of my improved thill-coupling. Fig. 2 is a detail view of the rear end of the thill-iron. Fig. 3 is a vertical section of the coupling taken through the line *x x*, Fig. 1. Fig. 4 is a detail section of the rocking cylinder.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved thill-coupling which shall be simple in construction, safe and noiseless in use, and easily coupled and uncoupled.

The invention consists in the combination of the cam and lugs, the slotted and notched cylinder, and the recessed and notched lugs with the axle-clip and the thill-iron, and in the combination of the rubber block faced with leather with the cam of the thill-iron and the lugs of the axle-clip, as hereinafter fully described.

A represents the axle of a vehicle. B is the axle-clip, and C is the yoke. Upon the forward arm of the clip B are formed lugs D, which are extended forward, and have their ends made circular, and with circular recesses in their inner side, to receive the ends of the small cylinder E. The cylinder E has a slot formed through it to receive the shank of the thill-iron F. It is also cut away or notched, Figs. 1 and 4, to adapt it to receive the rounded projection G, Fig. 3, and lateral projections or lugs J, Fig. 2, of the thill-iron. A rubber block, H, faced with leather, I, is secured between the arms or lugs D of the clip B.

To connect the thill-irons with the socket-

cylinder E the latter is placed with its diametrical slot vertical, as shown in Fig. 4, in which position its lateral recesses, for reception of lugs J of the thill-iron, coincide with the notches formed in the flanges of lugs D, Fig. 1. The thill-iron is then placed vertical, and the shank inserted in the socket-cylinder E, the lugs J in such case passing through the aforesaid slots or notches in lugs D. The thills are then lowered, and the lock is complete.

To disconnect the thill-irons from the clips, the thills are raised to a vertical position, in order that the lugs J may be drawn out of the notches in lugs D.

The function of the rubber block H is to prevent rattling of the thill-iron in the socket when the parts are in working position, the projecting end of the thill-iron being then in contact with the leather plate I. The cam projection G comes in contact with the leather plate when the thills are thrown up into vertical position, and the friction serves to hold them in such position out of the way.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the slotted and notched cylinder E, and the recessed and notched lugs D, and the thill-iron F, provided with the lugs J, substantially as herein shown and described.

2. The combination of the rubber block H, faced with leather I, with the thill-iron F, provided with cam G, the lugs D, and axle-clip B, substantially as herein shown and described.

FREDERICK C. POTTER.

Witnesses:

J. V. DEYO,  
F. B. WHIPPLE.