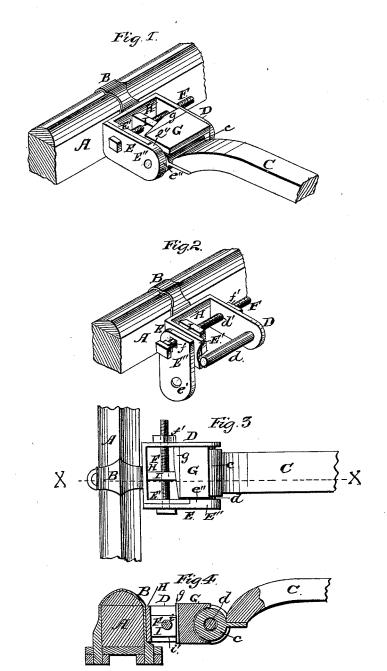
## M. L. WINANS. Thill-Coupling.

No. 213,486.

Patented Mar. 18, 1879.



witnesses: IBN Brock D. Y. Stuart M. L. Winaus

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## UNITED STATES PATENT OFFICE.

MYRON L. WINANS, OF GALESBURG, ILLINOIS.

## IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. 213,486, dated March 18, 1879; application filed February 5, 1879.

To all whom it may concern:

Be it known that I, MYRON L. WINANS, of Galesburg, in the county of Knox and State of Illinois, 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 invention, which 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 of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a perspective view of my improved thill-coupling. Fig. 2 is a perspective view, the thill and pad removed. Fig. 3 is a top view. Fig. 4 is a sectional view in the line X X in Fig. 3.

The invention consists in improvements in the construction and combination of parts, as hereinafter described, and set forth in the claims hereto annexed.

Referring to the drawings by letters, the same letter indicating the same part in the different views—

A represents an axle; B, the clip; and C, a thill of any ordinary construction. D is a fixed jaw projecting from the clip B, and has a fixed bolt, d, at its forward end, and a hole, d', near its rear end. E is a jaw formed in two parts—a part, E', fixed to the clip B, and a hinged part, E'', which is held in place by a bolt, F, which passes through a hole, f, in the plate E'', a hole in the part E', and the hole d' in the jaw D. The forward end of the part E'' has a hole, e', which receives the end of the bolt d, and projections e'', which rest against the end of the part E', and aid in supporting the part E'' in place.

G is an ordinary rubber pad, with a metallic plate, g, secured to its rear side, somewhat thicker at one side than the other, so as to present an inclined side toward the plate H, which forms the connection between the jaws D E.

I is an eccentric nut, carried on the central threaded portion of the bolt F, and formed, as shown at Fig. 4 of the drawings, with a narrow side, *i*, which can be placed next the pad G when new, and a broader side, *i'*, which can be placed next the pad after it becomes reduced in thickness from use and wear.

By loosening the nut f' on the bolt F, the jaw E'' may be dropped, as shown at Fig.

2, and the eye c on the rear end of the thill slipped on the bolt d or removed therefrom, as desired.

Placing the part E'' of the jaw E as shown at Fig. 1, and tightening up the nut f' of the bolt F will hold the thill securely in place on the bolt d, and the nut f' on the bolt F will not be so liable to shake loose as when the thill encircles it and oscillates the bolt with the motion of the thills.

The nut I may be adjusted so as to be held about midway between the jaws D and E, and so that when the nut f' is tightened up to secure the bolt F and jaw E" the nut I will force the pad G against the rear end of the thill C to prevent rattling.

As the pad G becomes worn, the nut I may be advanced on the bolt F while the bolt is loose, and will then exert the necessary pressure on the pad when the nut f' is again tightened up; and when still more worn the nut may be turned so as to bring its wider side in contact with the pad G.

Flanges may be formed on the inner sides of the jaws D E, or on the rear side of the plug G, if deemed necessary, for the greater security of the pad.

security of the pad.

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

1. A thill-coupling having a fixed jaw, D, carrying a fixed bolt, d, and a movable jaw, E'', secured by a bolt, F, substantially as and for the purpose specified.

2. A thill-coupling having a fixed jaw, D, carrying a fixed bolt, d, a movable jaw, E", having shouldered projections e", and a short fixed jaw, E, in combination with a bolt, F, substantially as described, and for the purpose specified.

3. The nut I and bolt F, in combination with pad G, having an inclined back, thill C, and jaws for supporting the same, substantially as and for the purpose specified.

tially as and for the purpose specified.
4. The eccentric nut I, having longer and shorter sides, in combination with pad G, thill C, and jaws D E, substantially as and for the purpose specified.

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

MYRON L. WINANS.

Witnesses:

ASA A. MATTESON, JOSEPH HOOVER.