

G. H. WEED.
Thill-Coupling.

No. 216,247.

Patented June 3, 1879.

Fig. 1.

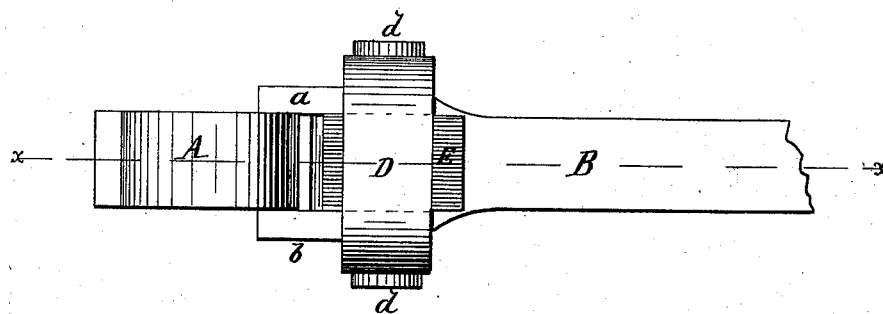
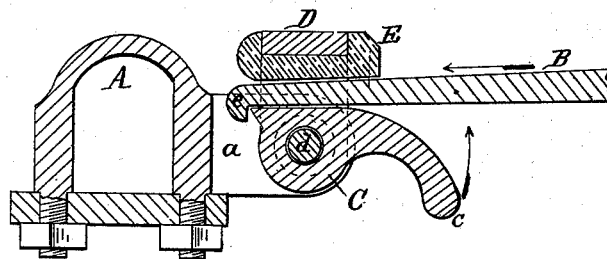


Fig. 2.



WITNESSES:

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IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. **216,247**, dated June 3, 1879; application filed December 19, 1878.

To all whom it may concern:

Be it known that I, GIRAUD H. WEED, of South Norwalk, in the county of Fairfield and State of Connecticut, have invented a new and Improved Thill-Coupling, of which the following is a specification.

The object of this invention is to provide a thill-coupling that enables the thills to be attached and detached from the vehicle without the use of tools, and as well in the dark as in the light.

It consists of an eccentric pawl pivoted between two arms projecting from the clip, which engages a lug on the end of the thill-iron, and holds the latter in the coupling by confining it between its eccentric face and a gib held under a yoke or bridle pivoted to the arms. The eccentric pawl is operated by a curved lever. Throwing this lever up disengages the lug on the iron and enables the thill to be disconnected; but the draft on the thill tends to tighten it in place.

In the accompanying drawings, Figure 1 is a top view or plan of my improved thill-coupling, and Fig. 2 is a longitudinal section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents an axle-clip, and B is the thill-iron. From the front of the clip project two arms, *a b*, and between these arms is pivoted an eccentric pawl, C, with a curved lever-extension, *c*. Over the arms is placed a bridle or yoke, D, its two ends being secured to the arms by the riveted bolt *d*, which forms at the same time the pivot of the eccentric pawl. On the end of the thill-iron is a lug, *e*.

E is a gib or key, made of rubber, and held under the bridle, furnishing an elastic bearing for the thill-iron.

The operation of my invention is as follows: When the thills are to be coupled to the vehicle the lever *c* is drawn up in the direction of

arrow 1, thus throwing the pawl down. The thill-iron is then inserted between the pawl and the gib E, and pushed in until the pawl engages the lug *e*, in the manner shown in Fig. 2. In this manner a strong coupling is made, and the greater the draft the stronger it becomes.

To uncouple, draw lever *c* up until the pawl disengages from the lug, (the elastic gib permitting the thill-iron to be forced up,) and when disengaged the thills are drawn out without difficulty.

In this way, it will be observed, the coupling is made without the use of any bolts, rivets, or other separate devices for holding the thills; consequently the connection is made without tools, and can be done as well at night and in the dark as in day-light. At the same time it is simple in construction and operation, economical, and as durable as the metal of which it is made.

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

1. As an improvement in thill-couplings, the eccentric pawl C, pivoted between arms *a b*, in combination with thill-iron B, with lug *e*, and a bridle or yoke, D, substantially as described.

2. The eccentric pawl C, pivoted between arms *a b*, and provided with lever-extension *c*, in combination with thill-iron B, with lug *e*, rubber gib E, and yoke or bridle D, substantially as described.

3. The combination and arrangement of the following parts, to wit: the clip A, with arms *a b*, eccentric pawl C, with lever *c*, thill-iron B, with lug *e*, to engage pawl C, gib E, and bridle or yoke D to form a thill-coupling, substantially as described.

GIRAUD HANFORD WEED.

Witnesses:

JOSEPH COX,

WALTER C. QUINTARD.