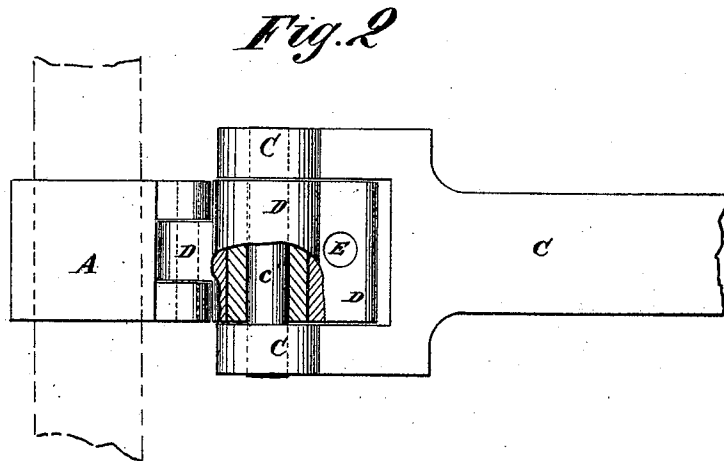
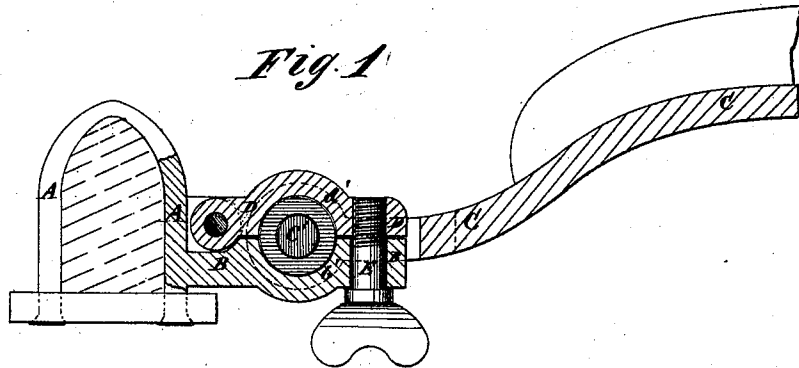


D. D. WHITNEY.
THILL-COUPLING.

No. 171,710.

Patented Jan. 4, 1876.



Witnesses:
Alex F. Roberts
Frank B. Lockley

Inventor:
D. D. Whitney
per *[Signature]*
attorneys

UNITED STATES PATENT OFFICE.

DANIEL D. WHITNEY, OF BEVERLY, NEW JERSEY.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. 171,710, dated January 4, 1876; application filed December 4, 1875.

To all whom it may concern:

Be it known that I, DANIEL D. WHITNEY, of Beverly, Burlington county, New Jersey, have invented a new and Improved Thill-Coupling, of which the following is a specification:

Figure 1 is a vertical section of my improved coupling; and Fig. 2 is a top view of the same, part being broken away to show the construction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved thill-coupling, which shall be so constructed as to allow the thills to be easily and quickly attached and detached, which will hold the thill securely, will prevent rattling, will allow the wear to be readily taken up, and shall at the same time be simple in construction and inexpensive in manufacture.

The invention consists in the combination of the hand-screw with the forward end of the rigid arm and the forward end of the hinged arm of the coupling, for securing the pin of the thill-iron in the notches of the said arms, as hereinafter fully described.

A represents the bow of the clip, which is secured to the axle by a yoke in the usual way. Upon the forward arm of the bow A of the clip is formed an arm, B, which projects forward horizontally, and in the upper side of

the middle part of which is formed a semi-cylindrical notch, *b'*, to receive the pin *c'* of the thill-iron C, which pin *c'* has a tubular rubber washer, *c''*, placed upon it.

D is an arm similar to the arm B, and with a semi-cylindrical notch, *d'*, formed in the middle part of its lower side to fit upon the pin *c'* of the thill-iron C. The inner end of the arm D is hinged to the inner part of the rigid arm B, as shown in Figs. 1 and 2. E is a hand-screw, which passes up through the forward end of the rigid arm B, and screws into the forward end of a hinged arm, D, as shown in Fig. 1. By this construction the thills are securely connected with the axle, cannot become accidentally detached, and may be very quickly attached and detached when desired.

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

The combination of the hand-screw E with the forward end of the rigid arm B and the forward end of the hinged arm D, for securing the pin *c'* of the thill-iron C in place in the notches of the said arms B D, substantially as herein shown and described.

DANIEL D. WHITNEY.

Witnesses:

CHAS. H. HENDERSON,
H. B. HOLBROOK.