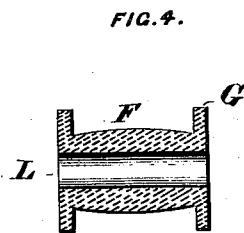
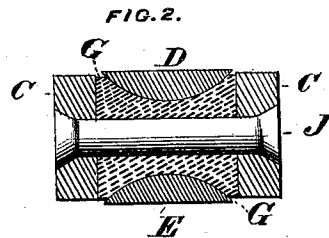
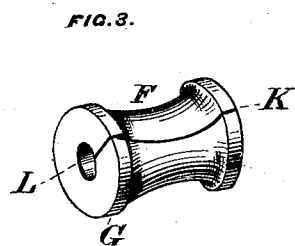
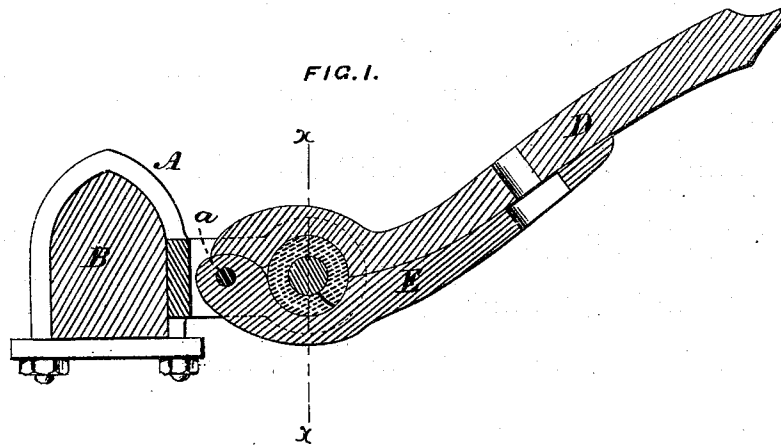


E. D. CLAPP & F. VAN PATTEN.
THILL-COUPLING.

No. 179,682.

Patented July 11, 1876.



Witnesses:

W. Ryan,
C. H. Ridgway,

Inventors.

Emerous D. Clapp,
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By Munson & Philipp,
attys.

UNITED STATES PATENT OFFICE.

EMEROUS D. CLAPP AND FREDERICK VAN PATTEN, OF AUBURN, NEW YORK.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. **179,682**, dated July 11, 1876; application filed June 6, 1876.

To all whom it may concern:

Be it known that we, EMEROUS D. CLAPP and FREDERICK VAN PATTEN, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Thill-Couplings; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

The object of our invention is to produce a cushion to be interposed between the divided eye which is secured to the thill and the bolt, which is rigidly attached to the ears of the clip part of the coupling, which will effectually prevent the eye from striking against the ears of the clip part, and thus cause rattling, and which can be easily placed or removed and a new one replaced without removing the bolt of the clip part; and it consists in the cushion having collars or equivalent means for preventing the divided eye from coming in contact with the ears of the clip part, and grooved to enable it to be readily placed over or removed from the bolt of the clip part without removing the latter.

In the drawing, Figure 1 is a vertical longitudinal section of the coupling attached to the axle; Fig. 2, a transverse sectional view through line *x x*, Fig. 1; Fig. 3, a perspective view of the device embodying our invention; Fig. 4, a vertical longitudinal section of the same.

A represents the clip part of the coupling, secured in place upon the axle B in the ordinary manner. J is a bolt, rigidly secured to the ears C of the clip part A by riveting. This can also be done by screwing one end of said bolt into one ear, and riveting the other end in the other end, or by screwing both ends into the ears, or in any other well-known manner which will insure its rigid retention in the ears.

The divided eye, which connects the thill to the clip part, is made in two parts, D E, hinged together at *a*, the part D in use being secured to the thill, and the part E to the part D in any convenient manner. Between the divided eye D E and the bolt J of the clip part we interpose a cushion of india-rubber, or other elastic or yielding material. This

is made with a depression, F, over which the divided eye, shaped internally to fit the groove, is secured, shoulders G on the cushion preventing it from coming in contact with the ears of the clip part. In Fig. 2 this recess F is rounding in form. It may, however, be square, as shown in Fig. 4, thus leaving square shoulders G, or it may be of any form desired. The cushion is also provided with an aperture, L, extending through its center, just large enough to snugly contain the bolt J.

In order to enable the cushion to be readily placed over the bolt J, we provide it with a groove, K, extending from its circumference to the aperture L, which groove allows the cushion to be spread open and over the bolt J in placing, removing, or replacing it.

Instead of the groove K the cushion may be split longitudinally into two pieces, to allow it to be placed, removed from or replaced on the bolt J. We prefer, however, to employ the groove K as the most convenient construction.

The advantages possessed by our invention are, that the cushion can be placed, removed, and replaced upon the bolt J without removing the latter, thus permitting the said bolt to be rigidly and immovably connected to the ears of the clip part, which is a great desideratum in thill-couplings.

Having thus fully described our invention and the merits it possesses, what we claim as new, and desire to secure by Letters Patent, is—

A cushion of india-rubber or other elastic or yielding material, provided with collars, to prevent the divided eye from coming in contact with the ears of the clip part, and with a groove, to enable it to be placed, removed, or replaced upon the bolt without removing the latter from the ears of the clip part, substantially as shown and described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

EMEROUS D. CLAPP.
FREDERICK VAN PATTEN.

Witnesses:

CHARLES G. BRIGGS,
HORACE T. COOK.