E. D. FROST.

THILL COUPLING.

No. 178,284. Patented June 6, 1876.

FIG. 1.

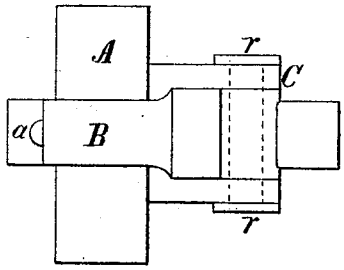
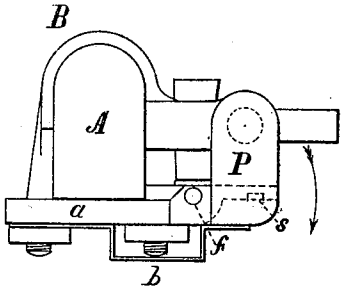


FIG. 2.



WITNESSES;

R. Newton

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INVENTOR:

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by F. S. Davenport, Atty.

UNITED STATES PATENT OFFICE.

EDWARD D. FROST, OF JERSEYVILLE, ILLINOIS.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **178,284**, dated June 6, 1876; application filed May 16, 1876.

To all whom it may concern:

Be it known that I, EDWARD D. FROST, of Jerseyville, in the county of Jersey and State of Illinois, have invented a new and Improved Thill-Coupling; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The invention herein described is an improved thill-coupling; and relates to certain details of construction whereby accidental uncoupling of the thills is rendered almost impossible, yet admitting of easy and quick removal and replacement of the latter, when required. The device also has the further advantage of being unsually simple in construction, yet exceedingly neat in appearance.

In the drawing, Figure 1 is a plan view of the coupling; and Fig. 2 is a side elevation of the same.

A, Fig. 1, represents a section of the axle; B, a clip of ordinary form, secured to the axle in the usual manner, the plate *a* being made so as to project somewhat further forward at its front end, for the reception of a bifurcated guard, P, Fig. 2, pivoted thereto, preferably by a rivet, *f*. This guard is provided with two cheeks, *r r*, Fig. 1, just sufficiently wide apart to encompass laterally the joint C, and is held in the position shown in the drawing by a spring, *b*, secured between the under side of the clip-plate *a* and its rear nut. To prevent the spring from pushing the guard beyond the required position the plate *a* is provided with a small tongue projecting forward to the front edge of the guard, where it comes in contact with the bottom of the bifurcation in the latter.

This tongue, it will be observed, is, in order to prevent the possibility of noise which would otherwise unavoidably result in traveling over rough ground, provided upon its under side with an intervening strip of rubber, *s*, forming a stop, inserted in a groove provided for its reception. The coupling-pin is preferably cylindrical in form, and of such length that when inserted its ends are exactly flush with the exterior sides of the joint.

By the foregoing details it will be readily seen that while the coupling-pin is securely held in position by the guard P its removal or insertion may be easily effected from either side after simply turning down the guard, as indicated by the arrow in Fig. 2, until it clears the ends of the coupling-pin, its return into the proper position being accomplished by the reaction of the spring *b*.

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

In a thill-coupling, the guard P, adapted to oscillate about the pivot *f*, as a center, in combination with the spring *b* and rubber stop *s*, substantially as and for the purpose described.

This specification signed and witnessed this 8th day of May, 1876.

EDWARD D. FROST.

Witnesses:

JAMES A. LOCKE,

W. H. STOECKEL.