J. F. HILL.

THILL-COUPLING.

No. 188,363. Patented March 13, 1877.

Fig. 1.

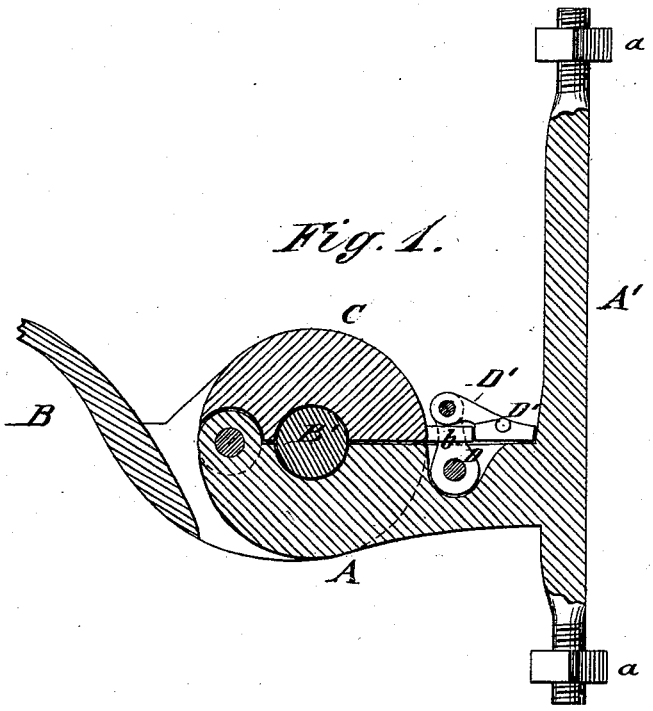
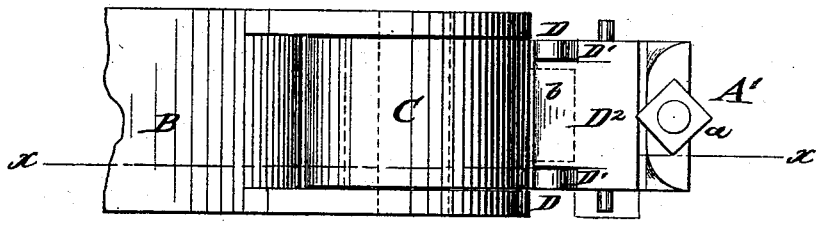


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES F. HILL, OF FLEETWOOD, PENNSYLVANIA.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **188,363**, dated March 13, 1877; application filed February 17, 1877.

To all whom it may concern:

Be it known that I, JAMES F. HILL, of Fleetwood, in the county of Berks and State of Pennsylvania, have invented a new and Improved Thill-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved thill-coupling, and Fig. 2 a top view of the same.

Similar letters of reference indicate corresponding parts.

This invention has reference to an improved thill-coupling, by which the shafts may be readily shifted from one carriage to another, the same working, when attached, in an easy and quick manner, and without friction or noise, and without danger of getting detached from the carriage.

The invention consists of a shaft box or bearing, with hinged top or cap attached by a clip to the axle. The center-pin of the shaft or thill attachment turns in the box, and is retained therein by a locking-lever mechanism, that binds on a tongue of the cap.

In the drawing, A represents a fixed bearing of my improved thill-coupling, that is secured, in the customary manner, by the clip A′, to the axle of the vehicle, the clip A′ being bent around the axle and attached to the same by a binding-plate, and by the screw-nuts *a* at the ends of the clips, in the customary manner. To the outer end of the fixed bearing A is hinged the top part or cap C, that forms, with the bearing A, the box in which the center-pin B′ of the shaft attachment or band B turns. A tongue, *b*, of the top or cap C, extends toward the clip A′, and is locked, after the center-pin B′ has been placed into the box A C, by the double lever D D^1, of which the side links D are pivoted into a recess of the fixed bearing, while the top part or plate D^1 is pivoted to the ends of the links D, and provided at the other end with a swinging plate, D^2, that fits into the space between the end of tongue *b* and clip A′, being seated on bearing A, so as to rigidly lock the top plate or part D^1 over the tongue *b*, and retain the hinged cap, and thereby the center-pin B′, in position in the box or bearing.

By raising the locking-plate D^2 out of its position between tongue and clip, the top plate and links may be swung back so as to clear the tongue, and admit the opening of the box and the detaching of the shafts in quick and convenient manner.

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

1. As an improvement in thill-couplings, the combination of the stationary bearing or support A, hinged cap C, and center-pin B′ of shaft attachment B, with a locking device D D^1 D^2, applied between cap and clip, to rigidly lock the shaft coupling or box, substantially as and for the purpose set forth.

2. The combination of the cap C, having tongue *b*, with the pivoted side links D, pivoted top plate D^1, and swinging locking-plate D^2, seated between tongue and clip, substantially as and for the purpose specified.

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Witnesses:
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