(No Model.)

A. M. HUNT & C. A. FOWLER.

THILL COUPLING.

No. 419,773. Patented Jan. 21, 1890.

Fig. 1.

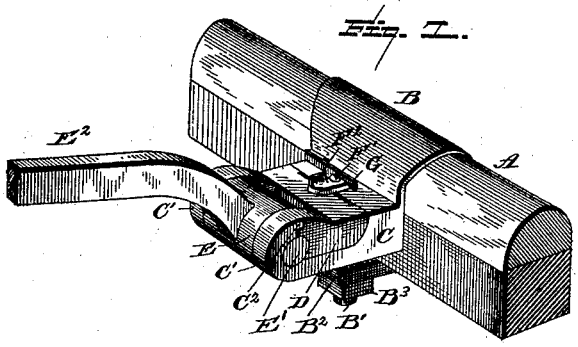


Fig. 2.

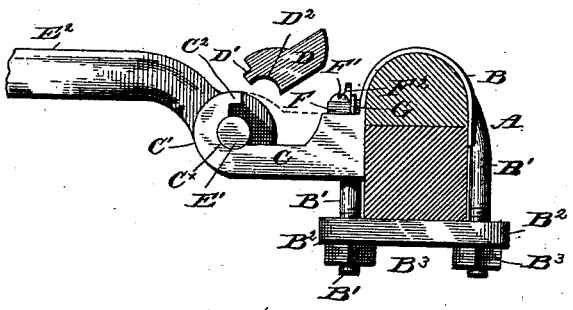
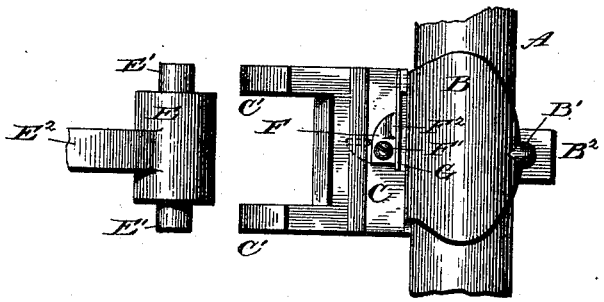


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ARTHUR M. HUNT AND CHARLES A. FOWLER, OF BELLEVUE, IOWA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 419,773, dated January 21, 1890.

Application filed May 24, 1889. Serial No. 312,010. (No model.)

To all whom it may concern:

Be it known that we, ARTHUR M. HUNT and CHARLES A. FOWLER, citizens of the United States, residing at Bellevue, in the county of Jackson, State of Iowa, have invented certain new and useful Improvements in Thill-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention has relation to thill-couplings, the main object of the invention being the provision of a coupling and its attachments, which will hold the shaft-iron firmly and securely in place and at the same time allow its journals to have a free and easy movement in their bearings.

Another object is to provide a thill-coupling which consists of as few parts as possible, and thus is necessarily made capable of manufacture at a minimum cost.

Another object which arises from the few parts is that the coupling can be readily applied to and removed from the axles of ordinary vehicles, and at the same time form a rigid coupling between the shaft-iron and the vehicle.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a thill-coupling, (applied to an axle,) the same being constructed in accordance with my invention. Fig. 2 is a side elevation of the same; and Fig. 3 is a plan of the same, showing the thill-iron removed and ready for insertion in place.

Like letters of reference refer to like parts in all the figures of the drawings.

A represents a portion of an axle of the usual form. Adapted to bind on the axle is the clip B, of thin metal. The clip B terminates on each side in the bolts B′, which are provided with screw-threads, and are connected by the tie-bar B^2, which is secured in place by the nuts B^3.

Projecting from the clip B, and preferably formed integral therewith, is the bracket C, which in turn has the projecting arms C′, which are curved upwardly on their ends, and provided with a suitable bearing, as $C^\times$, to receive the journals of the thill-iron. The arms C′ are shouldered on their ends, as at C^2, said shoulder forming a recess therein.

D is a journal-block, which has projecting from its front edge the lugs D′, which fit into the recesses formed by the shoulder C^2 on the arms C. The block D is intended for insertion within the bracket C, and the position it would occupy is shown in dotted lines in Fig. 2, and also in Fig. 1 in full lines. The block D is concaved, as at D^2, which completes the bearing for the reception of the journal of the shaft-iron.

E is the head of the shaft-iron, which is of cylindrical shape, and is intended to have an easy fit within the arms C′. The head E is provided with the journals E′, which are adapted to ride in the bearings formed in the arms C′, and projecting from said head E is the shank E^2, which is adapted for attachment to the thills of a vehicle. The journals E′ being in place in the bearings formed in the arms C′, they are held in place by means of the latch F, which is pivoted to the bracket, as at F′, and squared on its pivoted end, a spring G being adapted to bear thereagainst. The latch F is provided with a lug or shoulder F^2, which forms an abutment for the fingers when moving the same.

G is a preferably flat spring, which is secured to the clip B by suitable means, and bears against the squared end, holding it open or closed, as is desired.

What we claim is—

1. A shaft-clip terminating in bolts connected by a tie-bar held in place by nuts, a bracket preferably formed integral with the clip, a block for insertion therein, held in place by a pivoted spring-latch, and a thill-bearing formed in the bracket and block to receive the journal of the shank-iron.

2. The combination, with the clip and the bracket formed with arms having a thill-bearing and shoulders, of a bearing-block having lugs to fit beneath said shoulders, and a pivoted spring-latch to engage said block to hold it in place, substantially as described.

3. The combination, with the clip and bracket and the bearing-block fitted in said bracket, a latch pivoted to said bracket on a vertical pivot and bearing on the upper face of the block, and having a squared end, and the spring secured at one end to the clip and bearing against said squared end, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

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Witnesses:
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