(No Model.)

J. H. ROBINSON.

THILL COUPLING.

No. 261,045.

Patented July 11, 1882.

Fig. 1. Fig.2. WITNESSES: ATTORNEYS.

United States Patent Office.

JOHN H. ROBINSON, OF FREMONT, OHIO, ASSIGNOR OF ONE-HALF TO AMBROSE OCHS, OF SAME PLACE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 261,045, dated July 11, 1882.

Application filed April 11, 1882. (No model.)

To all whom it may concern:

Beitknown that I, John H. Robinson, of Fremont, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my improved thill-coupling. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a detail view of the adjustable clamping-block with its adjusting-screw and rubber. Fig. 4 is a detail view of the end of the thill-iron with its detachable cross-head, and Fig. 5 is a perspective view of the coupling-plate with its hooked arms or bearings.

Similar letters of reference indicate corre-

sponding parts in all the figures.

My invention contemplates certain

My invention contemplates certain improvements in the construction and arrangement of parts of thill-couplings, as hereinafter more fully described and claimed.

In the accompanying drawings, A represents the front axle of a vehicle, and B the clip, which is in one piece with a plate, C, having a pair of parallel ears, D D, that are slotted obliquely, as shown at d d, to form the hooks D'D'. The clip-bar E, to which the ends of the clip are nutted, extends out between the hooked arms D D, and has a screw-threaded aperture, e, at its outer end.

F is the inner end or head of the thill-iron, through which is inserted a bolt or cross-head, G, having a rib or feather, g, which fits into a correspondingly-shaped groove in the body of the thill-head. The projecting ends of the bolt or cross-head G rest in the hooked arms D' D', which form bearings for the same, and will of course turn with the head F of the thill on account of the rib or feather g.

H denotes the clamping block or follower, the rear portion of which has a sleeve or

thimble, h, through which is inserted the plain shank of a thumb-serew, I. The concaved front side of the clamping or follower block H is dovetailed transversely to receive the concave rubber or elastic cushion K and hold it firmly in place, said rubber forming a lip, k, projecting outwardly from the follower-block.

The clip-plate or back plate, C, has a vertical semi-cylindrical recess, c, to make room for 55 the sleeve or thimble h of block H and permit

of its play up and down.

From the foregoing description, taken in connection with the drawings, the operation of my improved thill-coupling will readily be un- 60 derstood. The bolt or cross-head G, being detachable from the head F of the thill-iron, can be readily renewed when worn. The lower threaded end of the thumb-screw I works through the screw-hole e in the extended end 65 of the clip-bar E, and by it the follower-block may be adjusted so as to bear with its concave rubber or cushion against the thill-head F, and thus absolutely prevent rattling, as well as preventing the thill-head from slipping out 70 of its bearings. The degree of pressure of the rubber against the thill-head may at all times be regulated by the adjustment of the screw I.

Having thus described my invention, I claim and desire to secure by Letters Patent of the 75

United States—

The concaved follower-block H, recessed transversely in its concave face to receive the elastic cushion K, and provided with the rearwardly-projecting sleeve h, having a smooth 80 bore, in combination with the clip-plate C D, recessed at c, thumb-screw I, and clip-bar E, having the screw-threaded hole e, as shown and specified.

In testimony that I claim the foregoing as 85 my own I have hereunto affixed my signature in presence of two witnesses.

JOHN H. ROBINSON.

Witnesses:

B. R. DUDROW, J. B. LOVELAND.