F. E. JUSTICE.

THILL-COUPLINGS.

No. 194,687. Patented Aug. 28, 1877.

Fig. 1.

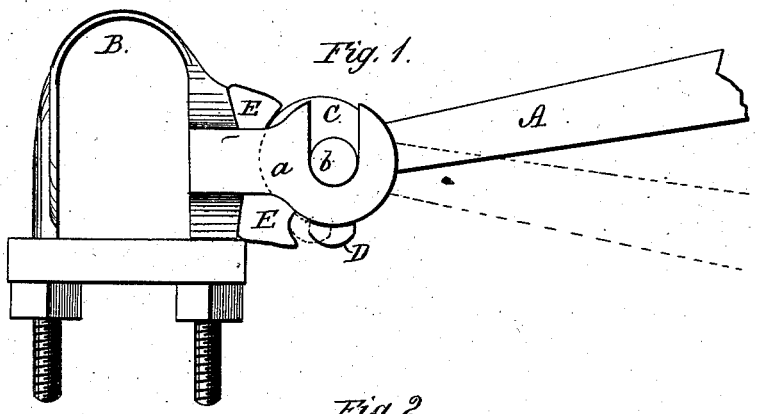


Fig. 2.

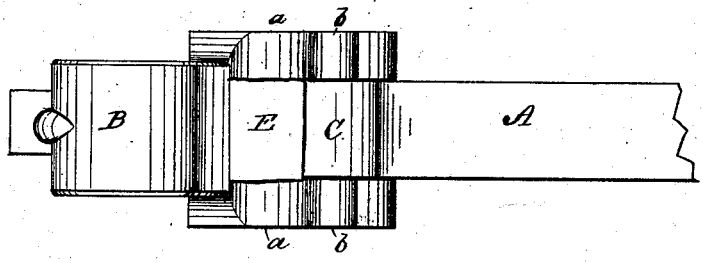


Fig. 3.

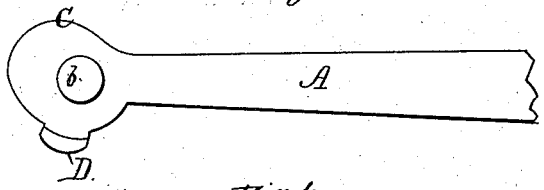
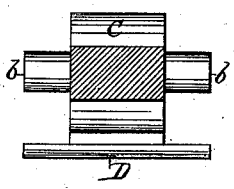


Fig. 4.



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UNITED STATES PATENT OFFICE.

FRANCIS E. JUSTICE, OF MARYSVILLE, OHIO.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **194,687**, dated August 28, 1877; application filed July 18, 1877.

To all whom it may concern:

Be it known that I, FRANCIS E. JUSTICE, of Marysville, in the county of Union and State of Ohio, have invented a new and Improved Thill-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention is an improvement in that class of thill-couplings in which the thill-iron is made detachable from the clip.

The object of the invention is to provide a simple means for preventing the detachment of the thill-iron except when the thills are raised to a vertical position, and also for supporting the thill ends off the ground when the carriage is not in use.

The said means consist of a horizontal bar attached to the under side of the eye of the thill-iron, so as to come in contact with an elastic block which is secured in the socket of the clip in such position as to act as a buffer for the said bar when the thills are lowered.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of my improved thill-coupling, the dotted lines indicating the position of the parts when the thills are unsupported by the harness. Fig. 2 is a plan view. Figs. 3 and 4 are, respectively, a side view and cross-section of the thill-iron detached from the clip.

A indicates the thill-iron, and B the clip, the arms *a* of which have open sockets or bearings for receiving the gudgeons *b* of the eye C of the thill-iron. A horizontal bar, D, is formed on the under side of, and in one piece with, the eye C, and projects beyond the ends of the latter, parallel with the gudgeons *b*. A rubber block, E, is placed between the clip-arms *a*, and projects below the latter, so that the bar D will come in contact therewith when the thills are lowered about half way from the angle they assume when a horse is attached to the vehicle. The block E, therefore, acts as a buffer for bar D, so that the thills are supported horizontally, or nearly so, and their front ends held off the ground, when the horse is detached, which is desirable for several reasons.

In addition to this function of the bar D, it prevents detachment of the thills from the carriage except they shall be first raised to a vertical position, as will be readily understood.

Having thus described my invention, what I claim as new is—

In combination with the clip having open sockets, and the thill-iron A, the buffing-block E placed between the arms of the clip, and the cross-bar D attached to the under side of the eye of the thill-iron, all as shown and described, whereby the said cross-bar comes in contact with the block when the thills are lowered, as and for the purpose specified.

FRANCIS E. JUSTICE.

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