

J. FORNEY.  
Trace-Coupling.

No. 202,806.

Patented April 23, 1878.

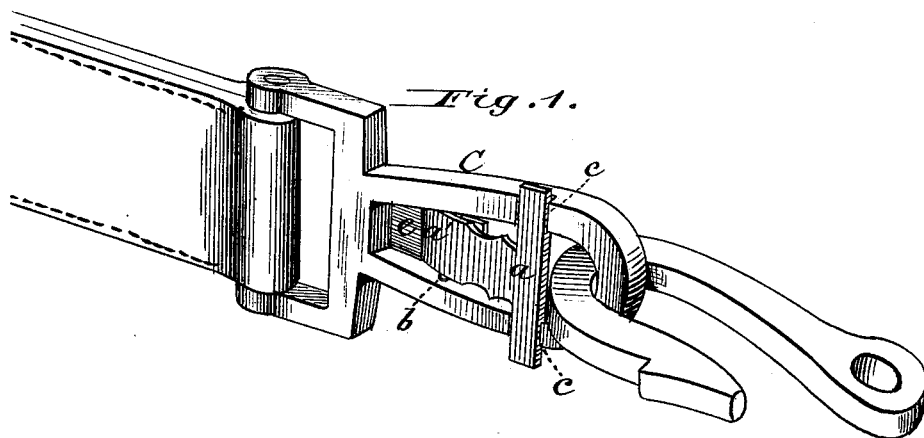


Fig. 2.

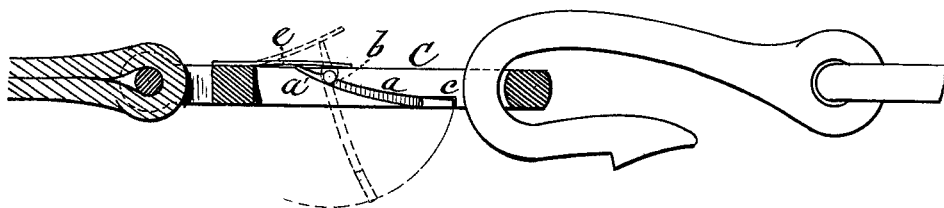


Fig. 3.

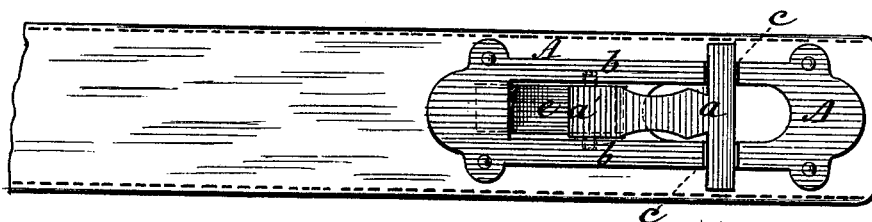
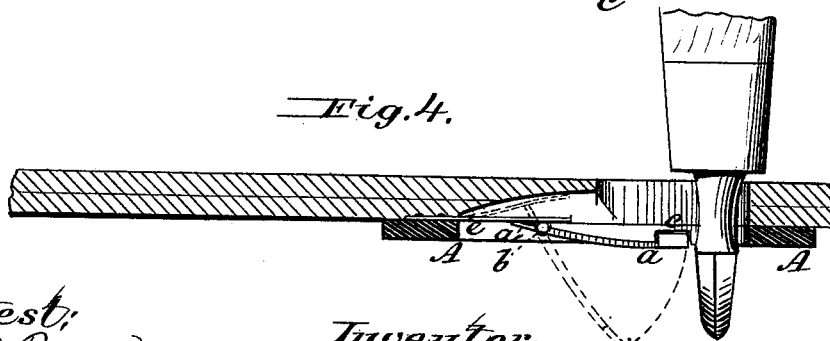


Fig. 4.



Attest:  
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# UNITED STATES PATENT OFFICE.

JOSEPH FORNEY, OF CANFIELD, OHIO.

## IMPROVEMENT IN TRACE-COUPPLINGS.

Specification forming part of Letters Patent No. **202,806**, dated April 23, 1878; application filed March 20, 1878.

*To all whom it may concern:*

Be it known that I, JOSEPH FORNEY, of Canfield, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Trace-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, and to letters of reference marked thereon, which form a part of this specification.

The invention relates to devices for attaching the traces of harness to the whiffletrees of wagons or carriages; and consists in the combination of a peculiarly constructed pivoted T-shaped spring-catch with the cockeye.

The methods of making the trace-coupling now in common use are so well known that my improvement as distinguished therefrom is apparent.

My improvement is applicable to both heavy and light draft vehicles, and its devices of adaptation are hereinafter specified.

In the accompanying drawings, Figures 1 and 2 represent a wagon-trace coupling with my improvements applied thereto; and Figs. 3 and 4, side and sectional views of a buggy-trace coupling, with my said improvements.

The specific object sought being to obtain a device for preventing the uncoupling of the traces from the whiffletrees from accidental causes, while at the same time to permit of its ready attachment and detachment, I will describe my improvement as being a T-shaped catch, *a*, pivoted at *b*, and having its short arm resting on a spring-plate, which acts at all times to keep the catch, with its cross-arms, in the notches *c* in the plate or cockeye frame, to hold the cockeye, or allow it to be thrown out of place when it is desired to uncouple.

Referring to Figs. 3 and 4, *A* is a re-enforcing-plate surrounding the trace-hole and suitably secured on the face side of the trace. The T-catch *a* is pivoted in bearings at *b* in the plate *A*, in such manner that a short arm, *a'*, has a direct bearing upon a subjacent plate-

spring, *e*, suitably fastened between said plate *A* and the leather. The short arm *a'* of the catch is beveled sufficiently to prevent its biting the spring-plate. The notches *c* in the plate act as seats for the cross-arm of the T-catch, and prevent any possible tendency of the cockeye to force it back by wear, and also, by allowing its pivot-arm to fall below the surface of the plate, avoid lateral displacement. It also gives a desirable flush face.

The operation is as follows: The cockeye, being adjusted with the trace, as usual, and the T-catch being turned outward and backward upon its pivot to permit that adjustment, it is only necessary to restore the T-catch to its place in the notch, when its cross-arm prevents the accidental uncoupling, the force of the spring holding the catch firmly to its work.

Figs. 1 and 2 show the catch as pivoted in a cockeye-frame, *U*, to act for confining a hook or supplemental cockeye for heavy draft purposes. This is a modified method of applying my invention.

I claim—

1. The combination of the T-shaped catch, pivoted as described, and having a short arm, *a'*, with a spring-plate, *e*, and the cockeye, as set forth.

2. The combination of the T-shaped catch, pivoted as described, and having a short arm, *a'*, with a spring-plate, *e*, seat-notches *c*, and the cockeye, as set forth.

3. A trace-coupling device consisting of the cockeye-frame, the pivoted T-shaped catch *a*, and the spring *e*, said catch being adapted, by its short arm *a'*, to be turned over upon said spring and to be held in its open or closed position, as described.

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

JOSEPH FORNEY.

Witnesses:

GILES VAN HYNING,  
HANNAH VAN HYNING.