C. ROBINSON.

Trace-Fastener.

No. 163,532. Patented May 18, 1875.

Fig. 1.

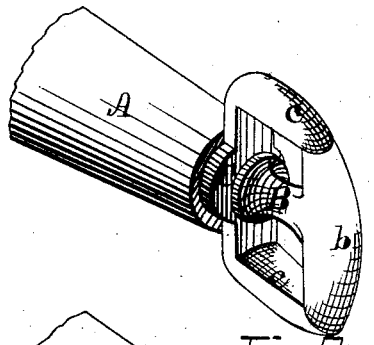


Fig. 2.

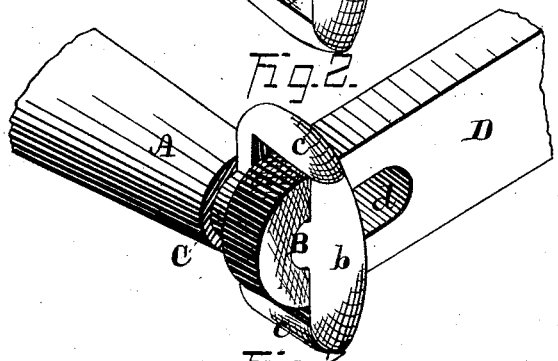
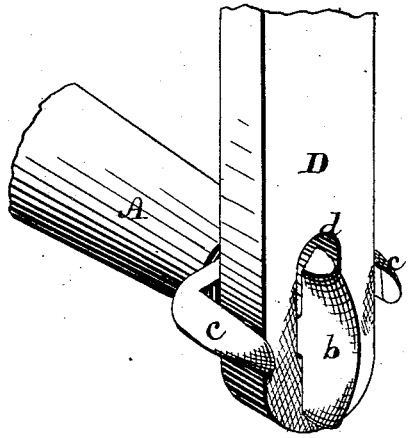


Fig. 3.



WITNESSES=

Jas. S. Hutchinson

John R. Young.

INVENTOR.

Clark Robinson by

Prindle and Colton Attys

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

CLARK ROBINSON, OF EAU CLAIRE, WISCONSIN.

IMPROVEMENT IN TRACE-FASTENERS.

Specification forming part of Letters Patent No. **163,532**, dated May 18, 1875; application filed May 4, 1875.

To all whom it may concern:

Be it known that I, CLARK ROBINSON, of city of Eau Claire, in the county of Eau Claire and in the State of Wisconsin, have invented a new and useful Improvement in a Self-Adjusting Tug-Fastener; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure is a perspective view of my device attached to the end of a whiffletree. Fig. 2 is a like view of the same, having attached thereto a trace; and Fig. 3 is a perspective view of said parts, showing the relative positions of the trace-end and lock or guard when the former is ready for disengagement from the whiffletree.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable harness-traces to be securely connected with whiffletrees, so as to render their accidental detachment therefrom impracticable while said parts remain unbroken; and to this end it consists in combining, with a T-shaped trace-hook attached to the end of a whiffletree, and having its cross-bar placed vertically, a plate pivoted upon the inner end of the neck of said hook, and provided with outwardly-projecting arms, the ends of which may be brought into contact with the ends of said cross-bar, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents a whiffletree, within the end of which is secured a bar, B, that projects outward in a line with said whiffletree, and has upon its outer end a cross-bar, *b*, that occupies a vertical position, as shown. Upon the bar B, next to the end of the whiffletree A, is pivoted a plate, C, which is permitted to rotate freely upon its bearing, and at its ends is provided with two arms, *c* and *c*, that extend outward in a line with said whiffletree, and, when turned to the proper position, bear against the ends of the cross-bar *b*. The trace D is provided, near its rear end, with a longitudinal opening, *d*, which corresponds to the shape and dimensions of the cross-bar *b*, so that when said trace is turned to a vertical position, said end may be passed over said cross-bar and caused to engage with the bar B. After the trace has been placed over or around the bar B, it may be turned to the usual horizontal position, when it will be found that the guard C *c* will be caused to occupy the position shown in Fig. 2, its arms *c* and *c* being in contact with the ends of the cross-bar *b*, where they operate as stops and effectually prevent the displacement of said trace until the latter has been turned once more to a vertical position.

In order that the traces may be prevented from disengagement in the event of their becoming slackened so as to hang downward, each guard C is constructed for one end of the whiffletree, and can only be removed from the cross-bar *b* by turning said trace upward.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

In combination with the T-shaped hooks B *b*, secured within the end of a whiffletree with its cross-bar *b* in a vertical position, the guard C, pivoted upon the inner portion of said hook, and having lateral arms *c* and *c*, which engage with the ends of said cross-bar, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of April, 1875.

CLARK ROBINSON.

Witnesses:
J. F. ELLIS,
H. G. MORGAN.