(No Model.)

J. WOOD & W. W. HARE.

WHIFFLETREE HOOK.

No. 493,420. Patented Mar. 14, 1893.

Fig. 1.

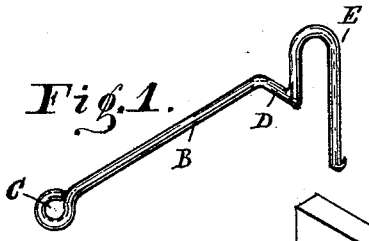


Fig. 2.

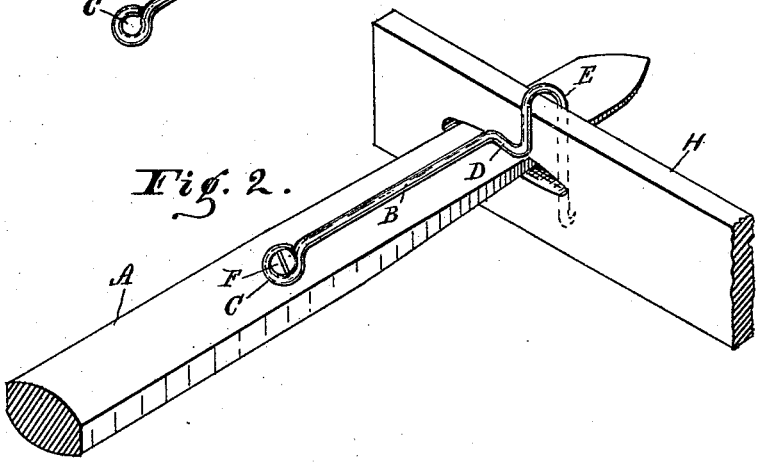
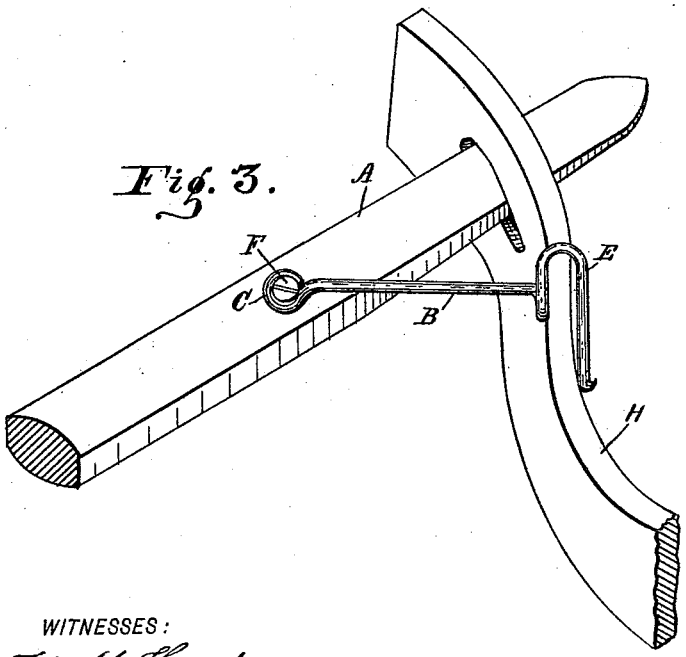


Fig. 3.



WITNESSES:

C. M. Hood.

J. A. Glaulin.

INVENTORS:

James Wood.

William W. Hare.

BY

H. P. Hood.

ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES WOOD AND WILLIAM W. HARE, OF NOBLESVILLE, INDIANA.

WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 493,420, dated March 14, 1893.

Application filed October 28, 1892. Serial No. 450,255. (No model.)

To all whom it may concern:

Be it known that we, JAMES WOOD and WILLIAM W. HARE, citizens of the United States, residing at Noblesville, in the county of Hamilton and State of Indiana, have invented a new and useful Improvement in Tug-Fasteners, of which the following is a specification.

Our invention relates to an improved device for securing the tug of a harness to the whiffletree of a carriage.

The object of our improvement is, to provide a simple and inexpensive device, which may be secured to an ordinary whiffletree in such a manner as to retain the eye of the tug thereon and prevent its slipping either inward or outward, and which may be engaged with the tug after the tug has been engaged with the whiffletree; all as hereinafter fully set forth.

The accompanying drawings illustrate our invention.

Figure 1 represents a view in perspective of our improved tug-fastener. Fig. 2 represents a view in perspective, showing the fastener in position on the whiffletree, and engaged with the tug. Fig. 3 is a view in perspective, illustrating the manner of engaging the tug with the fastener.

In the drawings, A, represents the whiffletree, having a smooth tapered end for receiving the eye of the tug, and formed without retaining shoulders or other devices for limiting the inward movement of the tug. The fastener consists of a piece of wire bent to form a hook having the straight arm, B, provided at one end with an eye, C, and at the other end with a short horizontal arm, D, forming substantially a right angle with the arm B, and arranged in the same plane as the eye C. The end of arm D is then bent upward and then downward so as to embrace the upper edge and outer side of the tug, to form a hook E, arranged in a plane at right angles to the plane of the eye C and arm D. This device is secured to the upper surface of the whiffletree by means of a screw or rivet, F, passing through the eye C; the arrangement being such that the arm B extends along the whiffletree parallel with its edges, and the arm D lies parallel with the inner face of the tug, H, and prevents its inward movement, while the hook, E, embraces the upper edge and outer face of the tug and prevents its outward movement.

In connecting the tug to the whiffletree, as illustrated in Fig. 3, the eye of the tug is slipped over the end of the whiffletree, and the tug, being slackened, is passed under the end of and into engagement with the hook and the straightening of the tug brings the fastening into the position shown in Fig. 2.

We are aware of the state of the art as shown in United States Patent No. 246,413 and we do not clain anything shown therein, but,

We claim as our invention—

In a tug-fastener, the combination of the whiffletree, the tug having an eye adapted to receive the end of the whiffletree, the retaining-hook consisting of the straight arm B pivoted to one arm of the whiffletree so as to swing in a horizontal plane thereon, the short horizontal arm D, and the open hook E adapted to embrace the tug, all combined and arranged to co-operate in the manner set forth.

JAMES WOOD.
WILLIAM W. HARE.

Witnesses:
ALEXANDER W. NIXON,
JAMES WALTER SCOTT.