

O PALMER.  
Whiffletree Hook.

No. 101,656.

Patented April 5, 1870.

FIG. 1.

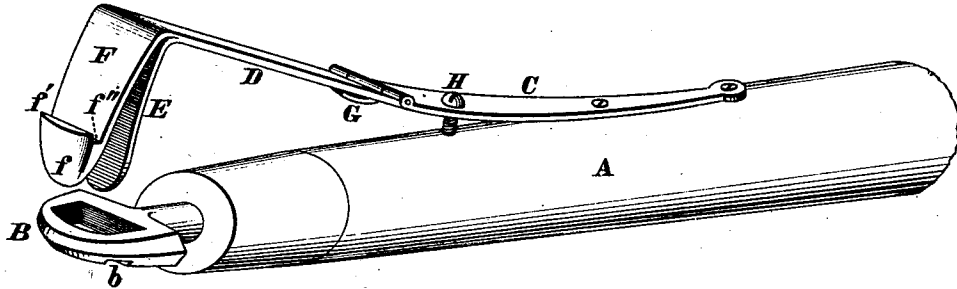


FIG. 2.

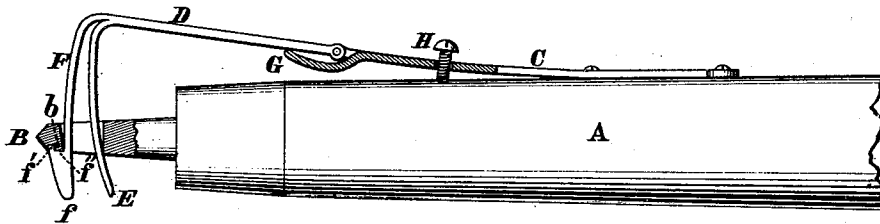


FIG. 3.

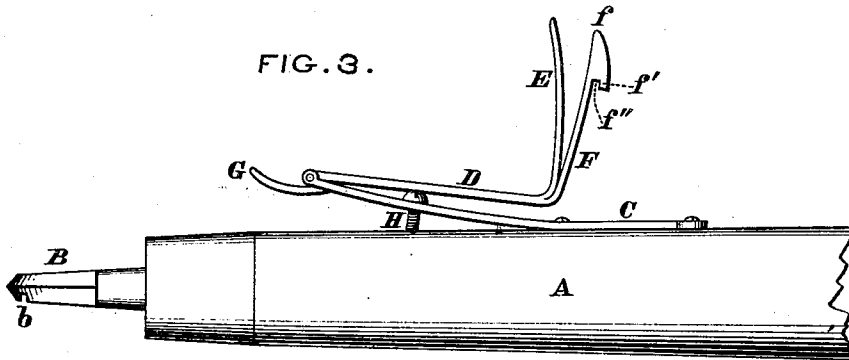
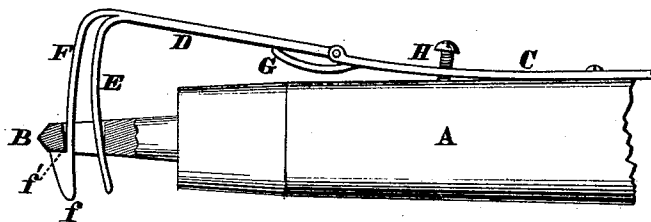


FIG. 4



*Knight Bros.  
Atty for  
Palmer*

ATTEST.  
*J. H. Layman.  
L. Mart*

# United States Patent Office.

OLIVER PALMER, OF CINCINNATI, OHIO.

Letters Patent No. 101,656, dated April 5, 1870.

## IMPROVEMENT IN TRACE-FASTENINGS.

The Schedule referred to in these Letters Patent and making part of the same.

I, OLIVER PALMER, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Trace-Fastening, of which the following is a specification.

### *Nature and Objects of the Invention.*

My invention relates to a fastening for connecting the tugs or traces of draft-animals with the whiffletree or single-tree, which combines great security with facility of hitching and unhitching.

### *General Description with Reference to the Drawings.*

Figure 1 is a perspective view of a portion of a whiffletree or single-tree whereon my improved fastening is shown in its open condition.

Figure 2 is a partially sectionized side elevation of the same in its closed condition.

Figure 3 is a side elevation of the device in its most open condition.

Figure 4 is a partially sectionized side elevation showing a modification of my device.

A represents a portion of a whiffletree or single-tree with its cock-eye B.

Screwed fast or otherwise secured to the upper side of the tree is a spring, C, to which is hinged an arm, D, whose end is bent downward so as to form what I call the guard E, which guard, when the device is fastened, occupies the cock-eye along with the catch F, (projecting from the same arm,) whose end *f* is sharpened or chamfered so as to readily enter the cock-eye, and is provided with a shoulder, *f'*, which, engaging under the cock-eye, prevents the accidental escape of the catch and guard therefrom.

The guard E discharges the functions of the ordinary leather thong in confining the trace, and also protects the catch F from the chafing of the traces.

For additional security the shoulder *f'* is, in the preferred form of my invention, notched or indented,

*f'*, as shown in figs. 1, 2, and 3, to engage behind a corresponding shoulder, *b*, on the under side of the cock-eye, so as to require two movements or manipulations to disengage the catch, namely, first a depression to liberate the indentation, and then a pressure inward to liberate the shoulder from the cock-eye.

The preferred form of my improvement has also a tongue, G, which, projecting rigidly from the under side of the spring C, outward underneath the arm D, presses upward against said arm with sufficient force to cause the liberated catch to spring back out of the way, as seen in fig. 3.

The tension of the spring C may be regulated by a set-screw, H.

An inferior modification of my invention is seen at fig. 4, where a plain shoulder replaces the indented one. The fastening, when in this form, may be liberated by a simple inward pressure of the catch.

### *Claims.*

I claim herein as new and of my invention—

1. The spring C, hinged arm D, and shouldered catch F, combined and adapted to operate as set forth.
2. In this connection, the indentation *f'* adapted to engage behind the shoulder *b* on the under side of the cock-eye, as and for the purpose designated.
3. In the described combination with the elements B, C, D, and F, the guard E.
4. In the described combination with the elements B, C, D, and F, the tongue G.

In testimony of which invention I hereunto set my hand.

OLIVER PALMER.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.