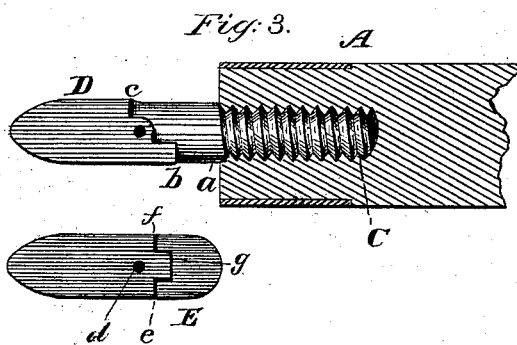
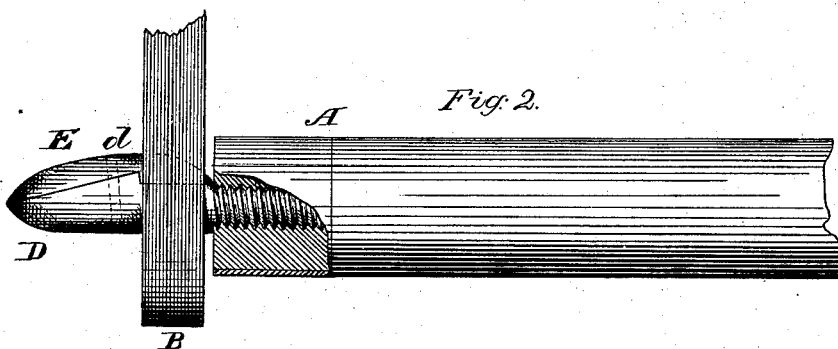
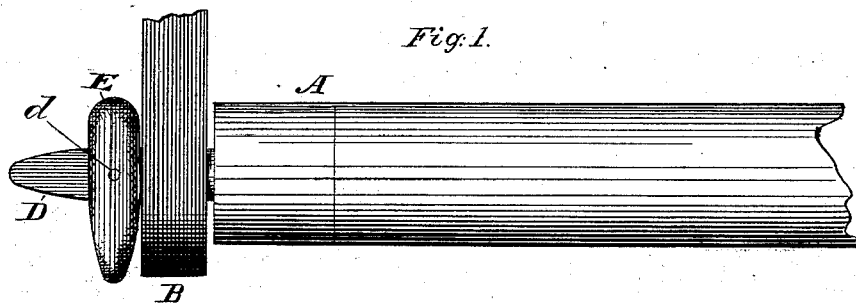


W. L. B. & J. J. CUSHING.
Whiffletree-Hook.

No. 216,727.

Patented June 24, 1879.



Witnesses:
John F. C. Brinkert
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UNITED STATES PATENT OFFICE.

WILLIAM L. B. CUSHING AND JOHN J. CUSHING, OF PROPHETSTOWN,
ASSIGNORS OF ONE-THIRD THEIR RIGHT TO HOBERT S. ANGUISH,
OF STERLING, ILLINOIS.

IMPROVEMENT IN WHIFFLETREE-HOOKS.

Specification forming part of Letters Patent No. **216,727**, dated June 24, 1879; application filed February 14, 1879.

To all whom it may concern:

Be it known that we, WM. L. B. CUSHING and JOHN J. CUSHING, of Prophetstown, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Whiffletree-Hooks; and we do hereby declare that the following is a full, clear, and exact description of the invention, 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.

Our invention relates to an improvement in whiffletree-hooks, the intention being to provide a means of attaching the trace to the whiffletree, so that while the trace may be readily hitched and unhitched it will be impossible for the trace to become accidentally unfastened.

Figure 1 is a top view of the trace in the position for work attached to the whiffletree. Fig. 2 is a back view of the whiffletree, with the trace raised perpendicularly in the position of being attached to or detached from the whiffletree, the dotted line showing the end of the button E in the trace. Fig. 3 is a view of the contiguous faces of the two parts constituting the hook.

A is the end of the whiffletree. B is the end of the trace, which may be of leather or the ordinary cockeye. C is a screw-bolt, having neck *a* to receive the trace, and having its end D outwardly tapering, with exception of the upper surface, which is flattened. On the outer edges of the flattened upper surface of the end D are formed the long shoulder *b* and the short shoulder *c*. The bolt C is screwed into the end of the whiffletree in the ordinary way.

E is a half-round button with tapering ends, and pivoted with its flat surface downward by means of the rivet *d* passing vertically through it at or near its center, and through the end D, at such point on the latter as that when the button E is turned in line with the end D its outer end and sides are coterminous with those of the end D, and that when the button E is

turned at right angles with the end D the inner side of the button will be on a line with the shoulder *b* of the end D, thus with such shoulder forming a stop for the outside of the trace, and at the same time the outer shoulder, *e*, of the button E and the outer side of the projection *g* thereof shall abut, respectively, against the outer and inner faces of the shoulder *c* of the end D, and prevent the button from turning farther than a direction parallel with the trace. On the lower surface of the button E are formed the shoulders *e f* and the intermediate square-sided projection, *g*.

The purpose of the shoulder *f* is, that when the button is turned into line with the end D it may engage the shoulder *b* of the end D, and the button be prevented from turning farther backward, thus rendering it more easy of alignment with the end D, for the purpose of putting on or removing the trace.

When the parts D and E are in line their vertical diameter is much the greatest; and as the diameter of the hole in the trace or cockeye is greatest horizontally, the trace is placed on the hook by being turned up into a perpendicular position and passed over the end of the hook until the inner side of the trace strikes the shoulder of the whiffletree, when the inner end of the button E will be in the hole of the trace, as shown in Fig. 2. The trace is then allowed to fall forward by its own weight upon the neck *a*, when the upper side of the hole in the trace, striking the tapering surface of the inner end of the button, moves the latter on the rivet *d*, and into a position parallel with and contiguous to the trace, and the button being longer than the hole in the trace, it is impossible for the latter to become detached.

When it is desired to remove the trace it is turned upward about half-way to the perpendicular, and then forward end of the button turned into the hole in the trace. As the trace is then turned to the perpendicular it carries the button (the end of which remains in the trace) into a position parallel with the end D, when the trace is readily passed over both of such parts.

The advantage of our invention is, that it is neat, strong, simple, and durable, and may be cheaply made of malleable iron. It also dispenses with springs and leathers, all of which are liable to become broken or otherwise ineffective. If properly made there will be no rattling of the parts.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a whiffletree-hook, the combination of the screw-bolt C, having the flattened end D, with the button E, when the latter is horizontally pivoted to such end, in the manner substantially as shown, and for the purpose described.

2. The combination of the whiffletree A, screw-bolt C, having the outwardly-tapering end D, and the button E, all constructed and operating substantially in the manner and for the purpose specified.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

WM. L. B. CUSHING.
JNO. J. CUSHING.

Witnesses:

H. C. RIPLEY,
H. S. ANGUISH.