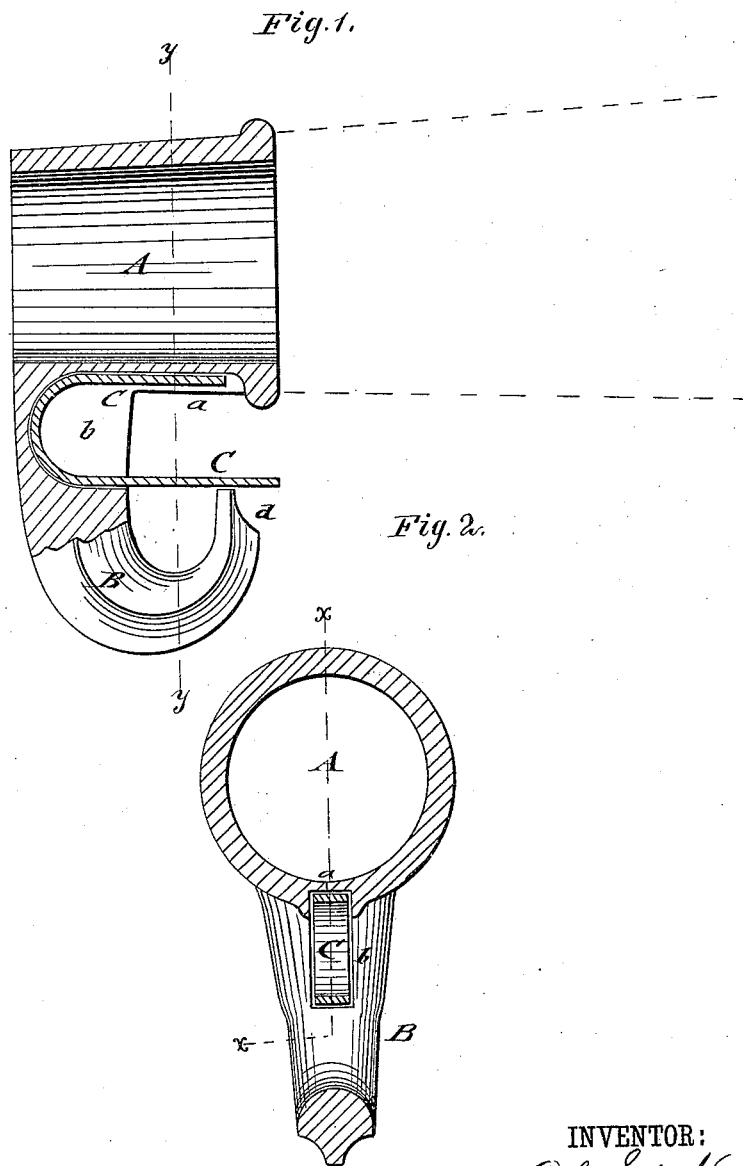


O. J. SMITH.
Whiffletree-Hook.

No. 205,583.

Patented July 2, 1878.



WITNESSES:

Henry N. Miller
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OTHNIEL J. SMITH, OF WAUWATOSA, WISCONSIN.

IMPROVEMENT IN WHIFFLETREE-HOOKS.

Specification forming part of Letters Patent No. **205,583**, dated July 2, 1878; application filed May 15, 1878.

To all whom it may concern:

Be it known that I, OTHNIEL J. SMITH, of Wauwatosa, in the county of Milwaukee and State of Wisconsin, have invented a new and Improved Whiffletree-Hook, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical central section on line *x x*, Fig. 2, of my improved whiffletree-hook; and Fig. 3, a vertical transverse section of the same on line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved whiffletree-hook, by which the trace may be quickly inserted and retained in reliable manner on the hook, and by which the trace is prevented from unhooking itself; and the invention consists of a hook projecting from the ferrule at the end of the whiffletree, the ferrule and hook being recessed below the hook to form a chamber for inserting a U-shaped spring, that is seated with one end in the recess, and that bears by its opposite end on the beveled end of the hook.

Referring to the drawing, A represents the ferrule, and B the hook, of my improved whiffletree-hook, which is made of malleable iron of the usual size. The ferrule A is provided below the hook with a groove, *a*, and the hook B with a semicircular cavity, *b*, both groove and cavity forming a chamber, into which a U-shaped band-spring, C, may be inserted. One end of the band-spring is then seated in the groove of the ferrule, the bend of the same in the cavity of the hook, while the opposite end bears on the end of the hook.

By pressing the spring together between the thumb and forefinger it may be readily inserted into the chamber formed for it in the ferrule and hook, and by letting it go it secures itself firmly in place, and cannot get out of position.

Should the spring break, it may be readily replaced, as no tools are required for removing the old spring and inserting a new one.

The ferrule and hook may be applied to either end of the whiffletree, and the trace readily placed on the hook by pressing back the spring with the end of the trace.

The hook is made with an outer bevel, *d*, at the end to guide the trace when pressing back the spring by the same for inserting it into the eye formed by the hook and spring.

The hook requires no thread to be cut nor holes drilled, no rivets put in, and is complete when applied, forming a cheap, perfect, and simple safety-hook for whiffletrees of all kinds.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the whiffletree-hook having a groove in the ferrule and a semicircular cavity in the hook with a U-shaped band-spring sprung into a cavity and bearing by its outer end on the end of the hook, substantially as described.

OTHNIEL J. SMITH.

Witnesses:

H. F. ROSE,
WILLIAM SPLITT.