W. S. MEAD.
Whiffletree-Hook.

No. 205,117. Patented June 18, 1878.

Fig. 1.

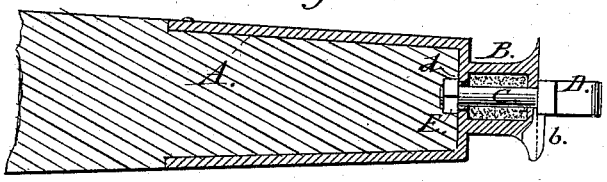


Fig. 2.

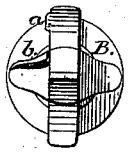
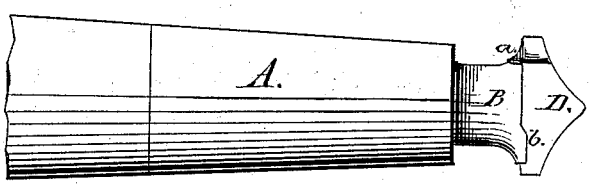


Fig. 3.



Witnesses:
M. C. Chapin
Alexander Pope

Inventor:
William S. Mead
per Edw. W. Dunn
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM S. MEAD, OF NEW YORK, N. Y.

IMPROVEMENT IN WHIFFLETREE-HOOKS.

Specification forming part of Letters Patent No. **205,117**, dated June 18, 1878; application filed May 15, 1878.

To all whom it may concern:

Be it known that I, WILLIAM S. MEAD, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Whiffletree-Buttons; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention is an improvement in whiffletree-buttons, and has for its object to provide a device simple in construction and arrangement, by which harness traces or tugs may be held on the ends of whiffletrees beyond the liability of slipping off.

It consists of a socket of the usual form, fashioned to fit over the end of a whiffletree, provided with a hollow stem, through which passes, and is secured with a nut, a shank of a button of peculiar shape, which shank is surrounded with an elastic substance to keep it in a given position with reference to a trace placed over the stem of said socket.

In the accompanying drawings, Figure 1 is a central section of the device as applied to the end of a whiffletree. Fig. 2 is an end view of the button and stem of the socket. Fig. 3 is a side elevation of the device complete.

Similar reference-letters denote like parts in all of the figures.

Referring to drawings, A is the socket, having a hollow stem, B, curved exteriorly to suit the usual opening in a trace or tug. Through this stem B passes the shank C of button D, which is secured to the inside of the socket A by a nut, E.

Surrounding the shank C, within the chamber of the extended stem B, is a piece of elastic tubing, which fits tightly (being somewhat compressed) between the inner surface of the hollow stem and said shank.

The elastic tubing is introduced into the space in the stem B through an opening in the wall *d* of the socket before the button is fixed in its place. Said opening is sufficiently large to admit the tubing, but not large enough to interfere with the bearing of the nut E, which secures the shank of the button D.

The button D is of the form shown in the drawings, and has extending from its inner surface a **V**-shaped rectangular projection, *a*, which, when the button is turned, or is in line with the hole in the trace, comes in contact with the upper part of the stem B, and keeps the button in position while placing or disengaging said trace.

The stem B is flat on its outer edge, to fit snugly against the flattened surface of the button D, but has a rectangular projecting lip, *b*, to serve as an abutment for the button when the trace is being applied, as well as when said button is turned to secure it.

When the trace is to be fastened, the button is turned until the projection *a* comes against the stem B, at the same time that the opposite side of said button comes in contact with the long surface of the lip *b*. When the tug is placed and the button is turned at right angles to its first position, and comes against the narrow surface of the lip *b*, it is prevented from turning farther in that direction.

The elastic substance incased in the hollow stem B affords friction to prevent the button from being reversed by jarring or shaking of the whiffletree.

I am aware that button-hooks have been invented in which an elastic material has been used in juxtaposition with the shank of the button outside of the socket of a whiffletree, and to such I lay no claim.

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

The socket A, having an extended stem, B, which is made hollow to inclose an elastic packing, in combination with the shank C of button D, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

WILLIAM S. MEAD.

Witnesses:
HORACE HARRIS,
H. A. MERRIAM.