## Z. M. HIBBARD. Whiffletree-Hook.

No. 220,836.

Patented Oct. 21, 1879.

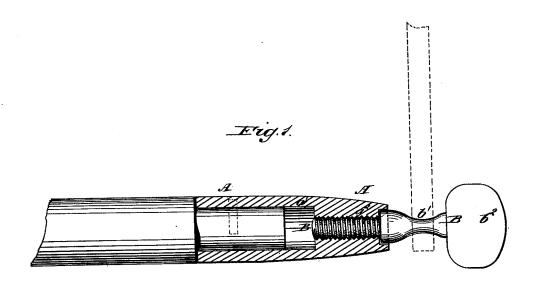
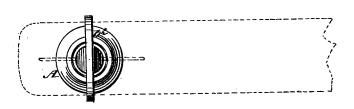


Fig. 2.



WITNESSES: Francis M/ Arolle b. Sudgwick INVENTOR:

3. m. Hibbard

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ATTORNEYS.

## UNITED STATES PATENT OFFICE.

ZEBINA M. HIBBARD, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN WHIFFLETREE-HOOKS.

Specification forming part of Letters Patent No. 220,836, dated October 21, 1879; application filed April 8, 1879.

To all whom it may concern:

Be it known that I, ZEBINA M. HIBBARD, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Trace-Fasteners, of which the following is a specification.

Figure 1 is a longitudinal section of my improved trace-fastener. Fig. 2 is an end view

of the same.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved trace-fastener which shall be simple in construction, inexpensive in manufacture, and safe and reliable in use, allowing the trace to be readily attached and detached, and not being liable to become unfastened accidentally.

The invention consists in a trace-fastener formed of the casting having a socket formed in one end, and in its other end a screw-hole, counter-sunk around its outer end, and the screw having a neck and a flattened cross-head formed upon its outer end, and provided with a shoulder at the base of its screw-thread, as hereinafter fully described.

A is a tapering casting, in one end of which is formed a hole or socket, a', to receive the end of the whiffletree, or a tenon formed upon the said end. In the other end of the casting A is formed a screw-hole,  $a^2$ , to receive the screw B, which has a neck, b', and a flattened cross-

head,  $b^2$ , formed upon its outer end to receive the trace. The outer end of the casting A is countersunk around the end of its screw-hole  $a^2$ , to receive the shoulder formed upon the screw B, at the base of its screw-thread, to prevent rain and snow from getting in around the said screw-thread and freezing it fast.

The casting A must be attached to the end of the whiffletree in such a position that the cross-head  $b^2$  of the screw B may be vertical, as shown in Figs. 1 and 2, when the said screw

B is screwed fully in.

To attach and detach the trace, the screw B is turned back one-quarter of a revolution, bringing its cross-head  $b^2$  into a horizontal position, and into line with the trace, and the said trace can then be readily slipped on and off. When the trace has been put on the screw B is turned forward again and will keep its place securely.

I am aware that a trace-fastener has been provided with an arrow-head and pin that engage with shoulders on the thimble; but

What I claim is—

A trace-fastener, B  $b^2$ , provided with a screwstem that works in the threads of the ferrule, and having a shoulder that fits within a rabbet of the ferrule, as shown and described.

ZEBINA M. HIBBARD.

Witnesses:

JAMES T. GRAHAM, C. SEDGWICK.