N. THOMAS.

TRACE-FASTENERS.

No. 194,568. Patented Aug. 28, 1877.

Fig 1.

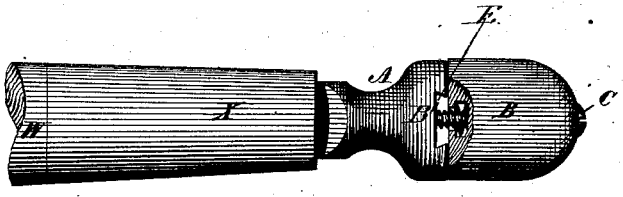
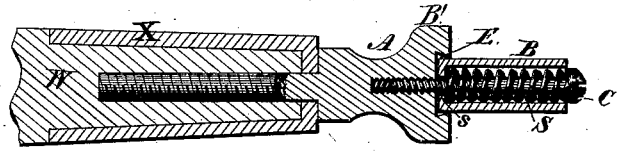


Fig 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

NELSON THOMAS, OF TAUNTON, MASSACHUSETTS.

IMPROVEMENT IN TRACE-FASTENERS.

Specification forming part of Letters Patent No. **194,568**, dated August 28, 1877; application filed June 16, 1877.

To all whom it may concern:

Be it known that I, NELSON THOMAS, of Taunton, in the county of Bristol and State of Massachusetts, have invented a new and Improved Trace-Fastener; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows the invention applied to a whiffletree, the movable button being turned so as to admit of the application of the trace; and Fig. 2 is a longitudinal sectional view of the device in working position.

Similar letters of reference in the accompanying drawings denote the same parts.

My invention relates to that class of fastenings for attaching harness-traces to the whiffletrees of vehicles in which a spring-head is so connected to the shank of the fastening that when turned to a certain point the trace will slip over the head upon the shank, and when turned at right angles to the shank will prevent the trace from slipping off.

The principal objection to the use of these trace-fastenings lies in the fact that they cannot be conveniently repaired when the springs become weakened or broken, and in the comparatively great expense of their manufacture.

The object of my invention is to overcome these objections, and to produce a cheap, simple and effective fastening, as I will now proceed to describe.

In the accompanying drawings, W represents the end of the whiffletree; X, the ferrule on the end thereof, and A the shank which carries the trace, screwed into the end of the whiffletree through the ferrule, as shown in Fig. 2. B is the button or fastening, flattened to correspond to the flattened part B′ of the shank when turned to register therewith, and also made hollow for the reception of the spring S and the passage of the screw C, by which the button is fastened and swiveled to the shank. The head of the screw bears against the end of the button and holds the spring in place, but allows the button to be freely turned, and by adjusting the screw the tension of the spring can be easily regulated. The face or flattened end of the shank is formed with a transverse recess or notch, E, into which the spring forces the end of the button when the latter is turned on the screw for securing the trace upon the shank.

The simplicity of this construction greatly cheapens the cost of manufacturing the fastening, as compared with others of its class known to me, and the method of applying the button permits its ready removal for repairing or changing the parts. By simply removing the screw the button and spring are detached from each other without disturbing the other parts.

To apply the trace the button is turned flush with the shank, as shown in Fig. 1, and the trace slipped over it. The button is then turned at right angles to the shank and sprung into the recess, as shown in Fig. 2, in which position it prevents the trace from slipping off the shank, as will be readily understood.

I claim as my invention—

1. The trace-fastening consisting of the flattened shank A, secured to the end of the whiffletree, and having the transverse notch E in its face, and the flattened button B, made hollow to receive the spring S and the screw C, by which said button and spring are held to the shank, substantially as described, for the purpose specified.

2. The flattened button B, combined with the flattened shank A B′ by means of the spring S and screw C, contained within the button, the screw passing entirely through it to enter the shank at the bottom of its transverse recess E, substantially as described, for the purpose specified.

NELSON THOMAS.

Witnesses:

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