

(No Model.)

J. P. SMITH.  
TRACE FASTENER.

No. 345,330.

Patented July 13, 1886.

FIG. 1.

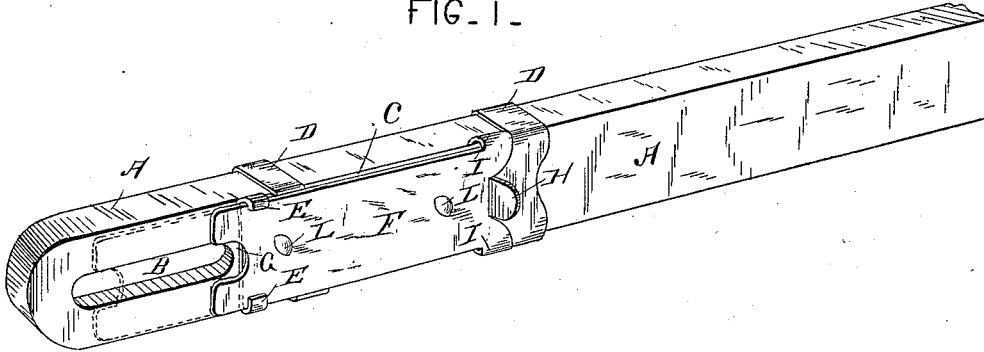


FIG. 2.

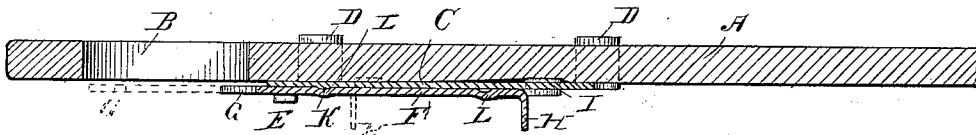
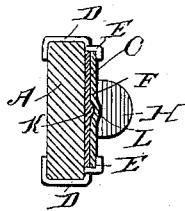


FIG. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSEPH P. SMITH, OF GLASTONBURY, ASSIGNOR OF ONE-HALF TO OLIVER  
J. SMITH, OF BRIDGEPORT, CONNECTICUT.

## TRACE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 345,330, dated July 13, 1886.

Application filed April 7, 1886. Serial No. 198,101. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH P. SMITH, a citizen of the United States, residing at Glastonbury, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Trace-Fasteners, of which the following is a specification.

My invention relates to an improvement in trace-fasteners; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a part of a trace provided with my improved fastener. Fig. 2 is a horizontal longitudinal sectional view of the same. Fig. 3 is a vertical transverse sectional view.

A represents the trace, which is provided at one end with the usual slotted openings, B, adapted to catch over the headed nib or stud at the end of the single-tree. An inconvenience has heretofore existed in this common mode of attaching the trace to the single-tree from the fact that the trace is likely to become detached from the nib or stud when the horse is in motion, thus rendering it necessary for the person in the vehicle to get out and reattach the trace. To avoid this difficulty is the object of my invention.

C represents a plate, which is provided at its ends with oppositely-extending lugs D, which are adapted to be bent over the opposite edges of the trace, and thereby secure the plate C thereto. One end of the plate is also provided with short outwardly-bent lugs E.

F represents a sliding tongue or plate, which is provided at one end with a notch, G, and at the opposite extremity with an outwardly-projecting thumb-hold, H. The outer end of the plate F is secured to the plate C by the bent lugs E, and the rear end of the said plate F is provided with similar bent lugs, I, which embrace opposite edges of the plate C.

When the plate F is moved back and forth upon the plate C, the lugs I strike against the lugs D at each limit of the movement of the plate F, and thus prevent it from becoming detached from the plate C.

From the outer sides of the plate C, near the outer end thereof, projects a stud, K, and the plate F is provided with corresponding counter-sunk recesses L near its ends, one of said recesses being adapted to engage with the said stud at each limit of the movement of the sliding plate, and thereby secure the latter against accidentally working loose and sliding on the plate C.

The operation of my invention is as follows: When the trace is attached to the nib or stud on the end of the single-tree, the plate F is moved rearwardly, forcing the trace forwardly until the shank of the nib or stud reaches the rear end of the opening in the trace, and the notch G of the plate F engages the front side of the shank of the nib or stud, and thus secures the latter firmly to the trace and prevents the trace from working over the head of the nib or stud, as will be very readily understood.

Having thus described my invention, I claim—

1. The combination of the plate C, having the lugs D to attach the said plate to the trace, and the sliding plate F, secured to the plate C, for the purpose set forth, substantially as described.

2. The combination, with the plate C, adapted to be secured to the trace, and having the projecting stud K, with the sliding plate F, secured to the plate C, and having the recesses L to receive the stud K, for the purpose set forth, substantially as described.

3. The combination of the plate C, means for securing the said plate to the trace, and the sliding plate F, secured on the plate C, having the notch at one end and the thumb-hold at the opposite extremity, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH P. SMITH.

Witnesses:

WILLIAM S. GOSLEE,  
HECTOR CHAPMAN.