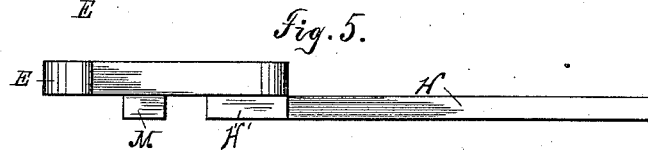
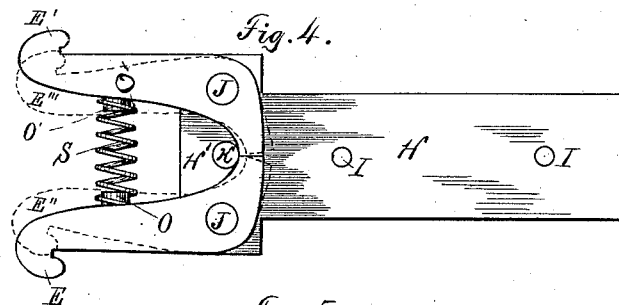
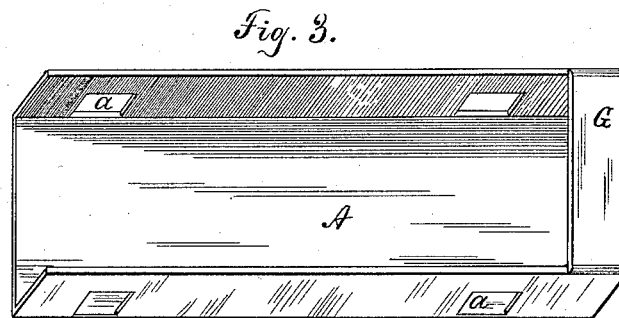
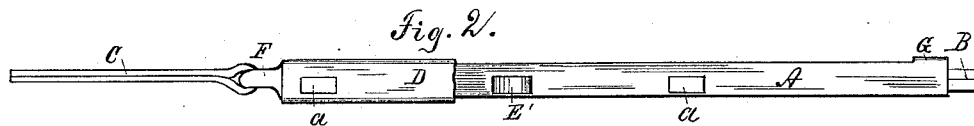
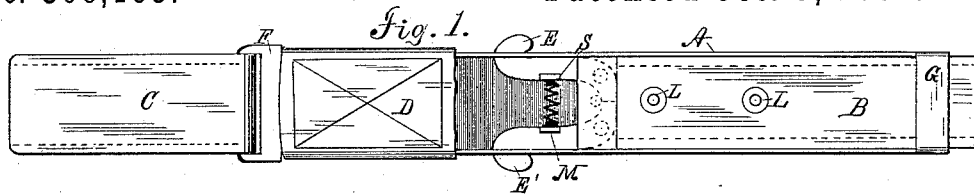


(No Model.)

F. LOHR.
TRACE ADJUSTER.

No. 306,165.

Patented Oct. 7, 1884.



WITNESSES:

George H. Patton
Wallace Greene

INVENTOR

Frank Lohr
BY
Ross H. Wiles
ATTORNEY

UNITED STATES PATENT OFFICE.

FRANK LOHR, OF FREEPORT, ILLINOIS.

TRACE-ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 306,165, dated October 7, 1884.

Application filed March 27, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK LOHR, a resident of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Trace-Adjusters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention is an improved device for varying the length of a trace or tug without the use of a buckle. It is fully described and explained in the following specification and shown in the accompanying drawings, in which—

Figure 1 is a top plan of the device, showing the parts and their connection, the covering D of the box A being partly removed to show the construction of the mechanism; Fig. 2, a side view of same; Fig. 3, a perspective view of a portion of the box A; Fig. 4, a bottom plan of the blade H, head H', and spring-catches pivoted thereon; and Fig. 5, a side elevation of same.

In these views, B is a trace formed by stitching together two leather straps, and H' a metallic blade lying between the straps and pierced by a series of holes, I, through which pass rivets L, Fig. 1, which secure the blade between the straps. The blade H is narrower than the trace, and is provided with an integrally-formed head, H', which lies outside of and at the end of the trace, and is of the same width as the trace. On one side of the head H' are pivoted two outwardly-extending hooks, E E', which swing about the pivots J J, respectively, and on the inner faces of the hooks E E' are two bosses, O O', which hold in place a coiled spring, S, whose force presses apart the hooks. On the same side of the head H' with the hooks E E' is a stationary pin, K, so placed as to prevent the rear ends of the hooks from swinging in past the center of the head, and each of the hooks is provided with a lug, M, lying in the plane of the blade H and head H'. The head H', hooks E E', and blade H, and the end of the trace to which they are attached enter a rectangular box or trough,

A, formed preferably with a bottom of the same width as the trace and two sides or edges of a width slightly greater than the combined thickness of the head H' and hooks E E'. The end of the box at which the hooks enter it is strengthened by a cross-bar, G, which also serves as a guide for the trace, and the opposite end is provided with an integrally-formed loop, F, adapted to receive a strap, C, or to be fastened directly to the hame. In the sides of the box are a series of holes, a a, preferably rectangular in shape, and adapted to receive the ends of the hooks E E'. The entire box A has a leather case or covering, D, and the holes a in the box A extend through the covering D as well.

It is evident from the description and drawings that the head H' and hooks E E' may be moved longitudinally in the box A at will; that whenever the hooks coincide with two opposite holes, a a, the pressure of the spring S will force the hooks into the holes, when they will resist longitudinal pressure, especially in the direction in which force must necessarily be applied to the trace, and that upon the application of pressure to the points of the hooks from without they may be forced into the space within the walls of the box, when the head H' may be again moved at will. The length of the entire trace may thus be varied at pleasure without using a buckle and without bending the leather of the trace.

The box A, instead of being open on one side, as shown, may be closed on four sides, if desired, and the openings a a may be in the top and bottom, instead of in the edges, as shown in the drawings.

One of the hooks E E' may be dispensed with and the holes a be formed only in one side of the box; but the use of two hooks engaging with opposite sides of the box gives greater strength and more direct draft, and I therefore consider it preferable.

Having now described my invention and explained its operation, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the box A, having the openings a a in its opposite faces, the trace B, blade H, secured therein, hooks E E',

pivoted to said blade, and spring S, forcing said hooks apart, substantially as shown and described, and for the purpose set forth.

2. The combination of the blade H, head
5 H', hooks E E', spring S, pin K, and lugs M, with the box A, having a series of openings, *a a*, in each of its two opposite sides, substantially as shown and described, and for the purpose set forth.

In testimony whereof I have signed this 10 specification in the presence of two subscribing witnesses.

FRANK LOHR.

Witnesses:

ZELLA TOBIAS,
WALLACE GREENE.