E. G. LATTA.
Trace-Buckle.

No. 205,715. Patented July 2, 1878.

Fig. 1.

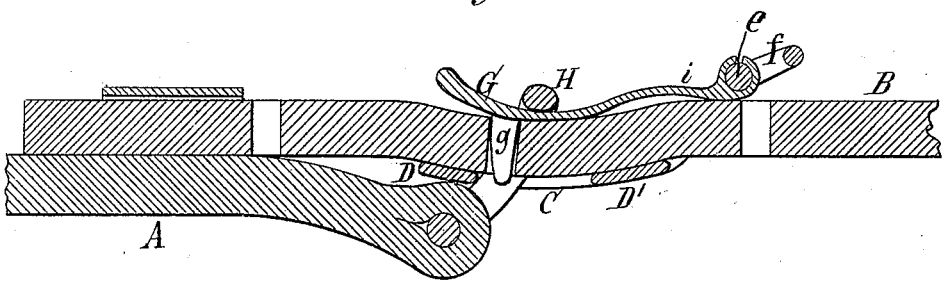


Fig. 2

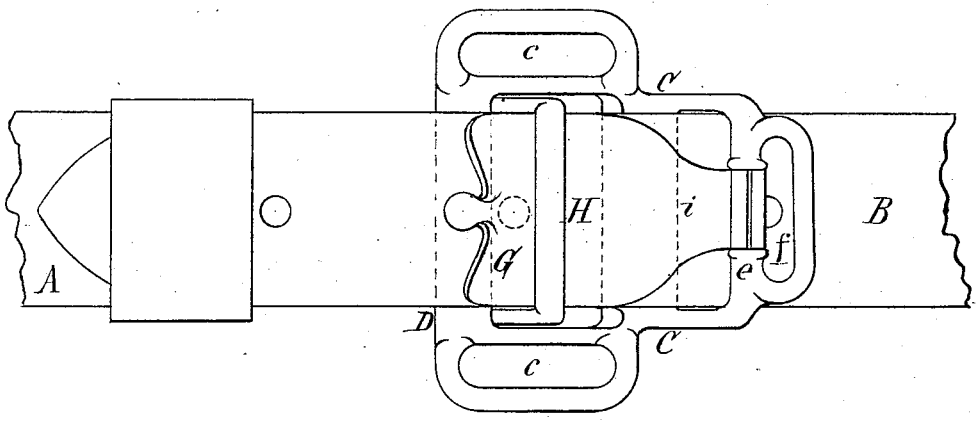
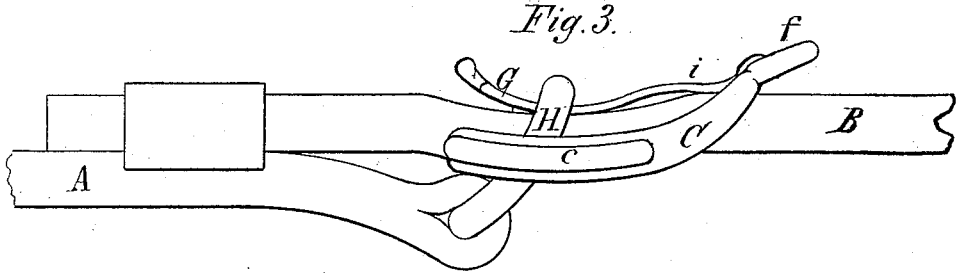


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

EMMIT G. LATTA, OF FRIENDSHIP, ASSIGNOR OF ONE-HALF HIS RIGHT TO HARVEY D. BLAKESLEE, OF BUFFALO, NEW YORK.

IMPROVEMENT IN TRACE-BUCKLES.

Specification forming part of Letters Patent No. **205,715,** dated July 2, 1878; application filed December 18, 1877.

To all whom it may concern:

Be it known that I, EMMIT G. LATTA, of Friendship, in the county of Allegany and State of New York, have invented a new and useful Improvement in Trace-Buckles, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to that class of trace-buckles in which a tongue-plate is employed, which is held in contact with the trace by a bail or loop attached to the hame-tug.

The object of my invention is the construction of a simple and strong buckle which permits the ready adjustment of the trace, relieves the tongue from strain, and the trace from undue compression, and which enables traces of different thicknesses to be used with the same buckle.

My invention consists of the particular construction of the device, as hereinafter fully set forth.

In the accompanying drawing, Figure 1 is a horizontal section of my improved buckle. Fig. 2 is a side elevation, and Fig. 3 a top-plan view thereof.

Like letters of reference refer to like parts in each of the figures.

A represents the hame-tug, and B the trace. C C represent the side bars of the buckle-frame, provided in the usual manner with loops *c c*. D D′ represent the flat cross-bars of the buckle-frame, forming the back or bed of the buckle. The cross-bars D D′ are curved in the longitudinal direction of the buckle, as clearly shown in Fig. 1, so as to form an open concave bed for the trace.

e represents the upper rear cross-bar of the buckle, under which the trace passes, and *f* the loop formed with the cross-bar *e* in the usual manner. G is the tongue-plate, hung with its rear end to the cross-bar *e*, and *g* the tongue formed on the under side of the plate G, near its front end. The tongue-plate G is made convex on its under side, so as to press the trace tightly into the open space between the two cross-bars D D′, which form the concave bed of the buckle. The tongue-plate G is curved upward above the rear cross-bar D′, as clearly shown in Fig. 1, to prevent the plate from pressing the trace against this cross-bar.

His the swinging bail hung to the rear end of the hame-tug A, so as to bear upon the tongue-plate G, the side pieces of the bail playing in recesses or depressions on the inner side of the side pieces C of the buckle. The rear end *i* of the tongue-plate, by which the plate is connected with the cross-bar *e*, is cast with open jaws, so as to straddle the cross-bar. After annealing the parts the open jaws of the rear end *i* of the tongue-plate are applied to the cross-bar *e* and closed by pressure, forming what is termed a "cold shut," whereby the tongue-plate is securely connected to the buckle-frame in a very simple and durable manner.

The convex form of the tongue-plate G enables the buckle to hold traces of different thicknesses with equal security, which would not be the case with a flat tongue-plate pivoted to the rear end of the buckle-frame. The convex form of the tongue-plate also serves to force the trace into the open space between the cross-bars D D′, thereby securely holding the trace in place and relieving the tongue *g* to a great extent from the strain of the trace.

In my improved buckle the trace itself is not clamped at any point between two metallic surfaces, and thereby saved from undue compression and too rapid wear.

My improved buckle is readily and cheaply constructed of malleable iron, and very durable, and it is easily adjusted when in use.

I claim as my invention—

The combination, with the bail H attached to the hame-tug, of a buckle-frame provided with an open concave bed, D D′, and the tongue-plate G *g* pivoted to the rear part of the buckle-frame and curved upward to clear the rear cross-piece D′, and then curved down to press the trace into the open space between the cross-bars D D′, substantially as and for the purpose set forth.

EMMIT G. LATTA.

Witnesses:

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