(No Model.)

W. T. NEELANDS.

TRACE BUCKLE.

No. 356,154. Patented Jan. 18, 1887.

Fig. 1.

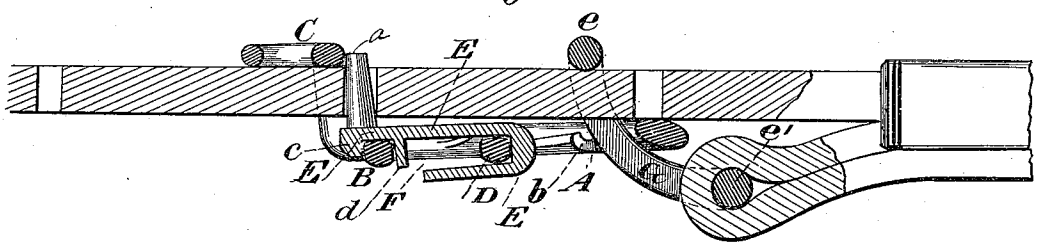


Fig. 2.

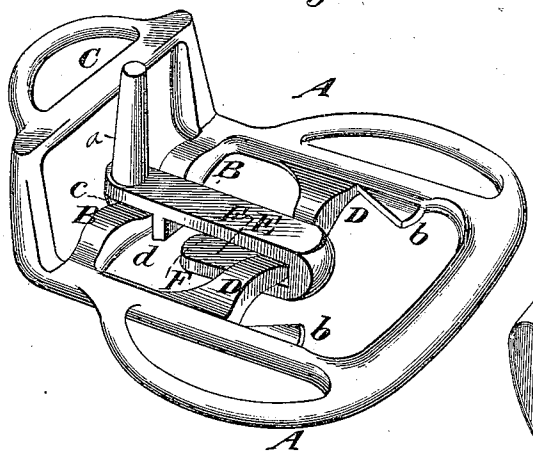


Fig. 3.

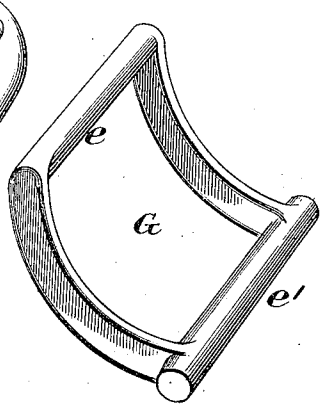
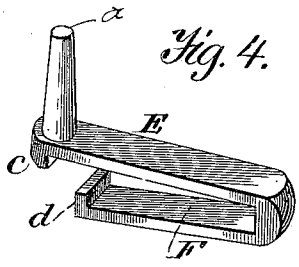


Fig. 4.



Witnesses.
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Alfred T. Gage

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Wm. T. Neelands
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UNITED STATES PATENT OFFICE.

WILLIAM T. NEELANDS, OF ST. MARY'S, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO GEORGE WEIDENBOERNER, OF SAME PLACE.

TRACE-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 356,154, dated January 18, 1887.

Application filed May 15, 1886. Serial No. 202,329. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. NEELANDS, a citizen of Canada, residing at St. Mary's, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in Buckles; 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 appertains to make and use the same.

My invention relates to trace-buckles, and has for its object to so construct the buckle that the trace will pass through it in an almost straight line, in which the strain of the pull on the trace will be distributed on different parts of the buckle, in which the trace can be easily and quickly adjusted, and generally to simplify and increase the efficiency of the buckle; and to such ends the invention consists in the construction and combination of parts hereinafter particularly described and claimed.

Figure 1 is a longitudinal section through the buckle and trace. Fig. 2 is a perspective of the buckle-frame. Fig. 3 is a perspective of the grip. Fig. 4 is a perspective of the tongue.

The letter A indicates the frame of the buckle, formed at one end with the cross-bar B and elevated bar C, and between the bar B and front of the buckle, preferably about midway, with the cross-bar D. The inner faces of the sides of the buckle-frame between the cross-bar D and front of the frame are formed with shoulders *b*. The tongue is composed of the bar E, formed with the longitudinal slot F, open at one end, and the upwardly-projecting pin *a*, to enter the trace-hole. The tongue at the end having the pin *a* is formed with a projection or flange, *c*, and back from the end with a second projection or flange, *d*, which may extend either downwardly, as shown in full lines, or upwardly, as shown in dotted lines in Fig. 2. The tongue is slipped over the middle bar, D, and the projection fits down in rear of the cross bar B and projection *d* in front of said bar. The object of the projections is to limit the longitudinal movement of the tongue.

The grip G is curved and fits within the buckle-frame, bearing against the shoulders *b*, and also against the under side of the front of the frame, and at its forward end is connected to that part of the trace H which connects with the collar or hames. This grip, it will be noticed, is in front of the tongue, and has its bearing on the buckle-frame, so that a large portion of the strain of the pull on the trace is taken from off the tongue and thrown onto the frame.

The portion of the trace which runs from the single-tree passes under the bar C, at which point the pin *a* passes through the hole therein. The trace then passes forward and under the rear bar, *e*, of the grip G, and thence over the front of the frame. Now, when the trace is drawn taut, the front bar, *e'*, of the grip is thrown up and the rear bar, *e*, down on the trace, so as to grip the trace and take some of the strain from off the tongue. At the same time the pin *a* of the tongue bears against the cross bar C and the front of the slotted bar E against the cross-bar D, so that the strain is to some extent thrown onto the bar C.

To adjust the trace it is removed in the direction of the grip G, when the shoulders *b* press against the lower face of the grip and throw its rear end forward, which releases its grip on the trace. Then by moving the trace farther forward the bar E is lifted from engagement with the bar B and slipped forward, so that the trace can then be lifted from engagement with the pin *a* and the latter passed through another hole, after which the parts will be drawn back to their first position, and then the trace is ready for its work.

Having described my invention and set forth its merits, what I claim is—

1. The buckle composed of the frame having a raised bar, C, and provided with a tongue, E, having a pin, *a*, adjacent to said raised bar, and the curved grip passed through the frame in front of the tongue, as shown, with its rear end raised to lie on top of a trace and its sides bearing against the under face of the front of the frame, substantially as described.

2. The buckle-frame formed with cross-bar D and elevated bar C and shoulders *b*, in com-

bination with the sliding tongue having projecting pin *a*, and the grip G, passed through said frame in front of the tongue and shoulders, as shown, substantially as described.

3. The buckle-frame formed with cross-bars D and B, elevated bar C, and shoulders *b*, in combination with the tongue composed of slotted bar E, provided with pin *a*, and projections to engage with bar B, and the grip G, passed through the frame in front of the tongue, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WM. T. NEELANDS.

Witnesses:
F. M. WITTMAN,
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