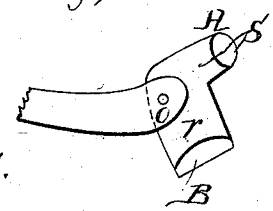
H. Lawrence,

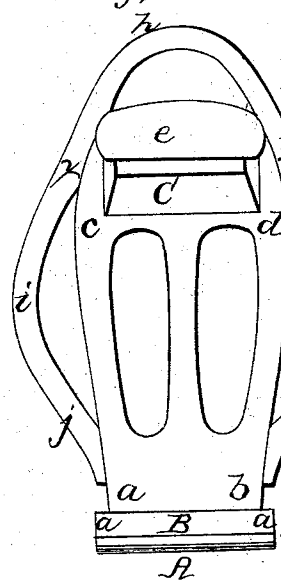
Harness Buckle,

No. 3,662, Patented July 13, 1844.

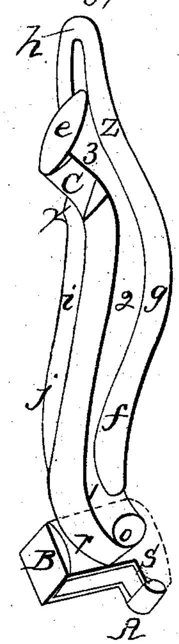
Fig; 3.



Fig; 1.



Fig; 2.



Witnesses,
Hicks Norden
Jno W. Allen

Inventor;
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UNITED STATES PATENT OFFICE.

HENRY LAURENCE, OF MANLIUS, NEW YORK.

BUCKLE.

Specification of Letters Patent No. 3,662, dated July 13, 1844.

To all whom it may concern:

Be it known that I, HENRY LAURENCE, of Manlius, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Buckles, known as the "Compound-Lever Buckle"; and I do hereby declare that the following is a full and exact description of the same.

My invention consists of an improvement in so constructing the buckle as to dispense with the common buckle tongue and provide for holding the tug or strap in the buckle by means of clamping or pinching the same in the buckle. For this purpose I construct the buckle out of brass, iron, or any other metallic substance of sufficient tenacity and durability.

The buckle consists of two pieces called the back piece and the front piece. The back piece is constructed of the proper material composing the main part or body of the buckle as seen in the plate, Figure 1, represented by the letters *a*, *b*, *c*, *d*, *e*, in the drawing hereto annexed and of such size as may be required. It consists of a plate of metal a little curved in form at the ends like the letter **S** as seen in the plate, Fig. 2, 1, 2, 3. At the hinder end of this plate at C, Fig. 1, is an opening or passage for the strap or tug to pass through between the back piece and the loop *e*. This back piece composes the main body of the buckle and is to be of the proper length and width according to the size of the buckle required. Attached to the sides of the back piece and forming part of the same loops may be made for attaching straps to the sides of the buckle of such size as may be desirable, as represented by the drawings of the plate at Fig. 2 and *j*, *i*, *x*. Another loop may also be attached to the hinder part of the buckle for similar purposes as the side loops as represented in the plate by *x*, *h*, *z*.

At the forward end of the back piece I make two pivots inserted into and forming part of the back piece represented in the drawings of the plate by *o*, one projecting from each side of the back piece of sufficient size and strength to hold securely the front piece and so as to allow the front piece, B, *r*, *o*, *s*, A, Fig. 2 to revolve on the pivots.

At the hinder end of the back piece at the opening or passage C through the back piece for the tug or strap to pass through I construct the loop *e*, forming part of the back piece and projecting outward and in front of and across the hinder end of the back piece of the proper size to admit the tug or strap to pass through the opening C so as to keep the tug or strap in its proper place.

The front piece is constructed as follows: It is to be made of the same material as the back piece or any other malleable metallic substance of the proper tenacity and durability one part thereof Fig. 1, B, of the proper length equal to the width of the back piece of the buckle to lie across the forward end of the back piece in front thereof (see plate, Fig. 1, B), and of such width and strength as the tug or strap to be held shall require. (See plate, Figs. 1, 2, and 3, letter B). Attached to this part of the front piece are the side plates or flanges forming part of the front piece as represented in Figs. 2 and 3 of the plate by *r*, *o*, *s*, one on each end of the above described part of the front piece, the outer or front edges of the flanges firmly secured at the ends of the part of the front piece B, so as to pass back or inwardly past the forward end of the sides of the back piece of the buckle.

The side pieces or flanges of the front piece passing inwardly and a little forward of the back piece in an elbow form are connected by a small bar forming a loop at the forward end of the front piece Figs. 1, 2, 3, A, to which to attach the harness or gearing at the forward end of the buckle.

The side plates or flanges are to be constructed with a hole in each at the elbow of the flanges of the proper size as seen in the plate *o*, in which are to be inserted the pivots above described at the forward end of the back piece and on which pivots the front piece is to revolve.

The holes in the flanges are to be made at such distance inwardly from the part of the front piece B, lying across and in front of the back piece as seen between B, and *o*, in Fig. 3 as to form a loop of sufficient width for the tug or strap to be passed through between the back piece and that part of the front piece B lying across and in front of the back piece as seen in the plate *r*, between B, and *o*, Figs. 2 and 3.

In the drawings hereto annexed Fig. 1 is a view of the buckle as seen from the front. Fig. 2 is a side view, and Fig. 3, is a view of a section of the buckle showing the for-

ward end of the back piece of the buckle and of one of the flanges or side parts of the front piece of the buckle.

In Fig. 1, *a*, *b*, *c*, *d*, *e* represent the back piece of the buckle; *f*, *g*, *z* and *j*, *i*, *x*, side loops; *x*, *h*, *z*, loop at the hinder end of the buckle; C, the opening through the back piece made by the loop *c*, *e*, *d*.

A is the bar at the forward end of flanges of the front piece of the buckle which connects them and to which is to be attached the harness or gearing.

B represents that part of the front piece lying in front of and across the forward end of the back piece; *o*, *o*, the pivots at the forward end of the back piece on which the front piece is to revolve.

In Figs. 2 and 3 *r*, *o*, *s* represent the side pieces or flanges of the front piece of the buckle—which front piece is to revolve on the pivots of the back piece at *o*.

The tug or strap being passed through the loop *e*, at the hinder end of the back piece and then through the loop between the forward end of the back piece and that part of the front piece represented by B, on applying the force to the forward end of the buckle at the loop A drawing the front piece forward by that part of the harness or gearing attached to A, the part of the front piece B is drawn inwardly by the revolving of flanges of the front piece on the pivots of the back piece against the back piece, thereby clamping and firmly holding the tug or strap in the buckle.

What I claim as my invention and desire to secure by Letters Patent is—

The construction of the back piece and the front piece of the buckle and the combination of the same on the lever principle as above described causing the said front piece to be pressed firmly against the tug or strap so as to hold the same securely and thus dispense with the common buckle tongue.

HENRY LAURENCE.

Witnesses:
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