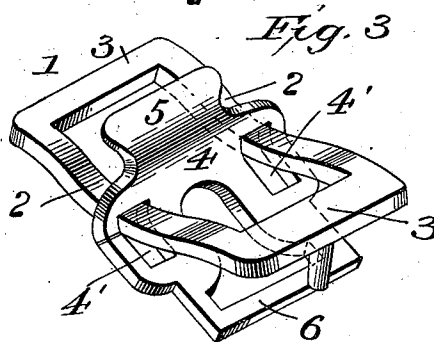
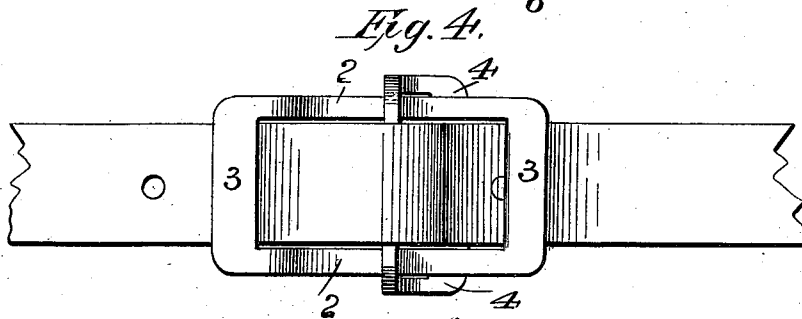
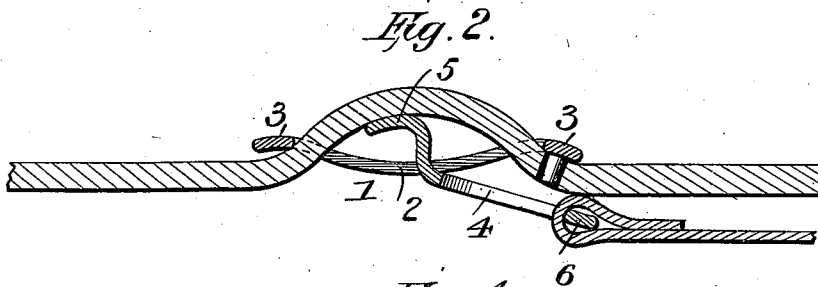
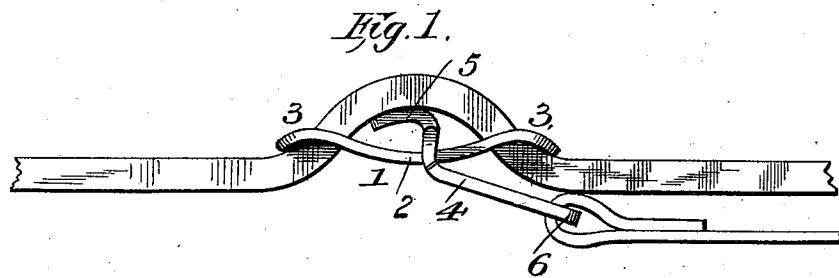


(No Model.)

H. T. RICHMOND.
BUCKLE.

No. 548,274.

Patented Oct. 22, 1895.



Witnesses
H. L. Ouyrand
A. J. Smith

Henry T. Richmond, Inventor
By H. B. Willson, Attorney

UNITED STATES PATENT OFFICE.

HENRY T. RICHMOND, OF MALVERN, IOWA.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 548,274, dated October 22, 1895.

Application filed March 1, 1895. Serial No. 540,187. (No model.)

To all whom it may concern:

Be it known that I, HENRY T. RICHMOND, a citizen of the United States, residing at Malvern, in the county of Mills and State of Iowa, have invented certain new and useful Improvements in Buckles; and I do 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 buckles which may be used in connection with halters, neck-yokes, traces, or in connection with any part of a harness where the strain is great.

The object of my invention is to provide a buckle which will effectively hold the strap of a harness in place, and which shall consist of but few parts, and which may be made at a small cost.

With these objects in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of my improved buckle, showing its application to a trace and tug-strap and the trace securely clamped to the buckle. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is a perspective view of the buckle, the straps being removed therefrom. Fig. 4 is a top plan view.

In the drawings, 1 represents the buckle-frame, which is preferably rectangular in form, comprising the side pieces 2 and the end pieces 3, the sides being curved slightly downward.

4 denotes the lever-plate, which is preferably made of malleable iron and is provided with apertures 4' at its sides to embrace the sides of the buckle-frame. One end of the plate is bent upwardly and has projecting from it a wide friction-lip 5, which is adapted to engage the under side of the strap and form a bend or kink in the same. The opposite end of the plate is provided with a cross-bar 6, to which is attached the tug-strap. It will be noticed that the side walls of the apertures are slit to admit of the plate being engaged with the sides of the buckle-frame. After the parts have been put together these side walls are bent to close the openings, and thereby the parts are permanently connected together and will not fall apart when the

straps are removed. As shown in Figs. 1 and 2, when strain is exerted upon the straps the forward bar of the lever-plate and that of the buckle-frame will act as jaws and thus, in addition to the friction exerted by the lip, serve to securely clamp the trace against slipping. In order, however, to positively guard against any slipping of the trace, I provide the end wall of the buckle-frame with a stud to engage a hole in the trace. This is not absolutely necessary, for I have found in practice that the clamping action of the buckle-frame and lever-plate is sufficient to accomplish this, and I only employ the stud as a safeguard, and would have it understood that I do not wish to be restricted to its use.

I would also have it understood that although I have described my invention in connection with a tug and trace that I contemplate the employment of the buckle in connection with any part or parts of harness or straps to which it may be applied.

What I claim, and desire to secure by Letters Patent, is—

1. The combination with a buckle frame comprising side and end pieces, of a lever plate having openings in its sides to receive the side pieces of the buckle frame and provided at one end with an upwardly projecting lip and at its opposite end with a cross bar, which in conjunction with one of the end pieces of the buckle frame, form frictional locking jaws, substantially as set forth.

2. The combination with a buckle frame rectangular in form, having its side pieces curved downward and provided at one of its end pieces with a downwardly projecting stud, of a lever plate, having apertures in its sides to engage the side pieces of the buckle frame and permanently connect the same thereto, said lever plate provided at one end with an upwardly projecting lip and at its other end with a cross bar, which in conjunction with one of the end pieces of the buckle frame form frictional locking jaws, substantially as set forth.

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

HENRY T. RICHMOND.

Witnesses:

FRANK ROBBINS,
J. E. SKADAN.