No. 735,650. PATENTED AUG. 4, 1903.

M. E. ZELLER.

HARNESS BUCKLE.

APPLICATION FILED MAR. 4, 1903.

NO MODEL.

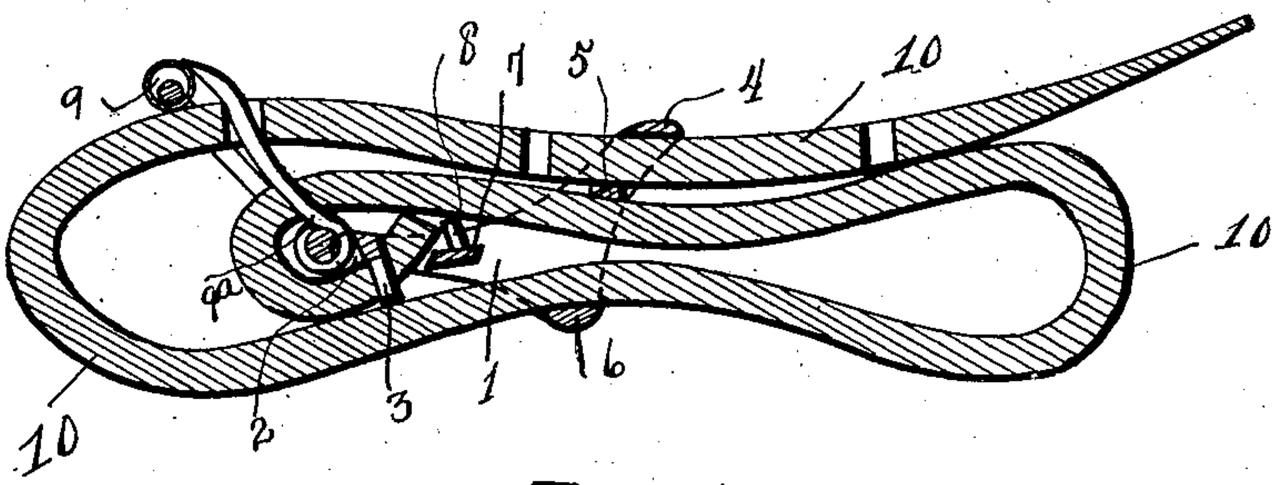

Fig. 1.

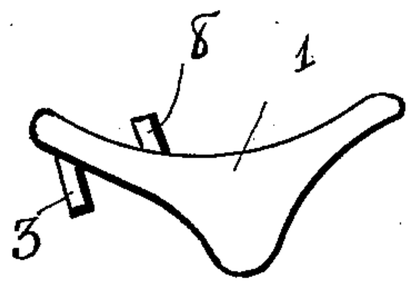

Fig. 2.

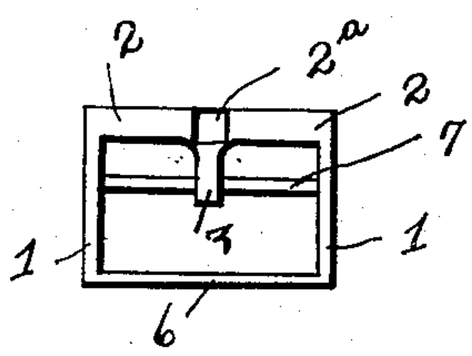

Fig. 3.

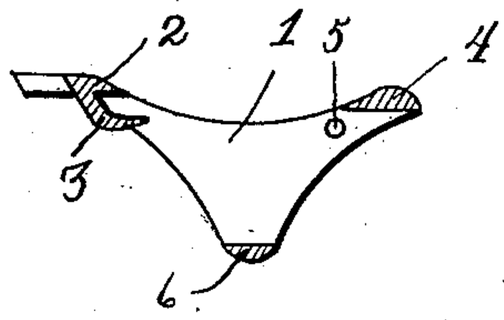

Fig. 4.

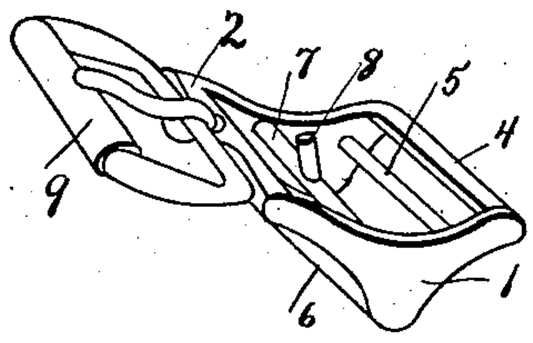

Fig. 1a.

Witnesses
Everett C Palmer
Geo. A. Hutchinson.

Inventor
M. E. Zeller.
By Joseph R. Edson
Attorney

No. 735,650. Patented August 4, 1903.

UNITED STATES PATENT OFFICE.

MELANCTHON E. ZELLER, OF BLUFFTON, OHIO.

HARNESS-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 735,650, dated August 4, 1903.

Application filed March 4, 1903. Serial No. 146,188. (No model.)

To all whom it may concern:

Be it known that I, MELANCTHON E. ZELLER, a citizen of the United States, residing at Bluffton, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Harness-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 certain improvements generally in harness-buckles, more particularly, however, to strap-fasteners.

The object of said invention is especially to dispense with the riveting of the parts in effecting the desired connections therebetween, to promote facility in making such connections, also to simplify the construction and arrangement of the parts, thus lessening the cost of manufacture, &c.

The nature of said invention consists of the combination of parts, including their construction and arrangement, substantially as hereinafter more fully disclosed and specifically pointed out by the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a longitudinal section thereof. Fig. 1ª is a perspective view of the frame and buckle extended with the strap detached. Fig. 2 is a detached view of the loop portion. Fig. 3 is an end view of said latter part. Fig. 4 is a modification.

Latitude is allowed herein as to details, as the same may be changed as circumstances suggest without departing from the spirit of my invention and the same remain intact and be protected.

In carrying out my invention I produce a loop or frame 1, preferably of the construction shown, being substantially of bell-crank or analogous form in its general outline, thus being adapted when operatively connected up with the other parts, presently described, to normally have its angle or vertex intermediate of its end portions. Also it will be noted that the arms of the bell-crank are preferaby of unequal length, the longer one having the forward end cross-bar 2, said cross-bar having, preferably through its outer edge, about centrally thereof, a recess 2ª, the purpose of which will presently appear. Projecting downwardly, also about centrally, from said cross-bar is the stud or tongue 3, preferably arranged about at an acute angle to the general plane of said frame or loop, being directed inwardly, said stud being for the purpose of engaging or passing through a hole near one end of the strap, also more particularly referred to later on, as a means for securing said strap at that end thereof to said frame or loop. Said frame or loop has at its opposite end a second cross-bar 4 and a short distance inwardly therefrom a parallel cross-bar 5, the function of which will be presently seen, and also about centrally of said frame or loop at its vertex or angle is a fourth cross-bar 6. Also intermediately of said cross-bar 6 and the end bar 2 is still another cross-bar 7, having about centrally of its upper surface a stud or tongue 8 for additionally securing the strap, if desired, but which may be omitted and not impair the efficiency of the fastening. Said cross-bar, with its tongue-bar 7, is arranged quite closely to the forward end bar 2 in order to engage the strap.

A buckle 9 of ordinary form has its tongue 9ª adapted to rest at its inner pivoted end in the recess 2ª of the cross-bar 2, such adjustment of parts having the tendency to retain the buckle, with its tongue, in proper relation to the frame or loop 1. The strap 10, above referred to, is secured near one end, as stated, to the stud or tongue 3 and thence passed through the buckle 9, with a slit or opening to permit the passage of the tongue of said buckle therethough, said strap being passed through the frame or loop 1, past the tongue cross-bar 7, and under the inner cross-bar 5 and formed into a loop. Said strap is next passed inwardly between the central cross-bar 6 and the previously-secured end of said strap, thus binding the parts together, and again passed through said buckle for the engagement with the desired hole in said strap of the tongue of said buckle, said strap being finally passed between the opposite or distant end cross-bar 4 and the inner cross-bar 5, lapping upon itself.

It will be observed that in the modification as disclosed in Fig. 4 I may construct the strap-end-securing tongue or stud, as above described, in the form of a hook or bend, as at 10, with its free end engaging the strap

laterally. The end cross-bar stud or tongue may be either straight, as first described, or bent, as disclosed in said modification, as preferred.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination of a loop or frame having end cross-bars, an intermediate cross-bar arranged out of the plane of said end cross-bars, an inner cross-bar, having a stud projecting upwardly, arranged between said intermediate cross-bar and one of the end cross-bars, said last-named end cross-bar having a downwardly-projecting stud, a buckle bearing against said frame or loop and a strap connected up with the aforesaid parts.

2. In a device of the character described, the combination of a loop or frame having end cross-bars, an intermediate cross-bar arranged out of the plane of said end cross-bars, an inner cross-bar, having a stud projecting upwardly, arranged between said intermediate cross-bar and one of the end cross-bars, said last-named end cross-bar having a downwardly-projecting stud, a buckle bearing against said frame or loop and a strap with one end connected to the stud of said end cross-bar and locked in place by the stud of the inner cross-bar, thence passed through said buckle, with the tongue of said buckle passing through said strap, thence passing through said frame and looped beyond, it thence being again passed through said frame and again passed through said buckle and engaged with the tongue thereof and finally passed under the distant end cross-bar of said frame.

3. In a device of the character described, the combination of a loop or frame having end cross-bars, a cross-bar arranged in a plane intermediately of said end cross-bars, one of said end cross-bars having a stud or tongue projecting therefrom, a buckle adapted to bear upon said frame, and a strap with one end connected to said stud or tongue, thence passed through said buckle, with the tongue of said buckle passing through said strap, thence passing under an inner cross-bar of said frame and looped beyond said frame, it thence being passed within the intermediate bar of said frame, and again passed through said buckle and engaged with the tongue thereof and finally passed under the distant end cross-bar of said frame.

4. In a device of the character described, the combination of a loop or frame having end cross-bars, an intermediate cross-bar arranged out of the plane of said end cross-bars, an inner cross-bar, having a stud projecting upwardly, arranged between said intermediate cross-bar and one end of the end cross-bars, said last-named end cross-bar having a downwardly-projecting stud, a buckle bearing against said frame or loop and a strap connected up with the aforesaid parts, said stud-bearing end cross-bar having a recess in which the tongue of said buckle rests.

5. In a device of the character described, a strap-carrying loop or frame having a fixed tongue or stud engaging the strap and arranged contiguously to the end bar of said frame forming a bearing for the buckle-tongue-carrying bar, said frame also having a cross-bar arranged contiguously to said stud and in a plane intercepting said stud intermediately of its ends and forming a bearing for the inner free end of the strap, whereby said strap is adapted to be looped through the buckle and passed in contact with said end of strap, for securing said buckle in place upon said frame.

6. In a device of the character described, a strap-carrying loop or frame having one of its end bars adapted to form a bearing for the buckle-tongue-carrying bar, a fixed tongue or stud engaging the strap and arranged close to said end bar and a cross-bar arranged close to said stud and in a plane intercepting said stud intermediately of its ends and forming a bearing for the inner free end of the strap, whereby said strap is adapted to be looped through the buckle and passed in contact with said end of strap.

7. In a device of the character described, a strap-carrying loop or frame of bell-crank contour, having end bars, one adapted to form bearing for the buckle, an intermediate cross-bar arranged out of the plane of said end bars, a cross-bar arranged between said intermediate cross-bar and one of said end bars, a fixed tongue or stud engaging the strap and arranged close to the end bar forming a bearing for the buckle-tongue-carrying bar, and a cross-bar arranged close to said stud and in a plane intercepting said stud intermediately of its ends, and forming a bearing for said strap at its inner free end, whereby said strap is adapted to be looped through said buckle and passed in contact with said end of strap.

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

MELANCTHON E. ZELLER.

Witnesses:
SOTHARD ALTHOUS,
HENRY L. ROMEY.