(No Model.) 2 Sheets—Sheet 1.

A. E. McCLURE.

BUCKLE.

No. 519,542. Patented May 8, 1894.

Fig. 1.

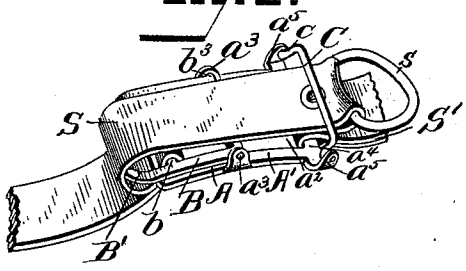


Fig. 2.

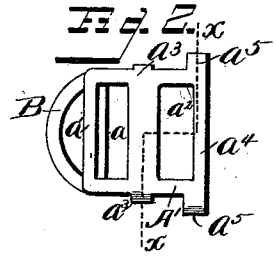


Fig. 3.

Fig. 4.

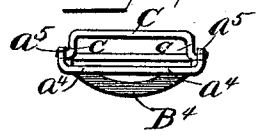


Fig. 5.

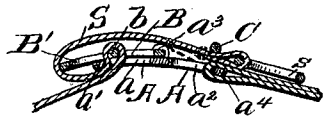
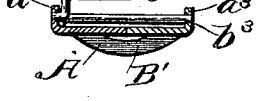


Fig. 6.



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(No Model.) 2 Sheets—Sheet 2.

A. E. McCLURE.

BUCKLE.

No. 519,542. Patented May 8, 1894.

Fig. 7.

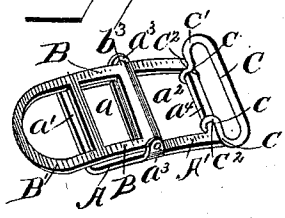


Fig. 8.

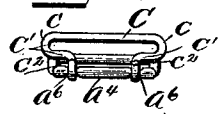


Fig. 9.

Fig. 10.

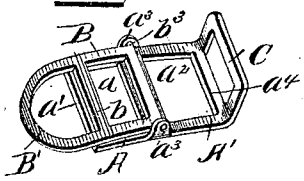


Fig. 11.

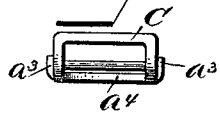


Fig. 12.

Fig. 13.

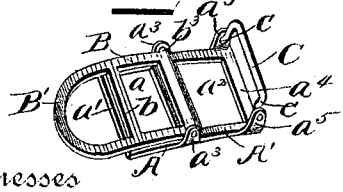
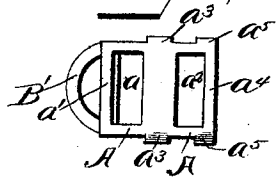


Fig. 14.



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UNITED STATES PATENT OFFICE.

ALBERT E. McCLURE, OF SEDALIA, MISSOURI, ASSIGNOR TO THE McCLURE MANUFACTURING COMPANY, OF SAME PLACE.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 519,542, dated May 8, 1894.

Application filed August 13, 1892. Serial No. 442,980. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. McCLURE, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Buckles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain improvements in that class of buckles which dispense with the ordinary teeth, prongs or other devices which perforate the material secured by the buckle, and it has for its object to provide a simple and improved buckle of this class which will possess advantages in point of inexpensiveness and simplicity in construction, ease of adjustment and operation, durability and general efficiency, which will provide for the convenient and secure retention of the free end of the strap after it is passed through and secured by the buckle, and which will thus be structurally adapted for use for a great variety of purposes and in various positions and arrangements.

To these ends, my invention consists in certain improvements in the construction and arrangement of parts, substantially as will be hereinafter fully described and specifically pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a buckle embodying my improvements. Fig. 2 is a bottom or plan view of the under side of the same. Fig. 3 is a side view. Fig. 4 is a rear end view. Fig. 5 is a longitudinal sectional view. Fig. 6 is a transverse sectional view on the line x—x, Fig. 2. Fig. 7 is a perspective view illustrating a modification. Fig. 8 is a rear view of the buckle shown in Fig. 7. Fig. 9 is a longitudinal sectional view of the modification shown in Figs. 7 and 8. Fig. 10 is a perspective view illustrating another modification. Fig. 11 is a rear view of the modification shown in Fig. 10. Fig. 12 is a longitudinal sectional view of the modification shown in Figs. 10 and 11. Fig. 13 is a perspective view illustrating another modification. Fig. 14 is a bottom or plan view of the under side of the modification shown in Fig. 13.

Corresponding parts in all the figures are denoted by the same letters of reference.

Referring to the drawings, A designates a base plate, comprised in my improved buckle, which is provided with an open front portion, as shown at a, forming a cross bar, a', at the front end of the plate. The base plate has a rear portion, A', which may be provided with a corresponding open portion, as shown at a^2, forming a rear cross bar, a^4, the purpose of which will be presently described. The base plate is provided with projecting ears or lugs, a^3 a^3, which may be bent up from the plate A and are located at the sides of the same preferably at a point about the center of the plate and between the open portions a and a^2.

B designates an upper link or member, which is provided with extensions or projections, b^3 b^3, at its rear end, which projections have a pivotal bearing in the ears or lugs of the base plate. The upper link B may be pivoted or hinged upon the base plate in this or in any other suitable manner, and the link B is divided by a cross bar, b, into two portions, a main portion and an outer projecting portion, B'. The link B is of an open or skeleton form and is relatively mounted upon the base plate so that the cross bar b operates in conjunction with the cross bar a' of the base plate while the outer portion B' of the pivoted link projects outwardly beyond the point of juncture of the cross bar b and the cross bar a' and forms a free lifting end by which the link may be readily raised to permit of the adjustment of the strap.

At the rear end of the base plate A is pivoted a link, C, which may be formed of an approximately U-shaped bail of wire having its ends, c c, bearing in upwardly projecting ears or lugs, a^5 a^5 formed at the sides of the rear end of the base plate and practically forming an extension of the rear cross bar a^4. The base plate is preferably widened at its rear end, (as illustrated in Figs. 1 to 6, inclusive,) so that the ears or lugs a^5 a^5 are on a plane outside the position of the main ears or lugs a^3 a^3, which permits of the link C being wider than the width of the main open portion a and the length of the cross bar b of the main pivoted link or member B, the purpose of which will be hereinafter set forth.

In practice, the free end of the strap, S, is passed upwardly through the opening *a* in the base plate, then over the cross bar *b* and downwardly again through the opening *a*, from which it is carried forwardly from the buckle, so that the strap bears upon the cross bar *b* and the cross bar *a'* and is securely bound. By lifting the link member B, the strap is loosened so that it may be readily adjusted. Upon the free end of the strap S is secured in any suitable manner a ring, as shown at *s*, or any other suitable retaining device which is of a relative diameter sufficient to obviate the accidental slipping of the free end of the strap from engagement with the buckle but which may at the same time permit of the passage of the same through the buckle when desired. For this purpose the ring or other retaining device *s* exceeds in diameter or length the width of the opening *a*.

My present invention is especially designed for application upon rubber boots and shoes, leather shoes, or any similar positions and arrangements, though it is manifestly adapted for efficient use for various other purposes, and when applied in position it may be secured by means of a strap S', passed around the rear cross bar a^4 and having its ends secured to the shoe or other device by an eyelet or in any other suitable manner. When the free end of the strap S is secured by the buckle, the projecting end carrying the ring or retaining device *s* is then passed through the rear link C (see Fig. 1) and the pivoted link C may thus be drawn down to a flat position, thus retaining the free end of the strap and preventing the same from swinging or flapping about the foot of the wearer. The width of the link C being greater than the width of the opening *a*, as above set forth, the passage of the free end of the strap with the retaining device *s* is readily permitted. Under some circumstances, the retaining device *s* may be omitted, and the increased width of the rear link C may also be dispensed with under certain conditions, as desired. The latter modification is illustrated in Figs. 13 and 14 of the drawings, in which the rear ears or lugs a^5 a^5 are simply bent up at the sides of the base plate in substantially the same manner and on the same plan as the main ears or lugs a^3 a^3, so that the width of the rear bail or link C is approximately the same as the width of the opening *a* at the front portion of the base plate.

In Figs. 7, 8 and 9, I have illustrated a modification in which the rear link C is mounted upon the rear cross bar a^4 in lieu of being mounted in ears or lugs at the sides of the base plate. In this construction, the ends *c c* of the wire bail or link C are bent or turned inwardly, as shown at *c'*, and then bent to form eyes c^2 c^2, which embrace the cross bar a^4 and have a pivotal bearing thereon, the cross bar a^4 being preferably reduced at the point of bearing for the eyes c^2, as shown at a^6, to prevent springing of the ends of the wire bail C and the consequent displacement of the same from their proper bearings. In this construction of my improved buckle, the width of the rear link C can be made considerably larger than the width of the open portion *a* to accommodate various constructions of retaining devices upon the free end of the strap, which may be used.

In Figs. 10, 11 and 12, I have illustrated another modification in which the rear link C is formed integral with the base plate A, in lieu of being formed by a separate bail or wire. In this construction, the base plate is extended beyond the rear cross bar a^4 and drawn upwardly or outwardly, as shown, this projecting end portion being of an open or skeleton form corresponding to the link C when formed in a separate piece of wire.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains, and while I prefer to form the main members of my improved buckle of plate metal it is manifest that they may be formed of wire or in any other suitable manner.

I do not herein specifically claim the integral fixed rear retaining link or the pivoted rear retaining link having the eyes embracing the rear cross-bar, the said specific constructions forming the subject-matter of separate applications for patent, Serial Nos. 480,176 and 480,177, respectively, filed July 11, 1893.

In adapting my present invention for use in various positions and arrangements, manifest modification may be made in the detail construction and arrangement. I therefore reserve the right to all such variations or modifications as properly fall within the spirit and scope of my invention and the terms of the claims.

Having thus described my invention, I claim—

1. The herein described improved buckle, comprising the base plate A having the openings *a* and a^2 forming the end cross bars *a'* and a^4 and provided with the projecting ears or lugs a^3 and the projecting lugs a^5 at its rear end, the upper link or member B pivotally mounted in the ears or lugs a^3 and having the dividing cross bar *b* and the outer projecting portion B', and the rear link or bail C extending across the rear end of the base plate and having its ends pivotally mounted in the ears or lugs a^5, substantially as and for the purpose set forth.

2. An improved buckle, comprising a base plate provided with an open front portion, as at *a*, and widened at its rear end, substantially as set forth, ears or lugs, as at a^5, being provided at its widened portion, an upper link or member pivotally connected with the base plate at a point in rear of the opening *a* and having a cross bar adapted to operate in conjunction therewith, and a wire link or bail, C, of approximately U-shape and extending

across the rear end of the base plate and having its ends pivotally mounted in the ears or lugs a^5, the length of the rear link C being thus greater than the width of the opening a, substantially as and for the purpose set forth.

3. As an improvement in buckles, the combination of a base plate provided with an open front portion, as at a, and a rear cross bar, as at a^4, an upper link or member pivotally mounted upon the base plate at a point in rear of the opening a and provided with a cross bar operating in conjunction with said opening, a widened rear link mounted at the rear end of the base plate, securing devices connected with the cross bar a^4 and adapted to secure the buckle in place, and a strap passing through the opening a and over the cross bar of the upper link and provided at its free end with a ring or equivalent retaining device, the retaining device being greater in width than the opening a and the rear link being adapted to permit the passage of the retaining device and receive and secure the free end of the strap when the latter is secured by the buckle, substantially as set forth.

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

ALBERT E. McCLURE.

Witnesses:
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M. J. McMAHON.