J. STAGGS.

FASTENER.

APPLICATION FILED FEB. 3, 1912.

1,067,281. Patented July 15, 1913.

Fig. 1.

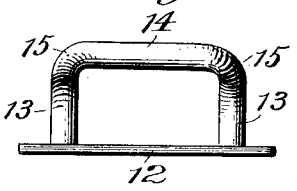


Fig. 2.

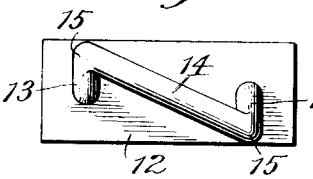


Fig. 3.

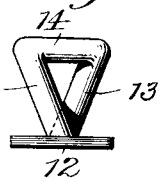


Fig. 4.

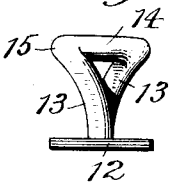


Fig. 5.

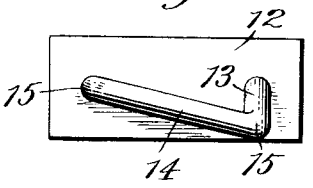


Fig. 6.

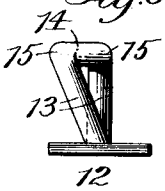


Fig. 7.

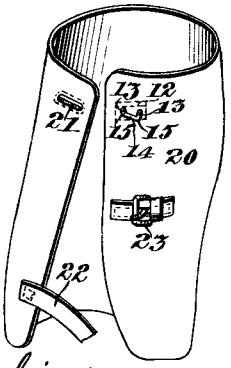
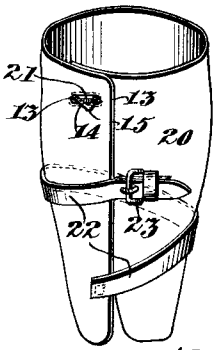


Fig. 8.



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UNITED STATES PATENT OFFICE.

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FASTENER.

1,067,281. Specification of Letters Patent. Patented July 15, 1913.

Application filed February 3, 1912. Serial No. 675,268.

To all whom it may concern:

Be it known that I, JOHN STAGGS, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention provides a fastener that will reliably hold two meeting parts or portions of an article together, and that will not unduly distend and eventually misshape a buttonhole or slot with which it coöperates.

The fastener is particularly adapted for use on leggings and other articles made of leather or other comparatively stiff material.

When read in connection with the description herein, the details of the invention will be apparent from the accompanying drawings, forming part hereof, wherein embodiments of the invention are shown in detail and as applied to a legging, for purposes of illustration.

While the embodiments of the invention shown herein are preferred, as they have given satisfactory results in practice, it is to be understood that it is not the intention to be necessarily confined thereto in interpretation of claims hereinafter, as changes in the forms shown can be made within the limits of the claims, without departing from the nature and spirit of the invention.

Like reference-characters refer to corresponding parts in the views of the drawings, of which—

Figure 1 is a side view of one form; Fig. 2 is a top view thereof; Fig. 3 is an end view thereof; Fig. 4 is an end view of another form; Fig. 5 is a top view of still another form; Fig. 6 is an end view thereof; Fig. 7 is a view of a legging equipped with the fastener and in position for the buttonhole to be brought over the fastener; and Fig. 8 is a view of the legging fastened.

Referring more particularly to the drawings, 12 designates the base of the fastener, which may be of any suitable form such as a plate as shown.

In the forms shown by Figs. 1 to 6, inclusive, the fastener includes a somewhat elongated retaining portion formed of a substantially rectangular loop, of wire-like rigid material, upstanding from, and with its ends soldered to, the base, the loop consisting of uprights 13 and a cross-bar 14 substantially parallel to the base. The invention contemplates the shaping of the parts in such manner that the cross-bar 14 and the bends or corners 15 between the bar and the uprights 13, or the outer edge and corners of the sheet material, will be deflected from a perpendicular plane in which the junctions of the uprights, or of the lower edge of the sheet material, and the base lie, in order that a button-hole or slot so formed in comparatively stiff sheet material that it lies normally in the same line as the junctions of the retaining portions with the base will be held on the fastener by the deflected parts. Figs. 1, 2, and 3 show the uprights 13 continuously deflected straight from the base, one to the right and one to the left; Fig. 4 shows the uprights continuously curved from the base in direction of deflection to the bends 15; and Figs. 5 and 6 show only one upright deflected, the other upright being substantially at right angles to the base. It is to be understood, of course, that in the form exemplified by Figs. 5 and 6 the one upright that is deflected may be curved as shown in Fig. 4. It will be seen that in all of these forms the cross-bar portion or outer edge and the bends connecting that portion to the uprights are deflected from position over the junctions of the uprights with the base; and that the stiffness of the material on which the fastener is used will prevent the distortion of the buttonhole or slot necessary to detach the same from the fastener, it being necessary to bodily "twist" the material, as shown by Fig. 7, to make or break the fastening.

In all the forms of the invention shown herein, in which the outer portion of the retaining part of the fastener is deflected from the line of junction of the retaining parts with the base, the configuration is such that there are no lateral projections from a line or plane drawn from one point of deflection to another point of the retaining part. It will thus be seen that, when the material having a buttonhole or slot therein is "twisted" to bring the buttonhole or slot in line with the cross-bar or outer edge of the fastener, it may be passed thereover and gradually returned to its normal position as it is passed down toward the base, without being subject to distortion by any laterally-projecting parts as is the case with many forms of fasteners that grad-

ually wear buttonholes or their equivalents until they are useless.

The application of the fastener to an article is illustrated by Figs. 7 and 8, wherein 20 designates the body portion of a legging, which when fastened has its meeting portions lapped in the usual manner. The overlapping portion has therein a buttonhole or slot 21, and the fastener is attached to the lapped portion in a position to coöperate with the buttonhole or slot to hold the legging fastened. The buttonhole or slot is disposed so that it will normally lie in a line coincident with the line of junction between the base and retaining portion of the fastener and out of line with the cross-bar or outer edge when the parts are lapped. When it is desired to bring the buttonhole or slot into engagement with the fastener to hold the parts together, the portion of the article having the buttonhole or slot therein is turned or twisted to bring the latter in line with the cross-bar or outer edge, as shown by Fig. 7, and then the buttonhole or slot is easily passed thereover and the material pressed toward the base to the position shown by Fig. 8, during which movement the material will be turned gradually back to its normal position and the buttonhole or slot will not be subject to distortion by contact with lateral projections. The parts are disconnected by reversing this movement.

It is necessary to make the buttonhole or slot only a little, if any, longer than the length of the cross-bar or outer edge of the retaining portion of the fastener, because of the fact that that portion is devoid of any projections that will widen the buttonhole or slot when passing onto or from the fastener.

By the use of this fastener, a legging may be formed with a strap that extends only from a place intermediate the top and bottom to the bottom or top, the function of one of the usual extensions to both top and bottom being performed by the fastener. For example, if the fastener is located near the top, as shown by Figs. 7 and 8, a strap 22 is attached at one end to the lapping portion near the bottom and brought around the legging to a buckle or the like 23 attached to the lapped portion about midway between the top and bottom, whereby the lower portions of the legging are held together, and the upper portions are held in place by the fastener. Of course, a plurality of buttonholes or slots may be formed in the lapping portion, if desired, to permit adjustment of the legging to legs of different sizes.

It is preferable that the fastener be so placed on the legging that, when parts of the legging distant from the fastener are drawn together after the latter has been engaged by the buttonhole or slot, the resulting twist in the material shall be in a direction opposed to the direction of deflection of the retaining portion of the fastener, in order that the material around the buttonhole or slot shall be turned under the deflected parts, rather than from under them as would be the case if the deflection was in the opposed direction. For example, if the fastener is placed near the top of the legging, as in Figs. 7 and 8, the line of the cross-bar or outer edge of the retaining portion should slope downwardly away from the outer edge of the lapped portion of the legging, in order that, when the lower parts of the legging are drawn together by the strap, the twist shall be in a direction opposed to the angle of the cross-bar or outer edge and the material around the buttonhole or slot given an increased tendency to remain under the deflected portions of the fastener. In other words, it is preferable that the twist incident to turning the buttonhole or slot toward the base of the fastener should be the same that is incident to drawing the other parts of the legging together.

The uprights 13 may be roughened or corrugated, if desired, to increase the retentive power of those parts.

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

1. A fastener comprising a base, and a retaining portion of wire-like material bent to form a somewhat elongated substantially rectangular loop having uprights secured to the base and a cross-bar joining the uprights, one of the uprights being deflected continuously from the plane perpendicular to the base and passing through the uprights as it rises from the base, whereby the cross-bar is placed at an angle to said perpendicular plane.

2. A fastener comprising a base, and a retaining portion of wire-like material bent to form a somewhat elongated substantially rectangular loop having uprights secured to the base and a cross-bar joining the uprights, one of the uprights being deflected in one direction and the other upright in the opposite direction continuously from the plane perpendicular to the base and passing through the uprights as it rises from the base, whereby the cross-bar is placed at an angle to said perpendicular plane.

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

JOHN STAGGS.

Witnesses:
ARTHUR G. OLIVER,
CURTIS M. MUSGRAVE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."