

May 15, 1951

A. J. GORE
ADJUSTABLE LOCKING BUCKLE

2,552,957

Filed Feb. 9, 1949

FIG. 1

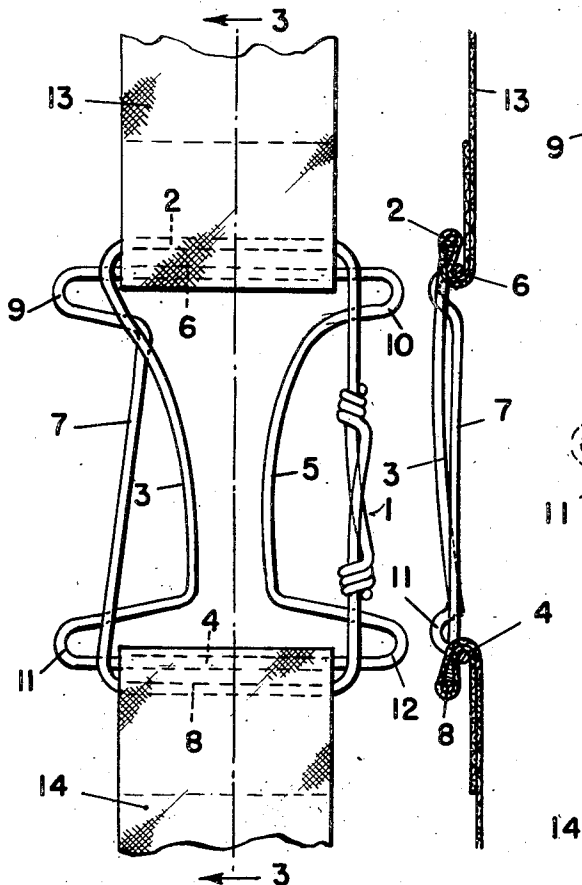


FIG. 3

FIG. 2

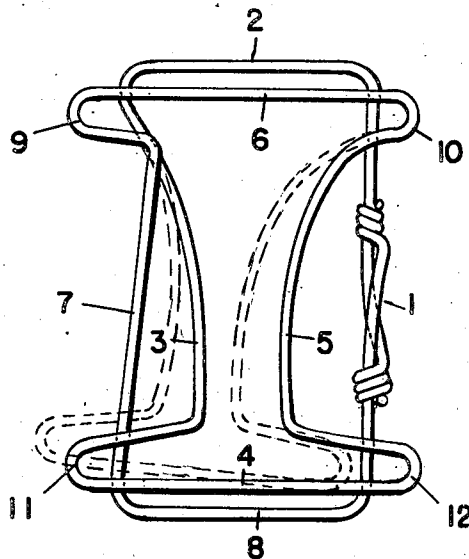


FIG. 4

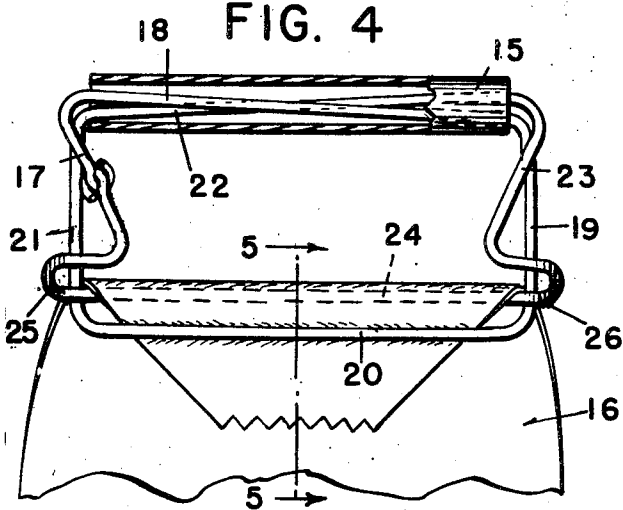
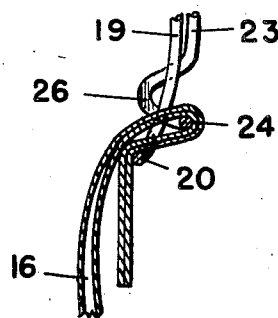


FIG. 5



INVENTOR.
ALBERT J. GORE,
BY *James M. Drysdale*
Attorney

UNITED STATES PATENT OFFICE

2,552,957

ADJUSTABLE LOCKING BUCKLE

Albert J. Gore, Washington, D. C.

Application February 9, 1949, Serial No. 75,371

3 Claims. (Cl. 24-74)

1

This invention relates to buckles and more particularly to a double adjustable locking buckle having at each end a means for clamping a strap or belt.

This invention is an improvement on applicant's former patent, No. 2,430,928 November 18, 1947. Applicant's patent shows a buckle attached to one end of a strap and having at its opposite end a clamping device adapted to coact with a fabric or cloth such for example as the top of a stocking.

One of the objects of the present invention is to provide a buckle formed of a single piece of wire and which is adapted to grip at each end a strap or band such, for example, as a girdle or bands such as used on vests or like articles of clothing.

Another object of this invention is to provide a modified form of the device of larger size having a tube like handle at one end and the other end adapted to grip a bag or like article so that the same may be conveniently carried.

A further object is to provide a buckle of the above character which will be reliable and efficient in use and operation and dependable in that it will not release the fabric until manipulated with that intention.

With the above and other objects in view which will be apparent to those skilled in the art, my invention includes certain novel features of construction which will be hereinafter set forth in connection with the drawings and then pointed out in the claims.

Fig. 1 is a front elevation showing each end of the buckle attached to a band.

Fig. 2 is a front elevation showing in dotted lines the lateral play or oscillation of the shoulders or projecting portions.

Fig. 3 is a sectional view taken substantially on the line 3-3 of Fig. 1.

Fig. 4 is a front elevation, with the tube like handle partly in section, of the modified form of the device.

Fig. 5 is a sectional view on line 5-5 of Fig. 4.

Referring to the drawings in detail and more particularly to Figure 1, the buckle is illustrated as gripping a cloth band at each end. The buckle is made from a continuous piece of wire of the proper resiliency and flexibility to permit its easily being manipulated without distortion. The wire starts at the joint 1, extends upwardly and then transversely across the top of the buckle at 2 thence downwardly at 3 to the lower side 4, thence upwardly at 5 then again transversely across the top of the buckle at 6, thence down-

2

wardly at 7, thence transversely across the bottom of the buckle at 8 and thence upwardly to the joint 1.

It will be observed that the buckle is provided with four shoulders or projecting portions, 9, 10 at the top of the buckles and 11, 12 at the bottom. These shoulders are necessary to assure a firm gripping of the strap as will be explained.

In attaching the strap to the upper portion of the buckle, the buckle is held in the hand in the position shown in Fig. 2, the strap end 13 is then passed downwardly between the projecting portions 9 and 10 thence under and over portion 2 thence between the portion 2 and the portion 6. The strap is then drawn to the desired position and locked by oscillating the clamp or oscillator formed by the parts 9, 6 and 10 as indicated by dotted lines in Fig. 2 and threading it through the loop formed by length 3, 4.

When in locked position, the arms 9 and 10 bear against the vertical portions 3 and 1 as clearly shown in Fig. 1.

Likewise in attaching the strap to the lower portion of the buckle, the strap end 14 is passed downwardly between the projecting portions 11 and 12 in the position shown in Fig. 2 thence under and over portion 8, thence between the portion 8 and the portion 4.

The strap is then drawn to the desired position and locked by oscillating the clamp or oscillator formed by the parts 11, 4 and 12 as indicated by dotted lines in Fig. 2 and threading the same through the loop formed by sides 7, 1 in the position shown in Fig. 1.

When in locked position the arms or projections 11 and 12 bear against the vertical portions 7 and 1 as shown in Fig. 1.

As clearly illustrated, the projecting portions 9, 10, 11 and 12 in Fig. 2 all appear on the upper surface of the buckle before the strap ends are attached and after the strap ends are attached and locked, the projecting portions 9, 10, 11 and 12 appear on the lower surface of the buckle bearing against the vertical portions 1, 3 and 7 as above described and as shown in Fig. 1.

Thus in order to securely lock the strap 13 after it is drawn to the desired position one of the loops is made shorter and narrower at the side and wider at the free ends than the other, the wide portions of said loop forming shoulders or projections 9 and 10. These shoulders or projections and their connecting portion 6 comprise an oscillator which is first oscillated to one side and then to the other side thereby shifting it through the adjacent loop into locked position as

3

shown in Fig. 1. In this position the shoulders or projections 9 and 10 appear on the opposite side of the vertical portions 3 and 1 to that shown in Fig. 2.

To securely lock the strap after it is drawn to the desired position, the oscillator formed by the projections 11 and 12 and their connecting portion 4 is first oscillated to one side and then to the other side thereby shifting it through the adjacent loop into locked position as also shown in Fig. 1. Likewise in this position the shoulders or projections appear on the opposite side of the vertical portions 3 and 1 to that shown in Fig. 2.

The modification shown in Fig. 4 shows a larger device provided with a handle 15 at one end and means for gripping a bag 16 or like article to be carried. The device is constructed of a single piece of heavy, resilient wire. The wire starts at the joint 17 passes upwardly and then transversely across the top as at 18, thence downwardly as at 19, thence transversely across the bottom as at 20, thence upwardly as at 21, thence transversely across the top as at 22, downwardly as at 23, thence transversely across the bottom as at 24 and thence upwardly to the joint 17.

To firmly attach the handle to the bag, the end portion of the bag is folded then passed in an upward direction adjacent the bar 24, thence over the bar 24 and drawn downwardly beneath the bar 20.

It will be observed that this device is provided with shoulders or projecting portions 25, 26. These shoulders are bent inwardly toward the side, portions 19 and 21 and the bar 20 is also bent relative to the side portions 19 and 21 in the same direction as the shoulders are bent.

The bending inwardly of the bar 20 above described effects a sharper turn of the flexible material which is gripped and thereby increases the pressure of the body of the material against the adjacent end portion thereby increasing the frictional force between the adjacent surfaces preventing the disengagement thereof.

As shown in Fig. 4, to securely lock the bag 16 after it is drawn to the desired position, the oscillator formed by the projecting portions 25 and 26 and their connecting portion 24 is first oscillated to one side and then to the other side thereby shifting it through the adjacent loop into locked position as shown in Fig. 4. In this position the projecting portions 25 and 26 appear in front of the portions 21 and 19.

The device being constructed of heavy, resilient wire and the shoulders 25, 26 and the wire 20 being bent in the manner described, the top of the bag or like article is securely locked to the handle as clearly illustrated in Fig. 5 of the drawing.

4

While I have herein shown and described only certain specific embodiments of my invention and have set forth only certain possible modifications, it will be appreciated that changes and variations can be resorted to without departing from the spirit and scope of my invention.

I claim:

1. A device of the character described consisting of a continuous length of resilient wire-like material joined at the ends presenting two adjacent elongated loops having adjacent end portions at one extremity to engage opposite sides of flat sheet like material looped therethrough, a tube like handle encasing the opposite end portion of said loops, one of said loops being shorter and narrower at the sides and wider at the free end than the other, the wide portion of said loop forming shoulders or projections, said shoulders or projections being offset or bent inwardly toward the longer loop whereby the flat sheet like material is securely held against withdrawal when tension is applied thereto.

2. In a device of the character described in claim 1, wherein the lower portion of the longer loop is also bent inwardly relative to the side portions of said loop.

3. A device of the character described consisting of a continuous length of resilient wire-like material joined at the ends, presenting two adjacent elongated loops having adjacent end portions at one extremity to engage opposite sides of flat sheet like material looped therethrough, one of said loops being shorter and narrower at the sides and wider at said extremity than the other loop the wide portion of said one loop forming shoulders or projections said shoulders or projections being offset or bent inwardly toward the longer loop, said extremity of the longer loop also being bent relative to the side portions of said longer loop in the same direction as the shoulders are bent whereby the flat sheet like material is securely held against withdrawal when tension is applied thereto.

ALBERT J. GORE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
450,994	Davis	Apr. 21, 1891
988,617	Bair	Apr. 4, 1911
1,716,236	Minyard	June 4, 1929
2,052,509	Whitton	Aug. 25, 1936