

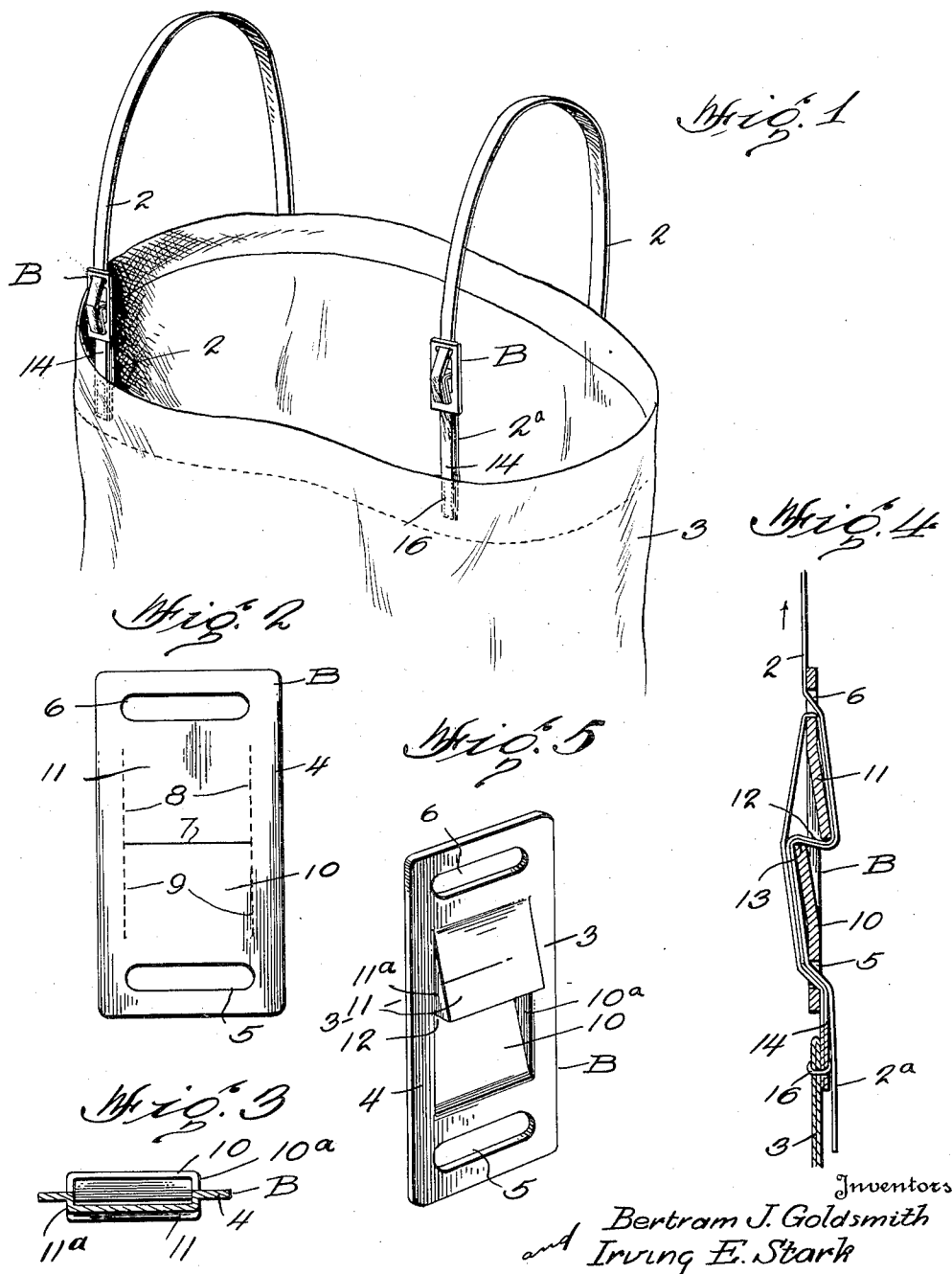
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BUCKLE

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BUCKLE

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5 Claims. (Cl. 24—198)

This invention relates to buckles and aims to provide a clamping buckle of improved form capable of effecting a sure and positive grip and subject to quick and easy manipulation.

5 A further aim of the invention is to provide a buckle of extremely simple construction which can be struck from sheet metal stock in finished form by a rapid and continuous punching operation, the buckle thus lending itself to quantity production with a resultant cheapening of its cost.

Other aims and advantages of the invention will become apparent from the following detail description of a buckle representing the preferred embodiment of the invention, reference being had to the accompanying drawing in which:

Figure 1 shows the buckle as applied to the shoulder strap of a woman's undergarment;

Figure 2 is a plan view of the buckle blank;

20 Figure 3 is a cross-section of the buckle taken on the line 3—3 of Fig. 5;

Figure 4 is a cross-section taken lengthwise of the buckle of Fig. 5 and illustrating the way in which the buckle is attached to the garment, and the manner in which the shoulder strap is associated with the buckle; and

Figure 5 is an enlarged perspective view of the buckle itself.

30 The buckle B will be described by way of illustration in connection with the shoulder strap 2 of a woman's slip 3, as shown in Fig. 1, the function of the buckle being to clamp the shoulder strap while at the same time affording a convenient means for lengthening or shortening the strap to obtain proper adjustment of the garment. The buckle may be fashioned from a flat, relatively thin metal blank or plate 4 of rectangular shape, as shown in Fig. 2. Adjacent the ends of this plate is punched a pair of parallel slots 5 and 6, of a length approximating, but slightly exceeding, the width of the strap 2 in conjunction with which the buckle is to be worn.

45 Midway between the slots 5 and 6 the plate is slit along a transverse line 7 corresponding in length to the length of the slots and located intermediate the side edges of the plate. The metal adjacent this slit upon opposite sides thereof, as indicated by the dotted lines 8 and 9 of Fig. 2, is forced outwardly in reverse directions beyond the plane of the plate to form two oppositely-directed, longitudinally-extending tongues 10 and 11. This forms an opening 12 through the plate which is overhung by the coextensive 50 tongues. The side edges of the tongues 10 and

11 are united with the plate by webs 10a and 11a respectively constituted of the metal drawn from the plate during the formation of the tongues, these webs, as best shown in Fig. 3, providing lateral guides for directing the ribbon 2 into and out of the opening 12. The completed buckle is illustrated in Fig. 5.

While in Fig. 2 the plate 4 is shown as slotted and severed only, and in Fig. 5 is shown after the tongues have been pressed out of the plane of the plate, this is simply for the sake of clearness, and preferably the slotting, severing and forming of the plate will all be accomplished in a single operation of the punch press, according to well-known metal-working practice, the buckle blanks being continuously fed into the press and continuously issuing therefrom as finished buckles. Under some circumstances it may be desirable to provide the projecting edge 13 of the tongue 10 with a greater degree of sharpness than results when the severance along the line 7 is effected in a direction perpendicular to the plate. This can be conveniently accomplished by disposing the plate 4 at a slight inclination to the stroke of the cutting knife so that the intersection of the plane of shear with the flat surface of the tongue 10, which determines the edge 13, defines an acute angle. The buckle may take any desired shape and its appearance may be enhanced by plating, enameling or burnishing.

30 The buckle is attached to the slip 3 in the manner disclosed in Fig. 4. A tab 14 comprising a flexible strip of material folded upon itself and of a width corresponding approximately to that of the shoulder strap 2, has its ends stitched at 16 to the inside of the slip. The two superposed strands of the tab extend in association through the slot 5, along the tongue 10 and over the edge 13 where they separate, the upper strand passing through the slot 6 and the lower strand extending through the opening 12 and around the tongue 11, there to unite with the first-mentioned strand.

45 The buckle has the shoulder strap 2 associated with it as indicated in this figure. The free end of the shoulder strap weaves through slot 6, around tongue 11, through opening 12 and thence, in company with the tab 14, passes through slot 5, after emerging from which latter the end 2a of the strap hangs free. It is to be observed that the strap, after entering the slot 6, passes underneath the two superposed strands of the tab where the tab leads over the tongue 10, and this is an important feature of the buckle. It is also to be observed that all projecting portions of 55

the buckle are protected by either the tab or the strap or by both from irritating contact with the skin of the wearer of the garment.

As will be apparent from what has just been described, the strap is so intertwined with the buckle that any pull upon the strap in the direction indicated by the arrow in Fig. 4 will tend to carry the buckle along with the strap, but this movement will be resisted by the tab 14 which is normally held taut by the weight of the slip 3. The pull will thus impart tension to the tab causing it to bear down upon the strap and bind it against the flat surface of the tongue 10 and, more particularly, press the strap against the sharp projecting corner 13. This effectively snubs the strap and secures it against slipping, and the stronger the pull, the tighter will the strap be clamped.

When it is desired to lengthen or shorten the strap, the buckle is held by the fingers so as to maintain slack in the tab 14, and relieve the pressure of the tab against the strap. The buckle being thus held, the strap may be drawn through the buckle in either direction until the desired adjustment of the garment has been obtained. However, as soon as the buckle is released by the fingers, the tab is drawn taut by the weight of the garment and the strap again pressed against the sharp edge 13 by the tab.

While the buckle embodying the principle of our invention has been described in connection with the shoulder straps of women's undergarments, suggesting one of its useful applications, it may be employed in many other ways, as for example in connection with belts, garters, suspenders, and the like.

We claim:

1. A buckle comprising a flat plate having a transverse elongated slot adjacent each end of approximately equal length, a transverse opening located intermediate the slots and between the lateral edges of the plate and oppositely directed, elongated tongues disposed upon opposite sides of the opening and directed lengthwise of the plate, each of said tongues being approximately coextensive in width with the length of the opening and extending from opposite faces at an inclination to the plate, relatively narrow, transverse, flat web portions of the plate located intermediate the slots and the opening, and said tongues having one of their ends joined to the relatively narrow, transverse, flat web portions, and the other of their ends overhanging the opening.

2. A buckle comprising a flat plate having a transverse elongated slot adjacent each end of approximately equal length, a transverse opening located parallel to and intermediate the slots and between the lateral edges of the plate, and oppositely directed, elongated tongues disposed upon opposite sides of the opening and approximately coextensive in width with the length of

the opening, the tongues being directed lengthwise of the plate, and extending from opposite faces at an inclination with respect thereto, each of said tongues having one of its ends joined to the plate, and the other of its ends overhanging the opening and terminating in a substantially straight edge portion adapted to frictionally engage a ribbon with which the buckle is designed to be associated.

3. A buckle comprising a flat plate having a transverse elongated slot adjacent each end, said slots being parallel and of approximately equal length, a transverse opening located parallel to and intermediate the slots and between the lateral edges of the plate, oppositely directed, elongated tongues disposed upon opposite sides of the opening and approximately coextensive in width with the length of the opening, the tongues being directed lengthwise of the plate and extending from opposite faces at an inclination with respect thereto, each of said tongues having one of its ends joined to the plate and the other of its ends overhanging the opening, and longitudinal webs connecting the lateral margins of the tongues with the plate.

4. A buckle comprising a flat plate having a transverse elongated slot adjacent each end of approximately equal length, a transverse opening located intermediate the slots and between the lateral edges of the plate, oppositely directed, elongated tongues disposed upon opposite sides of the opening and directed lengthwise of the plate, the tongues being approximately coextensive in width with the length of the opening and extending from opposite faces at an inclination with respect to the plate, each of said tongues having one of its ends joined to the plate and the other of its ends overhanging the opening and terminating in a transverse substantially straight edge, and said tongues having longitudinal webs connecting the lateral margins of the tongues with the plate.

5. In combination with a buckle comprising a plate having a transverse elongated slot adjacent each end, a transverse opening located intermediate the slots, oppositely directed, elongated tongues disposed along opposite sides of the opening and directed lengthwise of the plate, said tongues extending from opposite faces at an inclination with respect to the plate and having their free ends overhanging the opening, a tab comprising a pair of superposed strands of flexible material threaded through one of the slots, one of its strands thence passing through the other slot, and the other of its strands passing through the opening and uniting with the first-mentioned strand, said transverse slots, opening and tongues being approximately parallel and coextensive in a direction transversely of the plate.

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