April 1, 1958 S. F. STEIN 2,828,522

BUCKLES

Filed July 30, 1953

FIG. 1

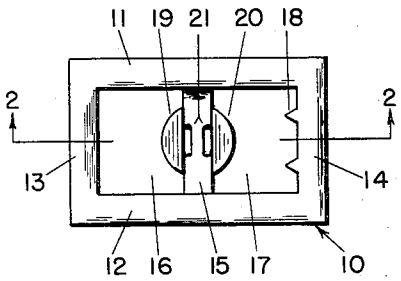


FIG. 2

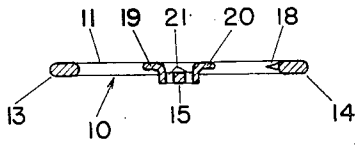
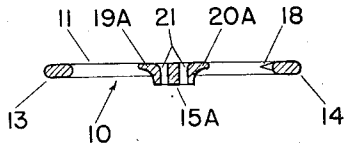


FIG. 3



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2,828,522

BUCKLES

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1 Claim. (Cl. 24—198)

The present invention relates to adjusting devices such as buckles, for instance, and particularly the kind used in the garment industry. The object of the invention is to construct a buckle in such a manner which will facilitate the attachment of the buckle onto the garment whereby saving of time and labor in the production of the garments is achieved.

In order to illustrate my invention reference is had to the accompanying sheet of drawings, wherein:

Figure 1 illustrates a front view of the buckle constructed in accordance with my invention;

Figure 2 illustrates a cross section on line 2—2 of Figure 1;

Figure 3 illustrates a diagrammatic view of a modified construction in cross section, as when the buckle be fabricated of plastic material according to my invention.

Referring to the drawings in particular:

Numeral 10 represents a buckle, which may be stamped out of a suitable sheet metal or may be fabricated of plastic material; either way is well known in the art of buckle making. The buckle 10 is constructed in the form of a frame which may be rectangular in shape comprising two horizontal bars 11 and 12 and two vertical bars 13 and 14. There is a vertical central bar connected with the respective horizontal bars 11 and 12 and is suitably spaced from the respective vertical bars 13 and 14, thus apertures 16 and 17 are provided which are required for engagement with the conventional strap for the purpose of adjustment; 18 represents pointed projections pointing downwardly and extending inwardly at the inner edge of bar 14; the central bar 15 is provided at each side with upwardly projecting members 19 and 20, the outer edges of which are preferably rounded in the form of half-moon to correspond to the periphery of a conventional button. The central bar 15 is provided with perforations 21 suitably spaced in relation to one another and disposed between the central portions of the members 19 and 20 to correspond to the perforations of a conventional button; there may be two or four such perforations. However, when there are only two, the latter may be somewhat elongated with respect to the length of the central bar so that either one row or two rows of button-sewing stitches may be used with the same perforations, which would correspond to a two-hole or four-hole button, whichever the button-sewing machine is set for.

Button-sewing mechanism is employed in garment factories, which mechanism is equipped with a clamp device for holding the button while the sewing machine needle passes through the perforations and such a clamp is provided with a pair of members arranged to engage the periphery of the button with the inner surface of the hollow body of the respective clamp device members in order to securely hold the button in position so that the button perforations register with the sewing machine needle as it moves up and down. The aforesaid button-sewing machine is adaptable to be changed to a buckle-sewing machine; it requires removing the button clamp device described above and replacing the same with a different device constructed to hold a buckle in place to be sewed onto the garment. It requires time and skill to make the change and to change the devices back in place when required.

The device used for buckle-sewing comprises a downwardly projecting terminal provided with a pair of prongs suitably spaced for engagement with the central bar of the conventional buckle to move the buckle with the garment material laterally so that the sewing-machine needle goes down through the material first on one side of the central bar, then on the other side thereof and so on repeatedly until a plurality of stitches have covered the central bar to securely hold the buckle in attached position on the garment material. The operator who sews buttons on trousers for instance, would have to sew buttons in a continuous operation until a given lot is finished with the button-sewing, when the button clamp device would have to be removed and changed over to a buckle engaging device and the operator would lose time while the changing is done and then handle the trousers again for the attachment of the buckles thereon.

The present invention contemplates the elimination of changing the devices referred to as well as to save handling the work twice as the same button clamp device is capable of doing the two kinds of jobs perfectly and there is no loss of time and motion involved. The members 19 and 20 of the buckle constructed in accordance with the present invention are provided to be engaged by the conventional button-engaging clamp. The result is that one kind of a device does the work for which it was required a different device heretofore.

The outer shape of the respective members 19 and 20 may be varied without departing from the conception that said members are adapted to engage with the inner surface of the hollow body of the respective clamp device members constructed for the engagement of the periphery of a conventional button, and instead of only one set of members 19 and 20 in conjunction with perforations 21 as shown, two or more of such sets may be employed along the length of the central bar 15, when the latter is of such a length that one set would not suffice for securely holding the buckle on the garment material.

As shown in Figure 3 a modified construction is illustrated, wherein the vertical bar 15A is thicker than bar 15 shown in Figures 1 and 2; the upper surface of bar 15A reaches substantially to the level of the respective upper surfaces of members 19A and 20A. This feature may be best accomplished when the buckle is fabricated of plastic material; in which case bar 15A and members 19A and 20A truly represent the structure of a plastic button such as used in connection with trousers for instance. The stitch-tension of the button-sewing machine as adjusted for buttons would in this instance well apply to the buckle according to my invention as well as to the conventional button; in the case of depressed bar 15, the stitching may be slightly loose but not objectionable as far as securely attaching the buckle to the garment is concerned.

While in the foregoing specification and the accompanying drawing there has been disclosed a preferred embodiment of the present invention, it will be understood that changes may be made from the precise disclosure without departing from the spirit and scope thereof. It is therefore desired that what is claimed be given broad interpretation and be limited only by the prior art pertaining thereto.

I claim:

A garment buckle having complementary horizontal bars and vertical side bars; an intermediary vertical bar;

two opposing members disposed at the respective sides of said intermediary bar and a comparatively narrow thread-receiving vertical bar disposed between said opposing members; the outer edge of each of said opposing members having a convex configuration and thereby being adaptable to be clamped in conforming relation by a clamping device while said thread-receiving bar is being sewn onto a garment by a sewing machine to which said device is attached.

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