UNITED STATES PATENT OFFICE

2,568,670

ADJUSTABLE SHOULDER STRAP FOR
UNDERGARMENTS

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Application March 10, 1950, Serial No. 148,966

1 Claim. (Cl. 2—325)

1. This invention relates to new and useful im-

5 improvements in ladies' undergarments and, more

particularly, to an improved adjustable shoulder

strap therefor.

Adjustable shoulder straps are known in which

10 one end of the strap is connectable differentially

with the garment by means of a button on

the garment and buttonholes in the strap or the like,

and others in which the strap has therein a loop

15 that, by means of buckles and the like, can be

adjusted in size to vary the overall length of the

strap.

The former of these known types of adjustable

20 shoulder straps has been found lacking in that,

by necessity, the buttonholes or the like in the

strap had to be spaced some distance apart which

resulted in the straps not being universally ad-

25 justable, but adjustable only to those lengths

fixed by the positions of the buttonholes; and if

the desired length for the strap should happen

to be one other than those provided for, it could

not be had.

The second-mentioned known type of adjust-

30 able shoulder strap has been found lacking in that,

due to the fineness and smoothness of the

material of which ladies' undergarment shoulder

straps are manufactured, the strap when ad-

35 justed to the correct length did not retain its set-

ting, but rather gradually slipped through the

regulating buckles, resulting in frequent re-

adjustments were required. Further, in most

instances the looping arrangement, in an at-

30 tempt to minimize such slippage, was made com-

plex so that adjustments of the strap could not

be made quickly or easily.

The second-mentioned known type of adjust-

able shoulder strap has further been found to be

objectionable in that when the adjustment of

the strap has been completed there is left pro-

truding from the buckle an annoying strap end

which cannot be disposed of and which oft times

projects to the outside of dresses and the like

having the popular low cut neckline.

One object of the invention, therefore, is the

provision of a shoulder strap for ladies' under-

garments which is universally adjustable to any

desired length and which can be locked in its

adjusted setting, and which eliminates the ob-

jections to the prior art constructions.

Another object of the invention is to construct

50 said strap so that the same is quickly and easily

adjusted and locked in adjusted position.

A further object of the present invention pro-

55 poses a novel shoulder strap in which all stresses

and strains are absorbed by the novel locking

device leaving the buckle free of all such stresses

and strains.

5. It is a further object of the present invention
to construct an adjustable shoulder strap which

is simple and durable and which can be manufac-
60 tured and offered for sale at a reasonable cost.

For further comprehension of the invention,
and of the objects and advantages thereof, refer-
ence will be had to the following description

and accompanying drawings, and to the append-
65 ed claim in which the various novel features of

the invention are more particularly set forth.

In the accompanying drawings forming a ma-

terial part of this disclosure:

Fig. 1 is a perspective view of a lady's under-

garment provided with the shoulder straps of the

invention,

Fig. 2 is an enlarged fragmentary front view of

the adjustable portion of one of the straps shown

also in Fig. 1.

Fig. 3 is a sectional view on line 3—3 of Fig. 2

with the thicknesses of the parts magnified to

70 clarify the view.

Fig. 4 is a fragmentary side view of the strap

of Fig. 2 with the adjustable portion thereof in a

modified position.

75 Fig. 5 is a perspective view of the slide fastener

device utilized for adjusting the straps.

Referring to Fig. 1, the improved shoulder

straps 10 of the invention are herein illustrated

as applied to a brassière 11 of otherwise ordi-

nary construction, but it is to be understood that

said straps are applicable equally well to other

ladies' undergarments such as slips and the like,

and even to ladies' outer garments to which ad-

justable shoulder straps are affixed.

As shown in Fig. 1 each shoulder strap com-

prises a main portion 12 which is secured to the

rear portion of the brassière in the usual man-

ner and, as better seen in Figs. 2, 3 and 4, an

adjustment portion comprising a slide fastener
tape 13 and a backing strip 14 secured to tape

13 by stitching 15. Tape 13 and strip 14 are

secured to the front portion of the brassière in

any suitable manner as here shown being fixed

between the body of the brassière and an edging

strip 16 therefor by stitching 17. Preferably the

main portion 12 and both layers of the adjust-

ment portion of each strap 18 all are of the same

width as shown.

The slide fastener tape 13 is of the usual sort,

consisting of separate parallel members connect-

ed together at either end by suitable clamps 18,

and having on their proximate edges, slide fas-

tener elements 20 interlocked with one another
by the action of a slider 21. The slide fastener elements preferably made of the polymeric amide readily available under the trade-mark "Nylon." Said slider, for the purpose at hand, is of the well-known locking type, that is to say, it can be slid over a desired number of the elements 20 to interlock said elements and then be locked in that position relative to the ends of the tape. To this end the operating tongue 22 pivoted to the slider by means of arms 23, see Fig. 5, has it pivoted end looped about to form a cam-like wedge 24 adapted to pass through a suitable hole 25 in the slider.

The construction is such that when tongue 22 is in the raised or operating position shown in Fig. 5, the slider 21 can be moved over the elements 20, but when the tongue is pressed flat against the slider and the tape 13, the wedge cam 24 moves downward through hole 25 and wedges the elements 20 therebeneath against the other side of the slider, locking the latter in position.

As shown in Figs. 2, 3 and 4 the free end of tape 13 is looped over the centermost of the three cross bars of a buckle 26, said loop being secured by stitching 27. If desired the backing strip 14 may also be looped over the center cross bar of the buckle 26, the elements 20 preferably when formed of "Nylon" or other similar material so that no metallic contact is made with the body of the garment's wearer.

The main portion 12 of shoulder strap 10 is threaded through the buckle 26 as shown and has its free end secured about a cross bar 28 of tongue 22 by stitching 30.

It will be seen therefore that the effective length of the shoulder strap 10 is determined by the position in which slider 21 is locked. The shorter the slider in Figs. 1 and 2, the shorter the effective length of the strap, and vice versa. To adjust the length of the shoulder strap, the main portion 12 thereof is pulled through the buckle 26 a short distance as shown in Fig. 4, the tongue 22 moved to operating position, and the slider 21 moved to and then locked in the desired position. The main portion 12 is then pulled back through the buckle 26 and the strap is locked at the desired length.

It is to be mentioned that the buckle 26 serves to maintain the pull of main portion 12 on the tongue 22 parallel to the tape 13 so that there is no tendency for said main portion to move the tongue 22 out of locking position. Also to be mentioned is that the length of tape 13 can be varied from that here shown to provide a greater or lesser range of adjustment of the shoulder strap.

It will be seen therefore that there has been provided a shoulder strap which is adjustable to and lockable at any desired length quickly and easily.

While we have illustrated and described the preferred embodiment of our invention, it is to be understood that we do not limit ourselves to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claim.

Having thus described our invention, what we claim as new and desire to secure by United States Letters Patent is:

An adjustable shoulder strap for a lady's undergarment having opposed front and rear portions to be supported from the wearer's shoulder, comprising an adjustment strap having one end secured to the top edge of the front portion of the undergarment to extend vertically therefrom, a main strap having one end secured to the top edge of the rear portion of the undergarment to extend vertically therefrom over the top of the wearer's shoulder and have its free end depend along the outer face of the adjustment strap, a buckle having spaced parallel slots separated by an intermediate cross bar, said adjustment strap having its top end secured to said cross bar, said main strap having its intermediate portion laced slidably through said slots of said buckle and frictionally bearing against the end of said adjustment strap secured to said cross bar, and a slide fastener on the outer face of said adjustment strap between the ends thereof, said slide fastener including a lockable slider having a pivotally mounted tongue with a cross bar, said main strap having its free end secured to the cross bar of said tongue, so constructed and arranged that the length of the shoulder strap can be adjusted by sliding the main strap relative to said buckle and correspondingly adjusting the position of the lockable slider of said slide fastener.

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