Sept. 11, 1934. A. HARRISON 1,972,933

SHOULDER STRAP FOR GARMENTS

Filed July 2, 1931

Fig. 1

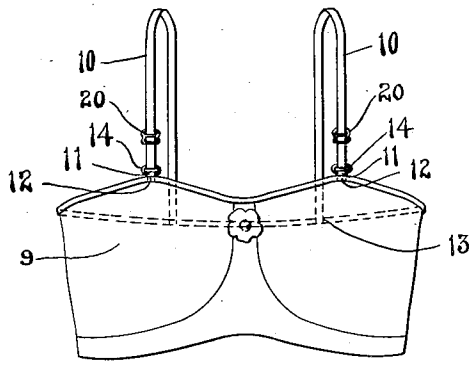


Fig. 2

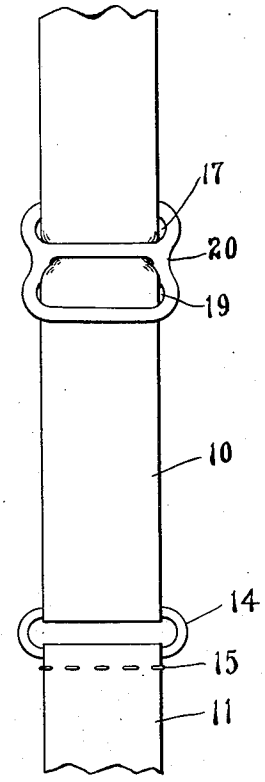


Fig. 4

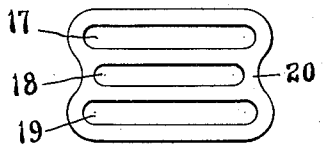
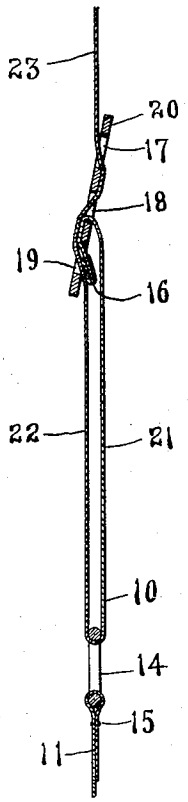


Fig. 3



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SHOULDER STRAP FOR GARMENTS

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2 Claims. (Cl. 241—12)

This invention relates to adjusting means for belts and while broadly applicable to all instances where it is desired to tighten or loosen any banded material, is more particularly concerned with the adjustability of the shoulder straps of women's undergarments.

It is among the objects of this invention to provide a shoulder strap of a variable length.

Another object of this invention is to provide a shoulder strap of variable length which will retain its predetermined length without variation until manually redetermined.

A further object consists in providing means for adjusting the length of the aforementioned shoulder strap which shall be as inconspicuous as possible, possessing the minimum of bulk and permitting its full function without discomfort to the wearer.

A still further object consists in providing a means which shall permit the variation in length by some simple movement without loss of time or effort.

An additional object consists in providing a device possessing the aforementioned qualities, which is easy to manufacture and assemble and lends itself to mass production with its attendant economies.

In the past, women have found that the unvarying length of the ordinary shoulder strap for their undergarments, could only be remedied by two methods. One was to permanently gather up the ribbon by cutting and resewing, in which case a change in the other direction was in a great many instances subsequently made impossible; or, by some temporary makeshift means such as an open pin. In the latter event, the dislocation of the pin was the source of embarrassment, or if it managed to retain its position, still might prove a source of annoyance by embedding itself into the flesh.

Thus the average woman might find that for afternoon wear the proper height for her undergarments might vary considerably with the demands made upon her for evening wear. These inconsistent and conflicting demands were often countered by the use of two sets of undergarments but in most instances were met by the pin method.

The present invention attempts to meet these demands and other more specific objects and advantages of the device will appear as the nature of the improvements are better understood, the invention consisting substantially in the novel arrangement and correlation of the instrumentalities herein fully described and illustrated in the accompanying drawing wherein similar reference characters are used to describe corresponding parts throughout the several views and then finally pointed out and specifically defined and indicated in the appended claims.

The disclosure made the basis of exemplifying the present inventive concept suggests a practical embodiment thereof, but the invention is not to be restricted to the exact details of this disclosure and the latter therefore is to be understood from an illustrative rather than a restrictive standpoint. It will be understood that the various features of the invention may be separately applicable despite their cooperation herein shown.

In connection with the features hereinafter specifically pointed out, and in addition to the many unique and improved structural combinations the invention is also concerned with the specific mechanical means by which the various advantageous functions are achieved; said mechanical means being combined to provide an inexpensive, simple, decorative and durable device.

The inventive idea involved is capable of receiving a variety of mechanical expressions, one of which for the purpose of illustration is shown in the accompanying drawing, in which—

Fig. 1 is a front elevation of an embodiment of my invention as applicable to a woman's undergarment;

Fig. 2 is a detailed plan view of a closeup of one of the shoulder straps;

Fig. 3 is a side sectional view of the same;

Fig. 4 is an enlarged plan view of the unique buckle forming a part of my invention.

With particular reference to Fig. 2, the reference characters 10 and 11 designate the upper and lower sections of an ordinary band of ribbon commonly used for suspending a woman's undergarment from the shoulders.

The lower section 11 has its extreme portion usually sewn at 12 to the front uppermost portion of the garment 9. The upper section has its corresponding portion similarly attached to the rear and uppermost portion of the garment at 13. To preserve the proper balance, two such straps or bands are customarily placed on a single garment, adjacent to each shoulder. This is specifically illustrated in Fig. 1.

Again referring to Fig. 2, the lower section 11 has its remaining end looped about the flattened ring 14 and fastened to itself preferably by sewing, at 15. The lower portion 11 is of fixed and unvarying length and requires no further attention after being fastened as just described.

The upper portion 10 has its remaining end terminate, in the preferred embodiment, in a

small metallic clip 16, which serves the dual purpose of preventing the free end of the ribbon from unravelling and also serves as an anchor as will subsequently be explained.

The upper portion 10 is passed through three slots or apertures numbered 17, 18 and 19 of the buckle 20. The buckle is fashioned of metal in the present embodiment but may be formed of celluloid or similar non-metallic substances. The buckle 20 is further characterized by having the upper and lower slots, 17 and 19, possess a length slightly greater than the width of the ribbon used, while the center slot 18 is formed with a length slightly less than ribbon width. In addition, the upper and lower slots are further distinguished from the central slot in that the widths of 17 and 19 will enable two sections of ribbon to be inserted comfortably while the central slot 18 may be formed slightly smaller in its width than the other two.

The upper portion 10 is introduced through the buckle and ring in the following manner. Before permanent attachment to the rear of the garment, the free end of the loose ribbon, that is; the one not encased within the clip 16, is inserted into the lower slot 19 from one side termed subsequently the rear. From the front it is then inserted into the middle slot 18, emerging from the rear. The entire ribbon is then pulled through these two slots until the clip 16 which is slightly longer than the lower slot engages it and impedes the further progress of the ribbon.

Before the free end however is pushed the second time through slot 19, it is looped about the ring 14, entering from the rear, and then reinserted in slots 19 and 18, similar to the method previously explained, but upon leaving slot 18, from the rear of the buckle, is drawn through 17, emerging from the front. The free end is fastened to the uppermost rear portion of the garment 9 as previously described, thus leaving the adjusting means in the front of the garment where it is more accessible to the wearer. This is clearly illustrated in Figs. 1 and 3.

Before affixing the free end to the garment, however, the wearer should cautiously determine whether the doubled up loop will suffice for the extreme demands in length made upon the ribbon straps.

Having thus described my invention in detail, I will now describe its operation.

The looped portion of the ribbon about the ring 14 comprises a rear section 21 and a front section 22. As is evident from an inspection of Fig. 3, when the section 22 is drawn downwardly away from the buckle, while the latter is held stationary the single section 23 will be slowly forced through the buckle to form an additional part of the loop. While its effective length above the buckle is that part drawn through it, the effective length below as part of 22 is one-half its length prior to its withdrawal. This occurs because the other half forms part of 21.

Thus when it is desired to shorten the effective length of the straps, the operator need only pull on the lower front portion of the strap. To lengthen the effective portion of the ribbon the upper portion 10 is similarly treated, only in the reverse direction the buckle being held stationary in both cases.

Having established the proper and desired length of ribbon, one further consideration remains,—how to maintain this predetermined position. While rough fabrics may minimize the problem through their frictional contacts, smooth fabrics accentuate it. As previously described, the middle slot 18 of the buckle is purposely made smaller than the width of the ribbon passing through it. Thus when the ribbon has passed through the central aperture, the edges are slightly bunched together, and this ruffling acts as a deterrent to the motion of the passing ribbon. Furthermore when a tension is applied to the strap, the ruffling actually grips the adjacent sides of the buckle and locks the fabric in the buckle. An additional locking aid is secured by the pressure of the clip 16 against the ribbon section 22 as it attempts to pass into the lower slot 19. Again the entwining of the ribbon through three slots causes part of the tensional forces to be resolved into pure compressional forces against the buckle and increases the frictional effect. These points are clearly illustrated in Fig. 3.

In accordance with the provisions of the patent statute I have described my invention, but I desire it understood that it is not confined to the particular form shown and described, the same being merely illustrative, and that the invention can be carried out in other ways without departing from the spirit of my invention, and therefore I claim broadly the right to employ all equivalent instrumentalities coming within the scope of the appended claims, and by means of which, objects of my invention are obtained and new results accomplished, as it is obvious that the particular embodiments herein shown and described are only some of many that can be employed to attain these objects and accomplish these results.

Having now described my invention, what I desire to claim and secure by Letters Patent, is:

1. The combination with a strap buckle, having three slots, wide enough to permit the passing of two superimposed straps therethrough, the outer slots being of a length corresponding to the width of said straps, the middle one being of a length slightly less than said width, so as to constrict its passage; of a strap of flexible material, the doubled up end of which is secured adjustably in said buckle by passing one free end of the strap through one end slot, back through the middle slot, forming a loose loop of the strap by again passing through these slots in the same sequence, then through the other end slot and adjusting the loop so that the other end of the strap becomes adjacent to the buckle, and a metal clip fixedly secured to the latter end so as to prevent its slippage through the first end slot.

2. The combination with a strap buckle, having three parallel slots wide enough to clear two thicknesses of the strap to be used, said outer slots being of the same length and the intermediate slot being of a different length than the outer slots and of a length slightly smaller than the width of said strap; of a strap of flexible material forming an adjustable loop, slidably secured upon said buckle by passing said strap in successive turns from one side to the other through said slots and tucking one free end through the middle and one end slot, so as to be clamped between the buckle and the entwined portion of the strap, and a clip attached to said free end, outside of the buckle so as to prevent the spontaneous detachment of said end through the slots.

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