May 24, 1938. C. GRAHAM 2,118,378

SUSPENSION STRAP

Filed May 26, 1937

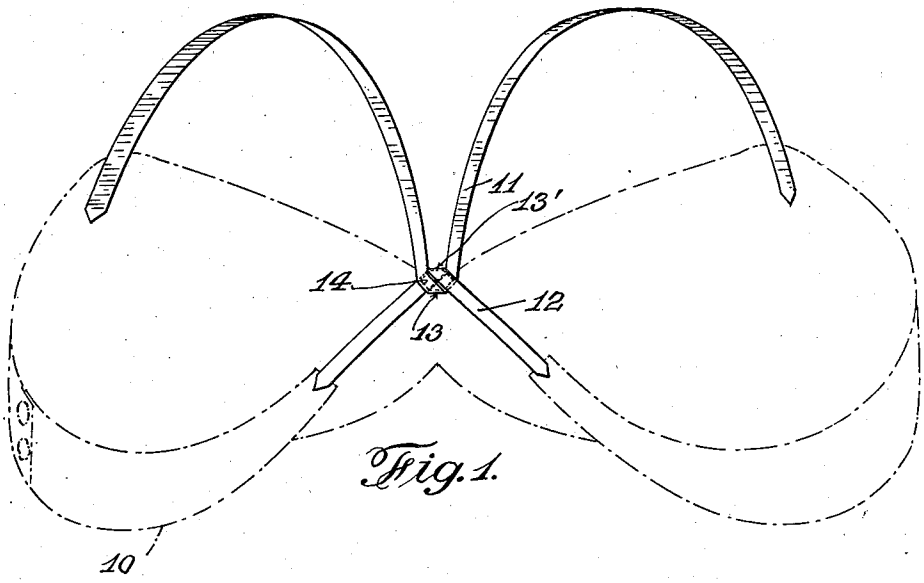

Fig. 1.

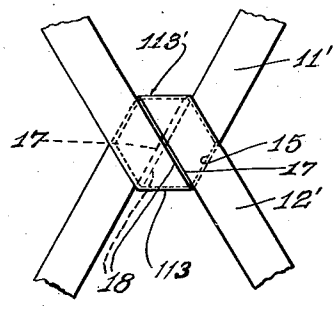

Fig. 2.

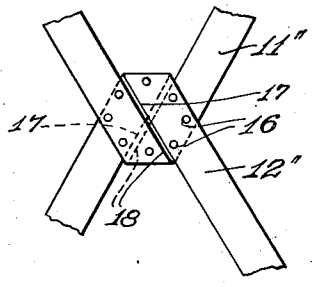

Fig. 3.

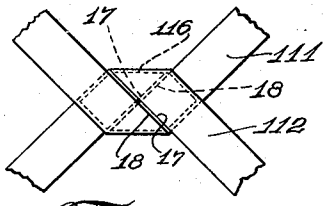

Fig. 4.

INVENTOR
Charlotte Graham
BY Paul M. Klein
ATTORNEY

Patented May 24, 1938 2,118,378

UNITED STATES PATENT OFFICE

2,118,378

SUSPENSION STRAP

Charlotte Graham, New York, N. Y.

Application May 26, 1937, Serial No. 144,801

2 Claims. (Cl. 241—12)

This invention relates to garment suspension means in general, and particularly to a suspension strap especially adapted for use with undergarments, such as slips, brassières and similar apparel, and which suspension straps are intended to be placed over the shoulders of the wearer and are further intended to prevent their slipping from the shoulders and discomforting the user.

One of the important objects of this invention is to provide a highly effective suspension strap of relatively inexpensive construction, which will prevent a garment suspended thereby from shifting from its intended position and which will preclude any possibility of slipping from the shoulders of the wearer.

Another important object of this invention is to provide a shoulder strap wherein are employed two independent resilient ribbons so constructed and arranged as to present a relatively flat instrumentality throughout, and wherein the connecting portions between the two straps are fixedly associated with one another so as to form a permanently flat-remaining joint or union, thereby making the device unobstructive, preventing bulkiness and protrusion through upper garments.

The foregoing and still further objects and important advantages of this invention will become more fully apparent from the ensuing description in connection with the accompanying drawing, in which

Fig. 1 illustrates a perspective view of one form of my suspension devices associated with a brassière;

Fig. 2 illustrates an enlarged detail view of a presently preferred embodiment of the connection between the two suspension members;

Fig. 3 illustrates a modified construction of such strap connection; and

Fig. 4 represents another type of connection or union between the two ribbons of my device.

Referring now specifically to Fig. 1, numeral 10 defines in broken lines the contour of a brassière to which is applied my suspension strap. The latter consists of two resilient ribbons, such as elastics, and of which one ribbon 11 is longer than the other ribbon 12, and wherein both ribbons are folded upon themselves in a more or less oblique manner at about their center portions 13 and 13'. Ribbon 12 engages with its folded portion the folded portion of ribbon 11, in which position the ribbons are fixedly held together by any suitable means, indicated at 14. I find it essential to hold the ribbons at their connecting areas flatly together, as will be explained further on, so as to prevent them from changing their relative positions at their union, whereby is assured the application of all parts of the device flatly against the body of the wearer.

As long as all parts of the straps remain in that flat position, including their point of union, the device will remain comfortable to the wearer and will permit any normal movement of the body without permanently altering the intended position of the garment in respect to the body and will automatically re-position the garment when the body assumes its normal pose. The most important feature, therefore, of my invention resides in the arrangement of my construction, whereby the straps are permanently kept in their flat position relative to the body of the wearer.

In Fig. 2 I have illustrated one of my preferred constructions or unions between two ribbons forming my strap, wherein ribbon 11' is folded obliquely upon itself to form a relatively sharp V-shape. The other ribbon 12' is correspondingly folded upon itself and passes flatly through the bent-up portion of ribbon 11' so that the folded areas of the ribbons, bounded by edges 113 and 113' will fill the space between the diverging legs of ribbons 12' and 11', respectively. In order to hold the two ribbons flatly joined together in the manner indicated, I prefer to sew them in position along their respective edges. The stitching is indicated at 15, and takes the form of a hexagon. By thus uniting the two ribbons at their central connecting portions or areas, their union remains flat and causes the two free ends of each ribbon to extend flatly from their union, and to remain in that flat position when attached to a garment.

A modified form of the union is illustrated in Fig. 3 wherein ribbon 11'' is joined with ribbon 12'' by an arrangement of rivets 16, which are preferably non-metallic or are covered with a non-metallic film to prevent contact between metal and body. Also in this construction the two ribbons are held flatly against one another, which flat joint influences the position of their respective free legs.

In Figs. 2 and 3, the V-shape formation of the folds is relatively acute, but not as acute as that of ribbon 11 in Fig. 1. A rather obtuse V-shaped fold of my union construction is illustrated in Fig. 3, wherein ribbons 111 and 112 form an oblong, substantially hexagonally shaped joint. The ribbons are secured together by a hexagonal peripheral stitching 116. In all of the ribbon unions illustrated in Figs. 2, 3 and 4, the oppo-

sitely diverging legs of the two folded ribbons overlap one another, and their inner edges meet for short distances, as indicated at 17 and 18.

While I am aware of various suspending means for brassières and undergarments, employing different constructions of straps, and which straps are usually adjustable or are intended to bodily shift with the movement of the wearer's body, I found it decidedly disadvantageous to have the strap parts free or movable, whereas when the ribbons are united in the manner indicated by me, they have a sufficient inherent "give" to allow free movement of the body, without changing their relative positions to the body, whereby not only the garment is steadily held at its intended position, but the ribbons remain in practically their original flat position in respect to the body and will not curl, twist or slip off from the shoulders as is usually the case with similar devices, wherein the ribbons are likely to alter their intended flat positions. Furthermore, my device is extremely simple, and while so simple, is inexpensive and still far superior and more effective than any devices known to me today.

Depending upon the stature or build of the body, the formation, the location, and the arrangement of the union between the two suspension members, as well as their relative lengths, may be altered, as will be clearly understood by comparing the union of the straps of Fig. 1 with that of Figs. 2, 3 and 4. In other words, for slim persons the folded portion of strap 11, will be in a more or less acute V-shape, whereas for broad-shouldered persons the V-shape union will be less acute. For tall persons, strap parts 11 will be longer, while for shorter, stout persons, the length of strap parts 12 may have to be increased.

While I have stated that the ribbons comprising my straps are made of elastic, it is quite obvious that any other resilient material capable of a "give", without permanently changing its structure, may be used. Furthermore, I have illustrated various connections between the two ribbons. It is obvious that such connections may be altered in many ways by providing, for instance, reinforcements for keeping broad ribbons flatly connected, as long as the principle involved, of fixedly uniting the two straps in a flat relation to one another, for the purpose of keeping the free legs of the strap member in flat position, is adhered to. I therefore reserve for myself the right to make changes and improvements in my suspension means, without departing from the scope and spirit of my invention, as defined in the annexed claims.

I claim:

1. In a shoulder strap suspension for garments, two resilient substantially flat ribbons, obliquely and flatly folded upon themselves at substantially their center portions, the folded portion of one ribbon interengaging the folded portion of the other ribbon, both ribbons being fixedly connected with one another at the place where they meet to form a flat joint.

2. In a shoulder strap suspension for garments, two resilient, substantially flat ribbons, obliquely and flatly folded upon themselves at substantially their center portions, the folded portion of one ribbon interengaging the folded portion of the other ribbon, both ribbons being fixedly connected with one another at the place where they meet to form a flat-remaining joint, the latter being substantially of hexagonal shape, and in which the folded portions of the ribbons fill the spaces between the diverging legs of the ribbons, the thickness of the joint corresponding to, but not exceeding the combined thickness of two super-imposed ribbons.

CHARLOTTE GRAHAM.