

June 27, 1944.

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2,352,564

FASTENING STRIP

Filed July 8, 1943

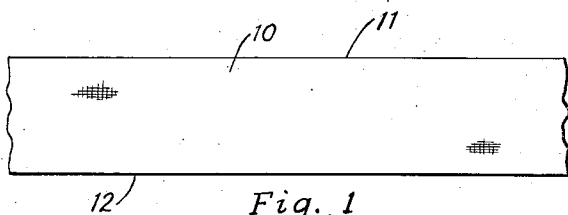


Fig. 1

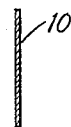


Fig. 1a

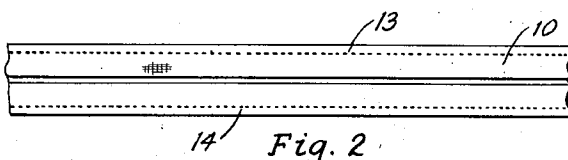


Fig. 2

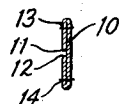


Fig. 2a

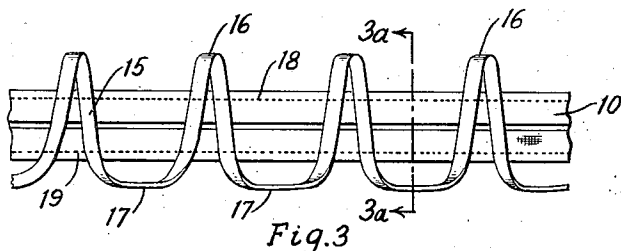


Fig. 3

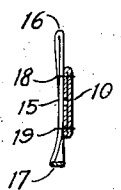


Fig. 3a

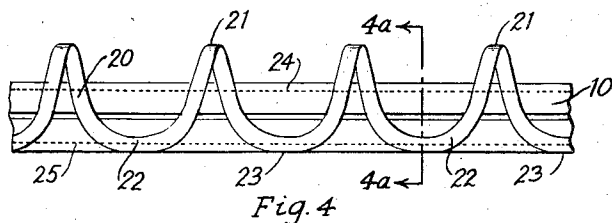


Fig. 4

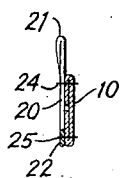


Fig. 4a

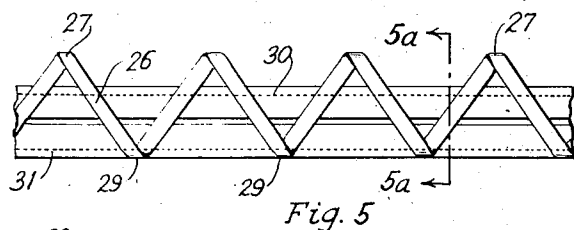


Fig. 5

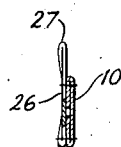


Fig. 5a

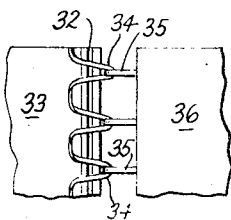


Fig. 6

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2,352,564

FASTENING STRIP

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Application July 8, 1943, Serial No. 493,953

4 Claims. (Cl. 24—203)

This invention relates generally to fastening devices provided with means arranged thereon in spaced relation for engagement with correspondingly spaced cooperating means. To this general class of fastening devices belong, among others, those devices that consist of a strip of material to be attached to one of the ends of a garment, and provided with a series of loops arranged thereon longitudinally of the strip at suitable intervals and projecting laterally of the strip for engagement with hooks, buttons, or the like, opportunely arranged on the other end of the garment, the loops being formed of suitable material secured to the strip in various manners, as by weaving, knitting or sewing to form the whole into an operative unit.

This invention relates to a device of the same general character, and has for its general object to provide a fastening means made of a strip of suitable material and a second strip formed into loops opportunely spaced for engagement with cooperating hooks, or the like, that can be manufactured in an inexpensive manner according to a method involving a minimum of operations, while being efficient in use and pleasing to the eye.

A more particular object of the invention is to provide an efficient device of this character suitable for use in women's garments such as brassières and the like, wherein the loop-forming material is secured to the base material in superimposed relation thereto and the whole is formed into an efficient unit without knitting, weaving or interbraiding the loop-forming material with the base material, or otherwise intimately interconnecting it with this latter. It is evident that such a construction makes it possible to simplify considerably the method of manufacture, and leads to a corresponding reduction in the cost of production.

These and other objects will become apparent as the description proceeds.

For the purposes of this disclosure, my invention has been indicated as particularly suitable for application to garments, especially women's garments such as brassières, girdles, and the like; it is however evident that my invention is capable of other uses than those mentioned, and the scope of the invention is by no means to be considered limited to the aforementioned suggested uses.

In the drawing:

Figure 1 is a plan view of a strip of material before any operations have been performed

thereon in the method of making the fastening device.

Figure 1a is a cross-sectional view of the same strip.

Figure 2 is a plan view of the strip in a further stage of construction of the device, showing the edges of the strip oppositely folded over and secured to the underlying surface of the strip.

Figure 2a is a cross-sectional view of the same strip.

Figure 3 is a plan view of the completed fastening device with the loop-forming strip secured thereto.

Figure 3a is a cross-section on line 3a—3a of Figure 3.

Figure 4 is a plan view of the completed fastening device according to another embodiment of the invention.

Figure 4a is a cross-section on the line 4a—4a of Figure 4.

Figure 5 is a plan view of the completed device according to still another embodiment of the invention.

Figure 5a is a cross-section on the line 5a—5a of Figure 5; and

Figure 6 is a front view of fragments of the ends of a garment showing the completed fastening device and cooperating means engaging the loops thereof to interconnect the ends of the garment.

Referring now in detail to the drawing, the fastening device comprises a body or base 10, shown isolated in Figures 1, 1a, consisting of a strip of any suitable material of opportune length and width. In forming the fastener, the marginal portions of strip 10 are folded over, as shown in Figures 2, 2a, upon the central portion of the strip so as to bring edges 11, 12 almost to contact each other; the marginal portions are then secured to the underlying central portion by means of lines of stitching 13, 14 adjacent the outer edges of the folds. This provides a stronger base for the support of the loop-forming material to be later secured to strip 10, and consequently allows of the use of a lighter material for said strip.

A narrow strip or tape 15 of any suitable flexible material is then applied to strip 10 to form laterally projecting loops in the manner that will now be described. Strip 15 is laid upon strip 10 in superimposed relation to the folded over marginal portions of this latter, transversely thereof, and projecting laterally from

one of the side edges of strip 10 by a convenient amount; it is then folded upon itself and caused to cross again strip 10 in spaced relation with its adjacent branch, so that said strip 15 does not cross itself at any point. The formation of a fold or loop 16 is thereby effected, this loop projecting laterally from one of the side edges of strip 10 and being adapted to receive a cooperating hook, or the like; the base of the loop is defined by a line of stitching adjacent the edge of strip 10 and connecting the two strips, as will be later described. Strip 15 is then formed into a curved portion laterally extending outwardly of the opposite edge of strip 10, as shown at 17, and led to cross again strip 10, contacting this latter with its opposite face, the operation being repeated as many times as required to form the desired number of loops.

Lines of stitching 18, 19 adjacent the side edges of strip 10, and closely parallel to lines of stitching 13, 14, secure strip 15 to the body of strip 10 through the folded marginal portions of this latter; said lines of stitching 18, 19 traverse each branch of strip 15 along two lines substantially spaced from each other by the whole width of strip 10, and insure a connection capable of withstanding the strains to which it will be subjected during the use of the fastener.

It is evident that line of stitching 18, while coacting with line of stitching 19 to secure strip 15 to strip 10, concurrently defines the base of loops 16 by anchoring the loop-forming branches of strip 15 close to the edge of strip 10.

In the embodiment of the invention illustrated in Figures 4, 4a, the loop-forming narrow strip, indicated at 20, is applied to strip 10 to form loops 21 in a manner similar to that previously described but is not formed into curved portions extending outwardly of the opposite edge of strip 10, being instead formed into curved portions 22, the outermost point 23 whereof is substantially flush with the side edge of strip 10 opposite to the loop-carrying edge. Lines of stitching 24, 25 secure strip 20 to strip 10 inwardly of the side edges of this latter; consequently, line of stitching 25 unites a substantial part of the curved portions 22 to strip 10.

Still another embodiment of the invention is illustrated in Figures 5, 5a wherein 26 indicates the loop-forming strip. Strip 26 crosses strip 10 in a substantially straight line at an angle to the axis of said strip 10, projects from one of the side edges thereof and is folded upon itself to form loop 27, crosses again strip 10 in a substantially straight line in diverging relation to its adjacent branch, and is folded again upon itself at 29 substantially flush with the opposite edge of strip 10. Lines of stitching 30, 31, inwardly of the side edges of strip 10, secure strip 26 to strip 10, line of stitching 31 passing through folds 29.

In use, the fastening device, indicated at 32 in Figure 6, is, for instance, sewn or otherwise secured to one of the ends of a garment, indicated by the numeral 33, with its loops 34 projecting outwardly therefrom, the loops being engaged by

opportune spaced hooks 35 secured to the other end 36 of the garment.

It will be understood that while I have described and illustrated in the drawing preferred embodiments of the invention, many modifications may be made therein without departing from the spirit of the invention or exceeding the scope of the claims.

I claim:

1. A fastening device for garments or the like comprising a strip of fabric, a tape superimposed upon one face of said strip and repeatedly traversing said face of the strip at spaced intervals in substantially opposite directions to form a plurality of projections laterally of one of the side edges of said strip, said tape being folded upon itself at the points of maximum projection, and any two adjacent transverse branches of said tape being in spaced relation to each other substantially throughout the width of the strip, said tape being secured to the strip by means of lines of stitching adjacent the side edges of this latter.

2. A fastening device for garments or the like comprising a strip of fabric, a tape superimposed upon one face of said strip and so arranged as to traverse said strip and to project therefrom at spaced intervals to form a plurality of loops projecting laterally of said strip, any two adjacent transverse branches of said tape being substantially in spaced relation to each other throughout the width of the strip, and in superimposed relation to one face thereof only, said tape being secured to said strip by means of lines of stitching adjacent to the side edges of this latter.

3. A fastening device for garments or the like comprising a strip of fabric, a tape superimposed upon one face of said strip to form a plurality of spaced transverse branches extending through the entire width of the strip, in a plane adjacent said face thereof, and projecting laterally of one of the longitudinal edges of the strip, the tape being folded upon itself at the points of maximum projection of said transverse branches to form a plurality of loops laterally of the strip, any two adjacent transverse branches of said tape being in spaced relation to each other substantially throughout the width of the strip, and lines of stitching adjacent the longitudinal edges of the strip for securing the transverse branches of the tape to the face of the strip upon which they are superimposed and concurrently defining the base of the loops.

4. A fastening device for garments or the like, comprising a strip of fabric, a tape superimposed upon one face of said strip to form portions repeatedly traversing the strip at spaced intervals in a plane adjacent said face thereof and projecting laterally of the longitudinal edges of the strip; the tape being folded upon itself laterally of one of said longitudinal edges to form loops and having portions extending in spaced substantially parallel relation to the other of said longitudinal edges, and lines of stitching for securing the tape to the strip.

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