Aug. 8, 1950 R. WEINBERG 2,518,407

ELASTIC TAPE

Filed Jan. 24, 1949

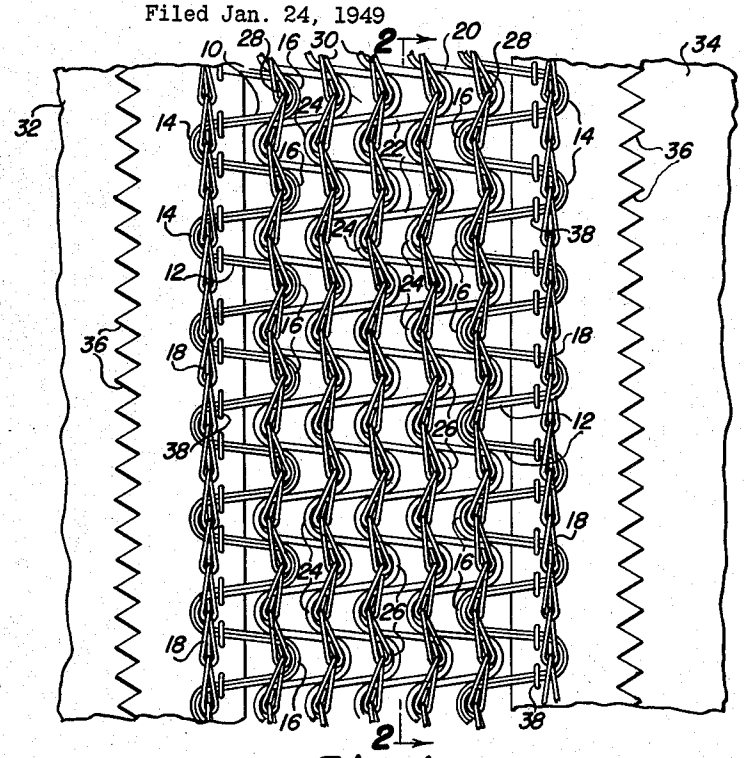


Fig. 1

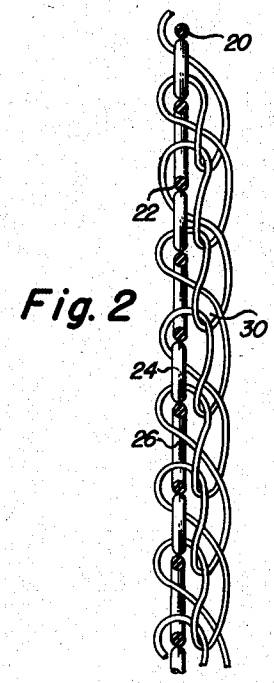


Fig. 2

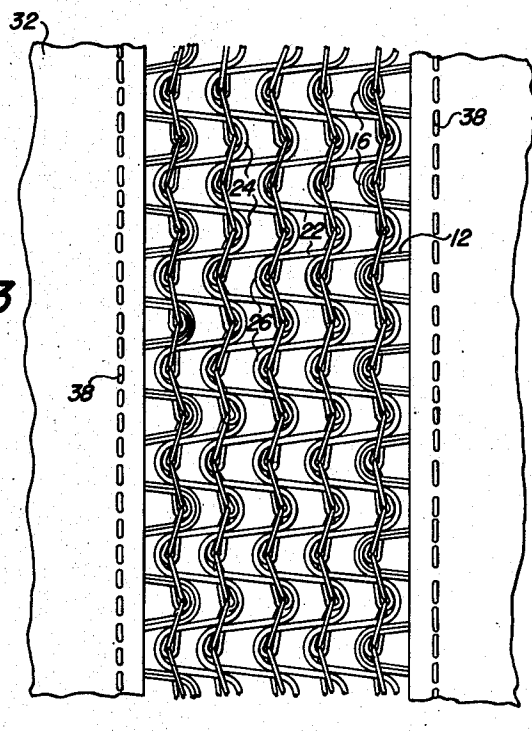


Fig. 3

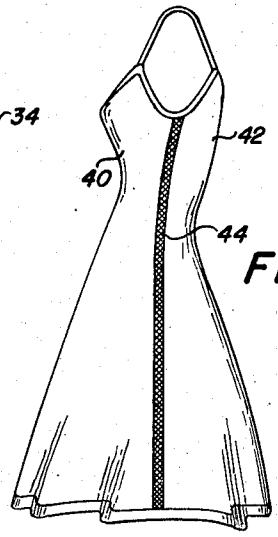


Fig. 4

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ELASTIC TAPE

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4 Claims. (Cl. 66—193)

This invention relates to elastic tape insertion for garments and has for its principal object to provide a tape of novel construction for use as a narrow seam connection between garment sections and which is substantially inelastic longitudinally of the seam while having maximum elasticity across the width thereof.

Another object is to provide an elastic lace tape having inelastic selvedge portions, a plurality of longitudinally extending elastic threads each having a succession of loops formed therein and lying in a common plane with said selvedge portions, and longitudinally extending inelastic threads in the form of chain stitches interconnecting the closed ends of the adjacent loops of the elastic threads with each other and the alternate loops of the outermost elastic threads with the inelastic selvedge portions of the tape.

It is a further object of the invention to provide elastic tape insertion as above characterized which may be inexpensively produced by means of a conventional lace making machine.

With the above and other objects in view, the invention comprises the improved elastic tape insertion, and the construction and arrangement of its several parts, as will hereinafter be more fully described, illustrated in the accompanying drawings and subsequently incorporated in the subjoined claims.

In the drawings, wherein I have disclosed one practical embodiment of my invention, and in which similar reference characters designate corresponding parts throughout the several views.

Figure 1 is a fragmentary elevation on a greatly enlarged scale showing the parts of the tape in widely separated relation for greater clarity and illustrating one application of the tape as a seam insert between spaced parts of a garment;

Figure 2 is a longitudinal sectional view taken substantially on the line 2—2 of Figure 1;

Figure 3 is an elevation similar to Figure 1, looking at the reverse side of the garment sections; and

Figure 4 is a side elevation illustrating the use of the improved elastic tape as a seam insert between the front and back inelastic sections of a lady's slip or similar article of apparel.

Referring more particularly to Figure 1 of the drawings, the improved elastic tape is provided with an inelastic selvedge extending longitudinally along each of its side edges. As herein shown, this selvedge may be formed from a multiple strand inelastic thread 10 having a continuous succession of loops 12 formed therein which alternately extend in opposite directions to the closed ends 14 and 16 respectively of said loops. The outer loop ends of the selvedge thread 10 are interconnected by inelastic thread forming the line of chain stitches 18.

The loop ends 16 of the selvedge threads 10 along each side edge of the tape are connected by a lace work pattern of interconnected elastic and inelastic threads. As shown, a plurality of longitudinally extending elastic threads 20 are each formed into a continuous succession of loops 22 with the closed ends 24 and 26 of said loops alternately projecting in opposite directions in similar manner to the loops 12 of the selvedge threads. The elastic thread loops are disposed in a common plane with each other and with the loops 12 of the selvedge threads, the closed ends of the loops in said elastic threads extending in overlapping relation with each other and loops of the outer most elastic threads 20 extending between the spaced closed ends 16 of loops 12 of the inelastic selvedge thread 10.

The loops 22 of the outer side elastic threads 20 are interconnected with the inelastic thread loops 12 of the selvedge portions of the tape by the longitudinally extending inelastic threads 28 which are formed into chain stitches the loops of which extend around the contiguous portions of the thread loops 12 and 22. Similarly the inelastic threads 30 are knitted so as to form chain loops interconnecting the loops 22 of the elastic threads 20 with each other at the contiguous closed ends thereof.

As seen in Figures 1 and 3 of the drawings, the inelastic selvedge portions of the tape are secured to the hemmed edges of two pieces of fabric 32 and 34, which may be pinked as shown at 36, by the longitudinal lines of stitches 38 which extend over and firmly secure the opposite side portions of the inelastic thread loops 12 to the fabric sections adjacent the line of inelastic thread chain loops 18 connecting the selvedge loops 12. In the lateral movement of the fabric sections 32 and 34 away from each other under stress, such movement is elastically resisted by the transmission of strain through the inelastic selvedge threads 10 of the tape and the inelastic threads 28 and 30 to the loops 22 of the elastic threads 20 so that said loops will be elastically elongated across the width of the tape. The inelastic threads 28 and 30 will however effectively prevent any substantial elastic or resilient yielding of the elastic threads 20 in response to strain applied to the tape longitudinally thereof.

In Figure 4 of the drawings I have shown the

above described elastic lace tape in one practical application thereof as an elastic seam **44** between the front and back portions **40** and **42** of a lady's slip or similar undergarment. It will be noted that the tape is comparatively narrow and extends from the center of the arm holes to the extreme lower edge of the garment. Thus, under the body strains the tape insertion will elastically yield locally at various points along its length while maintaining a substantially constant relationship between the front and back sections of the garment vertically thereof. By the improved elastic lace construction of the tape, maximum elasticity is obtained across the width thereof, obviating possible rupture of the seam, and insuring greater bodily comfort to the wearer. It will of course be understood that the number of elastic and inelastic threads in the tape may vary in accordance with the required width of the tape and the particular purpose for which it may be used.

From the above description and the accompanying drawing, it is thought that the construction of my improved elastic tape insertion and the several advantages thereof will be clearly understood. It may be inexpensively fabricated by a conventional lace making machine. The elastic and inelastic threads may be of predetermined selected weights, and if desired, for ornamental contrast with the garment to which the tape insertion is applied, the threads may be of a suitable selected color.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiment is therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein.

What is claimed and desired to be secured by United States Letters Patent is:

1. Elastic tape comprising inelastic selvedge portions, and connecting means between said selvedge portions elastically yieldable across the width of the tape and substantially inelastic lengthwise thereof, said means including a plurality of longitudinally extending elastic threads between said selvedge portions each having a continuous succession of loops formed therein and disposed substantially in a common plane with each other and with said selvedge portions, and a plurality of inelastic longitudinally extending knitted threads respectively interconnecting the loops of adjacent elastic threads at their closed ends with each other.

2. Elastic tape as defined in claim 1 wherein said inelastic threads form a connected chain of thread loops.

3. Elastic tape as defined in claim 1 wherein each selvedge portion of the tape includes loops of inelastic threads and said connecting means comprises a longitudinally extending chain of inelastic thread loops.

4. An elastic tape comprising selvedge portions of inelastic thread each comprising a longitudinally continuous succession of thread loops, transversely elastic connecting means between said selvedge portions comprising loops of elastic thread having closed ends disposed substantially within the open ends of said inelastic selvedge thread loops, and longitudinally extending inelastic knitted threads interconnecting said elastic thread loops and inelastic selvedge thread loops at their closed ends with each other and rendering the tape substantially inelastic longitudinally thereof.

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