

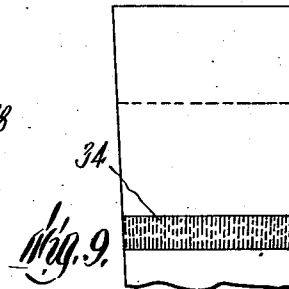
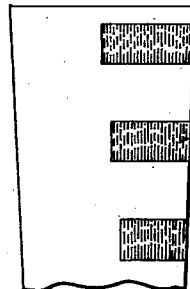
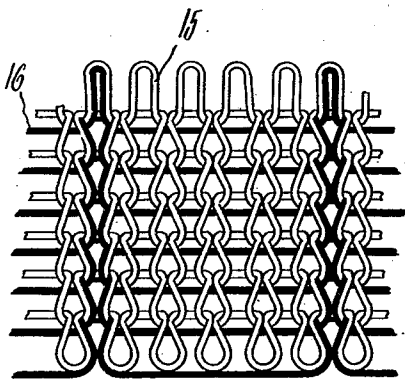
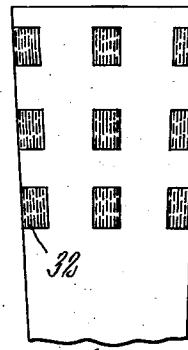
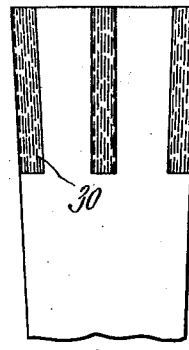
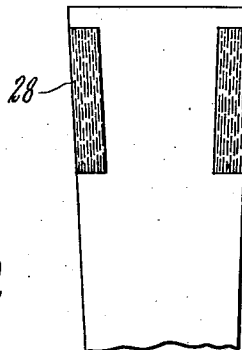
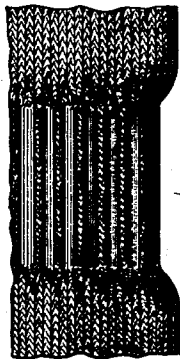
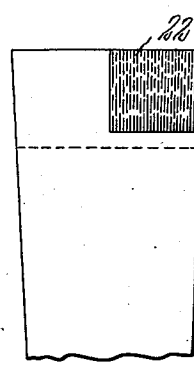
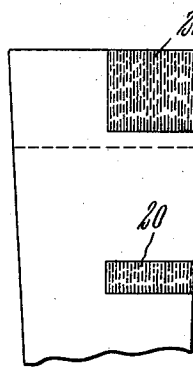
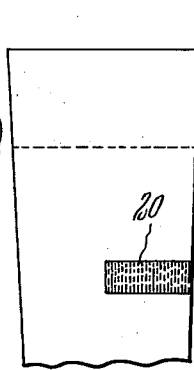
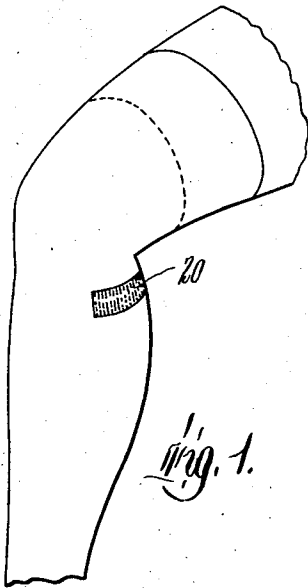
Dec. 14, 1937.

E. J. MARTEL

2,102,369

GARTER STOCKING

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UNITED STATES PATENT OFFICE

2,102,369

GARTER STOCKING

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Application March 3, 1936, Serial No. 66,826

2 Claims. (Cl. 66—172)

This invention relates to stockings, socks or anklets of inelastic yarn, characterized by certain areas in which a fine elastic yarn is knitted in with the inelastic yarn so as to impart additional resilience to such areas for certain purposes. More specifically, the invention relates to stockings having elastic areas located in such place or places as to be serviceable in holding up the stocking but which are arranged to be inconspicuous and to provide maximum comfort to the wearer. This application is a continuation in part of my copending application Serial No. 51,609, filed November 26, 1935.

For a more complete disclosure of the invention, reference may be had to the description of various embodiments which follows, and to the illustration thereof on the drawing of which

Figure 1 is a perspective view of the upper portion of a stocking, an elastic area being indicated thereon.

Figures 2 to 9 are side elevational views of the upper portions of stockings having one or more elastic areas arranged in different ways but for a common chief purpose of supporting the stocking, sock or anklet.

Figure 10 is a fragmentary elevational view of a portion of Figure 2, on a larger scale, showing a ribbed effect produced by the elastic yarn.

Figure 11 is a diagrammatic view of the stitches used in an elastic area.

In knitting a stocking embodying the present invention, the usual inelastic yarn, such as cotton, silk, rayon or the like, may be employed. In certain areas, such as those illustrated in various figures of the drawing, a fine elastic yarn is knitted in with the inelastic yarn so as to provide a greater degree of elasticity in such areas. The elastic yarn may be incorporated in the fabric in the manner described in my copending application Serial No. 42,251, filed September 16, 1935; that is, the elastic yarn may be knitted in with each stitch of the inelastic yarn in the areas in which elastic yarn is desired, or the elastic yarn may be knitted on spaced needles and floated past the intervening needles. To that end, the elastic yarn may be supplied to every needle or to spaced needles having between them, three, four, five or more needles which do not take the elastic yarn.

The elastic yarn may be fed under a desired degree of tension to needles which are spaced by several (i. e. three or more) needles which take the inelastic yarn only. Thus, when the stocking or other fabric is removed from the machine, the stretches of elastic yarn between successive

stitches contract, drawing the corresponding wales close together and giving the fabric a noticeable ribbed appearance, the size of the rib depending (other factors being the same) upon the number of wales skipped between successive stitches of elastic yarn. When such fabric is sufficiently stretched in the direction of the courses, the ribs flatten. On the reverse side, the floated stretches of elastic yarn are each elongated and under considerable tension. In the aggregate, these floated stretches impart to the fabric a high degree of stretch and restoring force.

An elastic area of this kind is diagrammatically indicated in Figure 11. As therein shown, an inelastic yarn 15 may be knitted into regular courses and wales to form the ordinary knitted fabric. In the elastic area, an elastic yarn 16 is knitted in with the inelastic yarn in certain stitches and omitted from the other stitches. As shown, the elastic yarn 16 is knitted into every course of stitches in the elastic area, but into wales which are spaced by four wales past which the elastic yarn is floated. These floated portions of elastic yarn contract when free from the needle cylinder, causing the intervening areas of inelastic fabric to gather into a ribbed formation as indicated in Figure 10.

According to the present invention, the elastic areas are disposed in the stocking in such a manner as to be effective in holding the stocking up in place, maintaining the stocking smooth and free from wrinkles, and tending to prevent runs. These elastic areas thus serve as garters for supporting the stocking but are so arranged as not to have any portion thereof appearing at the front of the stocking.

As shown in Figure 1, an elastic area 20, preferably narrow, is provided in the rear portion of the stocking, this area being spaced above the heel so as to come just above the calf and below the knee of the wearer. This serves to support the lower or shank portion of the stocking and may cooperate with another elastic area 22 at or near the top of the stocking, i. e., above the knee of the wearer. In such case, the lower area 20 supports most of the stocking, the upper area 22 being called upon only to support the upper portion of the stocking. Thus the support of the stocking is divided between these two elements. If desired, the lower element may be omitted as indicated in Figure 4, the support of the stocking being assumed by the upper garter element 22 which extends only part way around

the stocking so as not to appear at the front portion of the stocking.

In Figure 5 elongated narrow areas 28 are provided at both the front and rear of the stocking. Similar areas 30 in greater numbers are illustrated in Figure 6, these areas extending to the top of the stocking. Figure 7 shows a plurality of circular series of small spaced areas 32. In knitting such areas, the elastic yarn is floated from one area to the next as the knitting progresses. When the knitting operation is completed, the elastic yarns floating from area to area may be clipped or not as desired, according to the spacing between the areas. If, as in Figures 6 and 7, the areas are sufficiently close together to permit the floating yarns to remain without being in the way when the stocking is put on or taken off by the wearer, the elastic yarn extends all the way around the stocking, a very considerable portion of its length being subject to straight stretching in the portions which float between successive stitches and between successive elastic areas. Moreover, the elastic areas may be made narrower and more closely spaced than the examples shown on the drawing by way of illustration, and in such areas the elastic yarn may, if desired, be knitted in with every stitch of inelastic yarn and floated from area to area.

Figure 9 shows a narrow circular band 34 ex-

tending all the way around the stocking between the calf and the knee. Figure 8 shows a series of areas 38 of progressively shorter length, each area being somewhat similar to the area 22 illustrated in Figure 4.

Some of the various arrangements of elastic areas, such as those illustrated in Figures 4, 5, 6, 7, and 8, can be employed to advantage in socks and anklets as well as in full length stockings.

It is evident that many of these arrangements of elastic areas provide not only efficient means for supporting the stocking but also form novel and attractive designs.

I claim:—

1. In an article of hosiery, supporting means incorporated therein comprising an elastic area in the leg portion thereof extending around approximately the rear half only of the circumference, said elastic area containing knitted elastic yarn.

2. In an article of hosiery knitted of inelastic yarn, supporting means incorporated therein so as to be between the calf and knee of the wearer, said means comprising an elastic area extending around approximately the rear half only of the circumference, said area being characterized by an elastic yarn knitted into certain stitches of the basic yarn and floated past the other stitches.

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