FOOT PROTECTOR AND BLANK THEREFOR

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This invention relates to ladies' footwear and more particularly to a knitted sock covering only the foot of the wearer as a protection therefor.

In prior art foot socks of this general nature, various seam arrangements have been devised, many of which are in zones of concentrated pressure between the shoe and the foot of the wearer. Furthermore, many such seam arrangements are particularly conspicuous when open-toe and open-heel shoes are worn and thus greatly lacking in esthetic appeal.

Accordingly, a principal object of the invention is to provide a foot protector which can be made from a unitary piece of fabric and which is stitched on the sides rather than in the front and back.

A further object of the invention is to provide a knitted fabric foot protector that is inconspicuous, comfortable, and which possesses a high degree of esthetic appeal.

A still further object of the invention is to provide a foot protector of the character described having two spaced seams on the toe portion and two inseam seams.

The invention resides further in certain structural details hereinafter described and illustrated in the attached drawings wherein:

Fig. 1 is a view in perspective of a foot protector made in accordance with the present invention shown in relaxed condition;

Fig. 2 is a rear perspective view of the foot protector of Fig. 1, as it appears when mounted on a foot;

Fig. 3 is a side perspective view of the foot protector of Fig. 1;

Fig. 4 is a plan view of the blank used in making the foot protector of Fig. 1;

Fig. 5 is a view taken substantially on line 5—5 of Fig. 3;

Fig. 6 is a view taken substantially on line 6—6 of Fig. 3; and

Fig. 7 is a view taken substantially on line 7—7 of Fig. 3.

With reference to the drawing and more particularly to Fig. 4, it will be seen that a one piece blank 10 of knit fabric is provided having a substantially foot-shaped body portion 11 corresponding in dimensions to the particular size desired. This body portion is formed integrally with the substantially U-shaped toe portion 12 and substantially lip-shaped heel portion 13. The front edge of the blank comprises two oppositely directed angular edge sections 14 and 15 respectively joined by a substantially parabolic edge portion 16. The side edges 17 and 18 of the toe portion curve gently inwardly from the terminals of the edge portions toward the longitudinal axis of the blank to the point indicated by the dotted line 19 upon which the toe portion is folded so that the edge portions 17 and 18 may be sewn to the outwardly curved edge portions 22 and 23 of the body portion. The heel has front edge portions 24 and 25 which curve outwardly from points equally spaced from the axis of the blank first gently away from the perpendicular to the longitudinal axis then sharply away from this axis and then still further gently away from this axis terminating at points 26 and 27 from which the angular edge portions 28 and 29 extend sharply inwardly to points 32 and 33. From these points the bottom edge 34 slopes symmetrically initially gently, and then to a greater degree, as at 35 and 36, and then gently again producing the almost flat portion 37. The edges of the body portion flare sharply outwardly as at 38 and 39 and junction points with the heel portion with respect to the longitudinal axis and then gently inwardly as at 42 and 43 and then convexly to the zone of juncture with the toe portion. It will be understood that the dimensions of the body portion will vary in accordance with the size of the protector desired and that the dimensions of the toe and heel portions will vary accordingly.

To assemble the foot protector from the blank shown in Fig. 4, the toe portion is folded along the dotted line 19 and the edges 17 and 18 are sewn to the corresponding edges of the body portion. The heel-encircling portion is then folded along the dotted line shown so that it is perpendicular to the body portion and then the edge portions 24 and 25 are then sewn to the corresponding edge portions of the body portion so that they are perpendicular thereto. It will be noted that the angularity of the section 14 corresponds to the angularity of the portion 28 and that, similarly, the angularity of the section 15 corresponds to the angularity of portion 29. As seen in Figs. 3 and 7, the meeting edges are folded inwardly and stitched at C and D. The side edges of the toe portion and the corresponding edges of the body portion are sewn in a similar manner as shown at A and B. After the above stitching has been completed, elastic 45 may, if desired, be stitched around the perimeter of the upper edges of the protector as shown in Fig. 5. It will be noted that the seams A and B are disposed well on the side of the foot protector away from the point of greatest pressure between the shoe and the foot of the wearer and likewise the seams C and D are disposed adjacent the instep where pressure is at a minimum and, consequently, this seam arrangement leaves no mark on the wearer's foot and provides a seamless front particularly suitable for open-toe shoes.

The protector above described can be readily and economically manufactured from a single flat blank and because of the specific construction described, the appearance is enhanced over prior art foot protectors. The conformation of the parabolic edge portion 16 can be varied so that any vamp height may be attained.

I claim:

1. A blank for a one-piece foot protector comprising an elongated body portion symmetrical about a longitudinal center line and having side edges conforming substantially to the outline of the sole of a foot, a toe portion formed integrally with said body portion at the toe end thereof and extending outwardly therefrom along the center line, the side edges of said toe portion sloping gently and symmetrically outwardly of said center line corresponding to the curve of the edge of the body portion adjacent said toe portion and terminating at a given distance from said body portion in relatively straight end edge portions, and a heel portion formed integrally with said body portion at the heel end thereof having oppositely extending sections, each having a forward edge substantially perpendicular to said center line and terminating a selected distance from the juncture of said heel portion with said body portion in a relatively straight end edge portion, the sum of said given distance and said selected distance being substantially equal to the length of said side edge of the body portion.

2. A blank for a one-piece foot protector comprising an elongated body portion symmetrical about a longi-
having side edges conforming substantially to the outline of the sole of a foot, a toe portion formed integrally with said body portion at the toe end thereof and extending outwardly therefrom along the center line, the side edges of said toe portion sloping gently and symmetrically outward of said center line corresponding to the curve of the edge of the body portion adjacent said toe portion and terminating at a given distance from said body portion in relatively straight end edge portions, and a heel portion formed integrally with said body portion at the heel end thereof having oppositely extending sections, each having a forward edge substantially perpendicular to said center line and terminating a selected distance from the juncture of said heel portion with said body portion in a relatively straight end edge portion, the sum of said given distance and said selected distance being substantially equal to the length of said side edge of the body portion, the end edge portions of said toe and heel portions being inclined at supplemental angles to the outer edge and forward edge respectively of the toe and heel portions.

3. A one-piece foot protector comprising a body portion having side edges conforming generally to the outline of a foot, a toe portion integrally connected to the body portion at the forward extremity thereof and extending in overlying relation to said body portion, and a heel portion integrally formed with said body portion at the rear end thereof and extending forwardly and overlying the marginal edge portion of said body portion, said heel and toe portions meeting substantially centrally of each side edge of said body portion, means uniting the heel and toe portions respectively to the body portion of the foot protector along the side edges of the latter, to thereby provide in said foot protector uninterrupted surfaces, around the heel of the foot, under the sole of the foot, and over the toe of the foot.

4. A one-piece foot protector comprising a body portion having side edges conforming generally to the outline of a foot, a toe portion integrally connected to the body portion at the forward extremity thereof and extending in overlying relation to said body portion, a heel portion integrally formed with said body portion at the rear end thereof and extending forwardly and overlying the marginal edge portion of said body portion, said heel and toe portions meeting substantially centrally of each side edge of said body portion, stitches joining said heel and toe portions at the juncture thereof, and a line of stitches uniting the heel and toe portions respectively to the body portion of the foot protector along the side edges of the latter, to thereby provide in said foot protector uninterrupted surfaces around the heel of the foot, under the sole of the foot, and over the toe of the foot.

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