

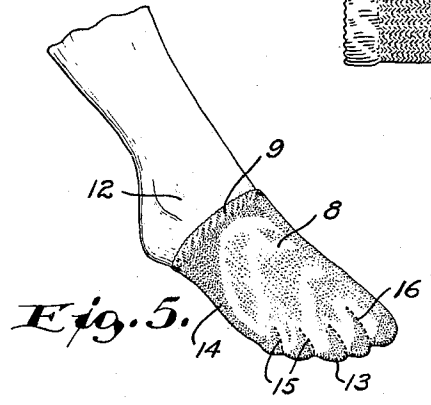
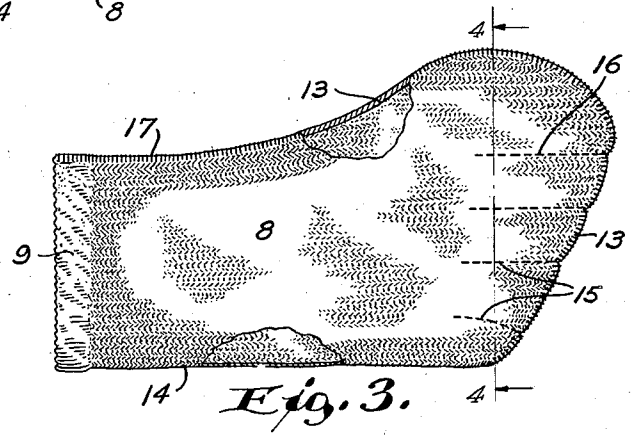
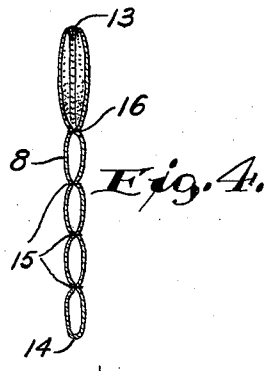
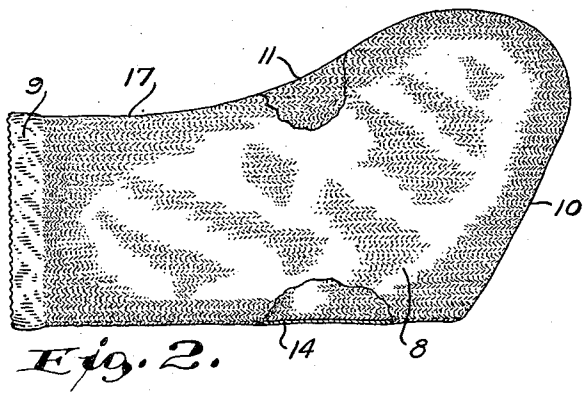
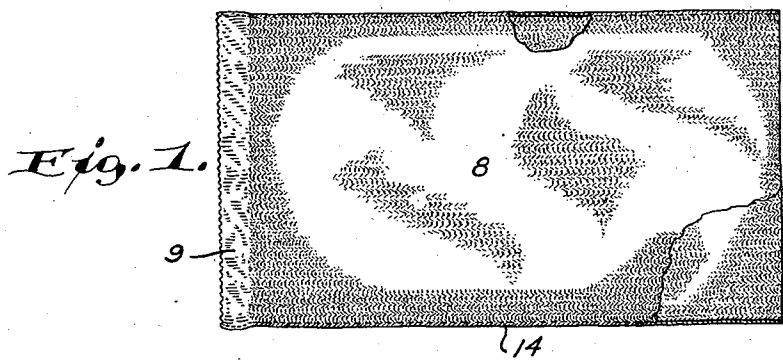
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2,248,303

ART OF TREATING FOOT AILMENTS

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2,248,303

ART OF TREATING FOOT AILMENTS

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5 Claims. (Cl. 2—239)

Our present invention relates in general to improvements in the art of treating foot ailments, and relates more specifically to an improved foot covering or protector and to an improved mode of producing such articles.

Generally defined, an object of our invention is to provide a new and useful protective foot covering, and to further provide an improved method of manufacturing such coverings.

Many individuals are subject to considerable annoyance from foot ailments such as "athlete's foot," which appear to be caused or at least aggravated by sweating of the feet especially between the toes, and by subsequent rubbing of the sweat coated surfaces against each other. It has been found that if it is possible to remove the sweat as it appears, and to prevent rubbing of the afflicted skin surfaces against each other, diseases of this kind may either be prevented or rapidly improve and disappear, and while some attempts have heretofore been made to provide a simple bandage for absorbing moisture and for protecting the coating skin areas, none of these prior efforts have proven commercially satisfactory. In order to avoid discomfort, such a protective foot covering must be relatively thin and devoid of bulkiness between the toes, and of seams exposed to portions of the foot which are normally snugly engaged by the shoe. The use of individual and disconnected complete coverings for each toe, is therefore prohibitive because of the excessive bulk of material between the adjacent toes. While a seam extending along the outer ends of the toes and at the instep side of the foot is not objectionable because of the extra clearances usually available within shoes at these places, no such seam or doubling of material is permissible along the outer side of the foot and along the small toe. It has also been discovered that a practical foot covering of this type should be fashioned to snugly fit the foot, and while it is preferable to confine each toe in an individual pocket, the adjacent toe confining pockets should be fixed against relative rotation in order to eliminate chafing.

It is therefore a more specific object of our present invention to provide an improved foot bandage for most effectively treating such ailments as "athlete's foot," and to also provide an improved method of fabricating such bandages in commercial quantities.

Another specific object of our invention is the provision of an improved mode of manufacturing medicinal foot coverings from knitted fabric, so that these coverings will properly engage the feet

of the user without annoyance, and will most effectively coact with the afflicted areas.

A further specific object of our invention is to provide a fashioned foot protector preferably formed of relatively thin and durable knitted fabric, and which will remain in place when properly applied to the foot.

An additional specific object of the present invention is to provide an antiseptic bandage for sore feet, which can be manufactured at moderate cost and which will effectively separate the surfaces of the toes from contact with each other while at the same time eliminating chafing.

These and other specific objects and advantages will be apparent from the following detailed description.

A clear conception of the several steps of the improved method, and of the construction and mode of using foot coverings or bandages fabricated in accordance with our invention, may be had by referring to the drawing accompanying and forming a part of this specification wherein like reference characters designate the same or similar parts in the various views.

Fig. 1 is a plan view of one of the tubular blanks of knitted fabric, preferably used in fabricating our improved foot bandages, portions having been broken away to more clearly show the structure of the tube;

Fig. 2 is a similar view of the blank after the same has been cut to fashion shape;

Fig. 3 is a plan view of the completed foot covering or bandage, with portions likewise broken away;

Fig. 4 is a transverse section through the toe portion of the completed covering, taken along the line 4—4 of Fig. 3; and

Fig. 5 is a perspective view showing the bandage applied to a human foot.

While our invention has been shown and described herein as being especially applicable to foot coverings formed of tubular knitted fabric and in a particular manner, it is not the intent to thereby unnecessarily restrict the scope.

When fabricating the improved antiseptic bandages, we prefer to form tubular knitted blanks 8 such as shown in Fig. 1 of the drawing, having no seams therein, but being provided with a relatively elastic selvage edging 9 at one end. These blanks 8 may be formed in rapid succession on a tubular knitting machine, of relatively fine thread or yarn having absorbent qualities. Each blank 8 is subsequently cut at the raw end and at one side as shown in Fig. 2 to provide cut edges 10, 11 and to give the blank 8 a fashion

shape adapted to snugly fit a human foot 12. The fashion cut blank 8 is subsequently sewed along the cut edges 10, 11 to form a durable peripheral compact closing seam 13 extending about the blank from the uncut and unseamed side 14 to the cut ends of the selvaged edging 9, see Figs. 3 and 4. After the closing seam 13 has been applied, stitching 15, 16 is applied to the blank 8, to form the toe receiving pockets, and it is to be noted that the fashion cut blank is so formed that the stitching 16 which forms the pocket for the big toe, is disposed in substantial alinement with the seamed and straight side portion 17 of the bandage when the latter is collapsed or flattened. While most of the rows of stitching 15, 16 are disposed substantially parallel to each other, it is preferable to position the row which separates the small toe pocket from the adjoining pocket at an angle, as shown in Fig. 3, in order to enhance the comfort during wearing of the bandage.

The bandages thus produced may be interchangeably worn either on the left or right foot, since all blanks for predetermined size bandages are the same. The blanks and the resulting bandages may also be formed of any desired length so as to provide either a mere toe covering, or a sandal type foot covering, or a complete sock or stocking, but we have found it most desirable and least wasteful to produce the blanks by tubular ribbed knitting. When using proper thread or yarn, we find that it is preferable to utilize approximately thirty six gauge ribbing formed on tubular knitting machines, with a minimum of about three hundred ribs or needles for three and one-half inch diameter tubing, and a maximum of about four hundred ribs or needles for six inch diameter tubing. This method of production will result in the formation of blanks adapted to fit any human foot, with minimum waste of material, and which may be worn with maximum comfort either alone or within the ordinary stockings.

After the covering or bandage has been thus completely fabricated, it may be medicated in any suitable manner as by dipping or spraying with medicated liquid or powder, applied especially on the interior, after which it is ready for use. The short bandage may be applied to a foot 12 as illustrated in Fig. 5, whereupon the edging 9 will snugly coat with the instep and arch portions of the foot and the toes will be confined within the adjoining pockets produced by the stitching 15, 16. The fashion cutting of the bandage will insure the desired snug fit at the front portion of the foot 12 and at the toes, and by providing the stitching 15, 16 between the adjacent toe receiving pockets, the toes will be completely surrounded with fabric so as to prevent direct contact, but excess bulk of material between the toes is eliminated. The toe pockets are moreover attached directly to each other and therefore cannot rotate or shift relative to each other, and possible chafing is thus avoided. In distributing or merchandizing the improved bandages, they may be slipped over cardboard retainers each having a shape substantially as shown in Fig. 3, and such cardboard retainers may also be used to maintain proper shape of the bandages after they have been washed and while the same are drying. The bandages may be sold either individually or in pairs, and are applicable interchangeably to either foot.

From the foregoing detailed description it will be apparent that our invention provides an improved method of fabricating improved foot cov-

erings or bandages, which are simple in construction and highly effective in use. The improved method of production enables the bandages to be quickly produced from tubular knitted blanks without excessive waste, and the improved articles are fashion formed so as to properly contact the feet and without presenting undesirable seams or bulk of material where the feet are snugly engaged by the shoes. The stitching 15, 16 effectively prevents contact of the toes with each other, and the pockets formed by this stitching cannot rotate or shift relative to each other; and the improved article has produced remarkable results in curing diseases such as "athlete's foot." The location of the stitching 16 in substantial alinement with the straight side portion 17 is also of importance in securing a fashioned fit, and the provision of the resilient or elastic selvaged edge 9 insures proper retention of the short type of bandage upon the foot 12. While it may be desirable in some cases to add one or more transverse rows of elastic stitching to each blank 8, this has not been found necessary in commercial production, and the interchangeability of the blanks obviously reduces the cost of manufacture to a minimum.

It should be understood that it is not desired to limit this invention to the exact steps of the method or to the precise details of construction, herein shown and described, for various modifications within the scope of the claims may occur to persons skilled in the art.

We claim:

1. As an article of manufacture, a tubular foot covering having opposite ends of different sizes, the large end being closed to form a pocket and the smaller end being provided with a resilient selvage edge, and said pocket having rows of stitching extending inwardly of said closed end toward said selvaged edge, one of said rows of stitching adjacent to one side edge of said pocket being substantially alined with the portion of said side edge of said pocket located near said selvaged edge.

2. As an article of manufacture, a flatly collapsible and elastic covering for the toe portion of a foot having its toe confining end of greater size than its opposite open end; one side of said covering when collapsed being straight and the large end edge being disposed at an oblique angle relative to said side while the smaller end has a selvage edge disposed approximately perpendicular to said side, and the opposite sides and said oblique end edge being closed to form a pocket having a maximum width at the toe confining portion thereof when collapsed, and a series of rows of stitching extending inwardly of said oblique edge and toward said selvage edge to form a series of gradually enlarged segregated adjoining toe confining receptacles.

3. As an article of manufacture, a covering for the toe portion of a foot having its toe confining end of greater size than its opposite open end, the large end edge being disposed at an oblique angle relative to one straight side and the smaller end having a selvage edge disposed approximately perpendicular to said side, and the opposite sides and said oblique end edge being closed to form a pocket having maximum width at the toe confining portion thereof, and a series of rows of stitching extending inwardly of said oblique edge and toward said selvage edge to form segregated adjoining toe confining receptacles, the row of stitching adjacent to one side of said pocket being

substantially alined with the portion of said side located near said selvaged edge.

4. As an article of manufacture, a flatly collapsible covering for the toe portion of a foot having its toe confining end of greater size than its opposite open end, the large end edge being disposed inclined relative to one straight side when the covering is collapsed and the smaller end having a selvage edge disposed approximately perpendicular to said straight side, and the opposite side and said inclined edge being closed by a seam to form a pocket having greatest width at the toe confining portion thereof when collapsed, and a series of approximately parallel rows of stitches of gradually increased length extending inwardly of said inclined closed edge substantially parallel to said straight side to form segregated adjoining toe confining receptacles.

5. As an article of manufacture, a knitted cov-

ering for the toe portion of a foot having its toe confining end of greater size than its opposite open end, the large end edge being disposed inclined relative to one straight side and the smaller end having a selvage edge disposed approximately perpendicular to said straight side, and the opposite side and said inclined edge being closed by a seam to form a pocket having greatest width at the toe confining portion thereof, and a series of approximately parallel rows of stitches of gradually increased length extending inwardly of said inclined closed edge substantially parallel to said straight side to form segregated adjoining toe confining receptacles, the longest row of stitching adjacent said opposite side of said pocket being substantially alined with the portion of said side located near said selvaged edge.

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