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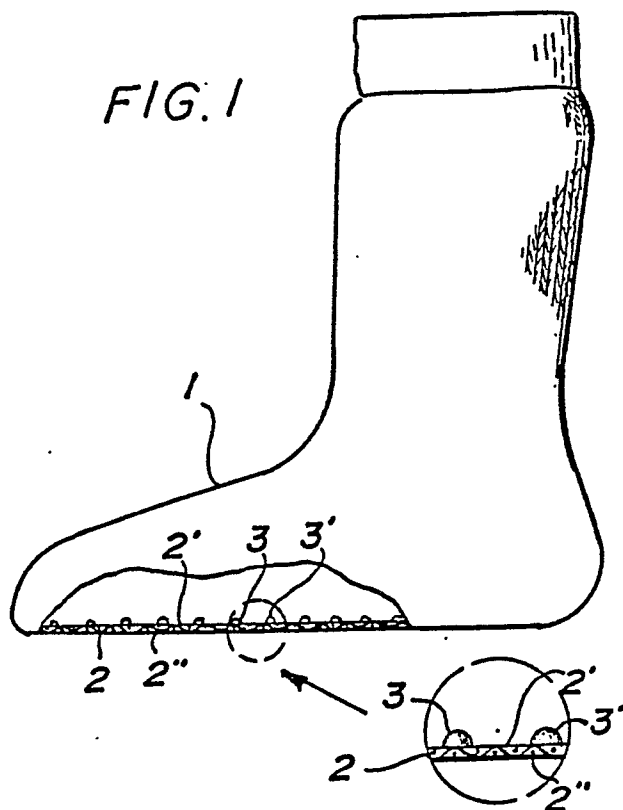
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(54) Hosiery article.

(57) A sock (1) has a sole (2) to the inner surface (2') and/or outer surface (2'') of which a plurality of generally hemispherical protuberances (3,3') is attached. The protuberances are made from plastic material and ceramic powder, magnetised powder, copper powder and a steriliser and stimulate the foot of the wearer and thus the circulation of blood.

FIG. 1



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HOSIERY ARTICLE

The present invention relates to articles of hosiery, particularly socks, and is concerned with articles of hosiery which are beneficial to the health of the wearer.

The sole of the foot contains numerous nerves and blood vessels that are connected to the remainder of the body. Continuous stimulation of this part of the foot will stimulate the whole body and improve the circulation of blood. With the development of new modes of transportation, physical activity is nowadays on the decline for most people. This shortage of exercise together with a surplus of nourishment results in man having various ailments that cannot be cured by drugs alone. Whilst many such ailments could be overcome by sufficient physical exercise, most people who work in an office do not have sufficient time to take sufficient exercise.

With this background it is the object of the present invention to solve or alleviate the problems caused by the lack of exercise in modern society and, in particular, to provide an article of hosiery which continuously stimulates the bottom of the wearer's foot and thus improves his health.

According to the present invention an article of hosiery, such as a sock, is characterised in that a plurality of protuberances are attached to the outer surface and/or the inner surface of the sole of the article of hosiery, the protuberances being made from a mixture of plastic material, ceramic powder, magnetised powder, copper powder and a steriliser.

The protuberances are preferably not more than 1 or 2mm high and are thus sufficiently small not to be felt when the article of hosiery is worn but nevertheless give continuous stimulation to the bottom of the foot. This promotes the circulation of blood in the foot and as a result of the continuous massaging effect stimulates those parts of the body to which the nerves in the foot extend.

The protuberances are preferably generally rounded, e.g. generally hemispherical, and preferably do not have a width greater than 3mm or a height greater than 1mm and may be rather smaller if the article of hosiery is to be worn by a woman.

The presence of the magnetised powder has the effect of enhancing the magnetic power of the body and improving the circulation of blood. The copper powder has a deodorising effect and sterilises the bottom of the foot. Both these effects are achieved simultaneously with the continuous stimulation of the bottom of the foot.

Further features and details of the invention will be apparent from the following description of cer-

tain specific embodiments which is given by way of example with reference to the accompanying drawings, in which:

Figure 1 is a side elevation, partly in section, of a sock in accordance with the invention together with a scrap sectional view through part of the sole of the sock;

Figure 2 is a scrap sectional view through the sole of a modified sock;

Figure 3 is a view similar to Figure 2 of a portion of an oversock; and

Figure 4 is a side elevation, partly in section, of a modified oversock.

The sock 1 illustrated in Figure 1 has a sole 2 connected to the inner surface 2' of which is a plurality of solid projections or protuberances 3,3' comprising ceramic resin, that is to say a resin or plastics material and ceramic powder, and magnetised powder, e.g. magnetised iron filings, copper powder and a steriliser, such as sodium chloride, that is common salt. The protuberances are generally hemispherical in shape and are sufficiently small that they are not noticed by the wearer. The protuberances are applied to the sock in a semi-molten state and then solidified and thereby connected to the sock. The protuberances are connected to the sock at their flat surface.

In the embodiment of Figure 1 the protuberances are on the inner surface of the sock and there are none on the outer surface 2". However, in the construction of Figure 2, which is principally intended to be worn by a woman, the protuberances 3,3' are secured to the outer surface of the sole of the sock. The stimulation of the foot is thus rather less intense than in the embodiment of Figure 1 and the sock of Figure 2 is therefore particularly suitable for wear by a woman.

In the embodiment of Figure 3 there are protuberances 3,3' on both the inner and outer surface of the sole of the sock. In this case, the protuberances on the inner and outer surfaces of the sock are in registry with one another. This imparts a particularly vigorous stimulation to the sole of the foot.

The embodiment illustrated in Figure 4 is an oversock for a woman and the protuberances 3,3' are again attached only to the outer surface of the sole of the sock.

Claims

1. An article of hosiery characterised in that a plurality of projections (3,3') are attached to the outer surface (2") or the inner surface (2') of the

sole (2) of the article of hosiery, the projections (3,3') being made from plastic material, ceramic powder, magnetised powder, copper powder and a steriliser.

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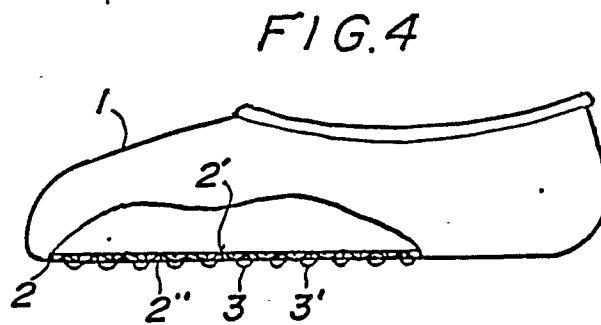
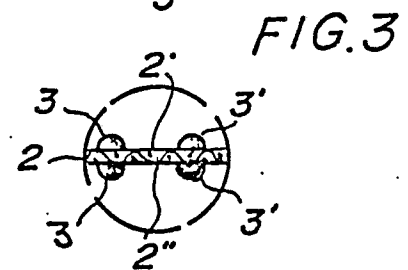
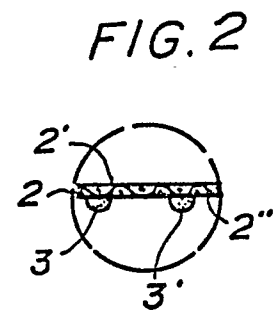
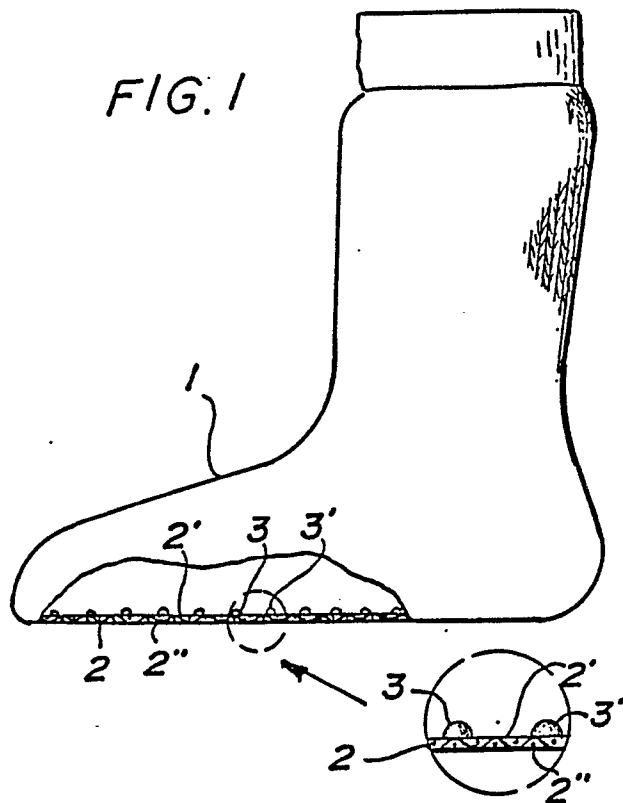
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	US-A-4206514 (A. YAMAUCHI) * the whole document * ----	1	A41B11/00
A	US-A-4015347 (K. MORISHITA) * column 3, lines 22 - 50; claims 1, 5-7 * ----	1	
A	DE-C-597663 (S. EPSTEIN) * the whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			A41B A43B A61F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 04 AUGUST 1989	Examiner GARNIER F.M.A.C.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document			