## UK Patent Application (19) GB (11) 2 240 258(13) A

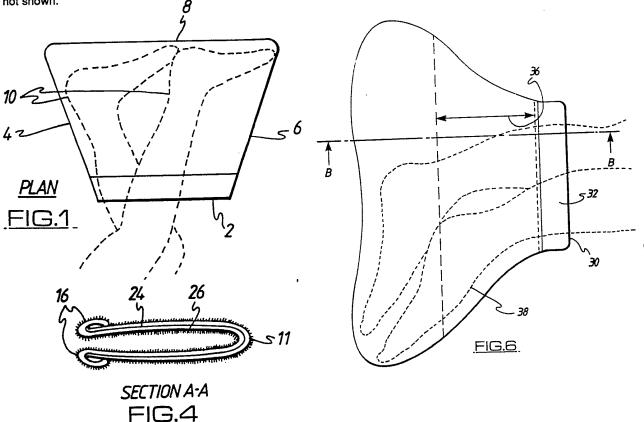
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- (71) Applicant John Anthony Clayton Woodcote, 11 Addingford Drive, Horbury, Wakefield, West Yorkshire, WF4 5BW, United Kingdom
- (72) Inventor John Anthony Clayton
- (74) Agent and/or Address for Service Bailey, Walsh and Co 5 York Place, Leeds, LS1 2SD, United Kingdom

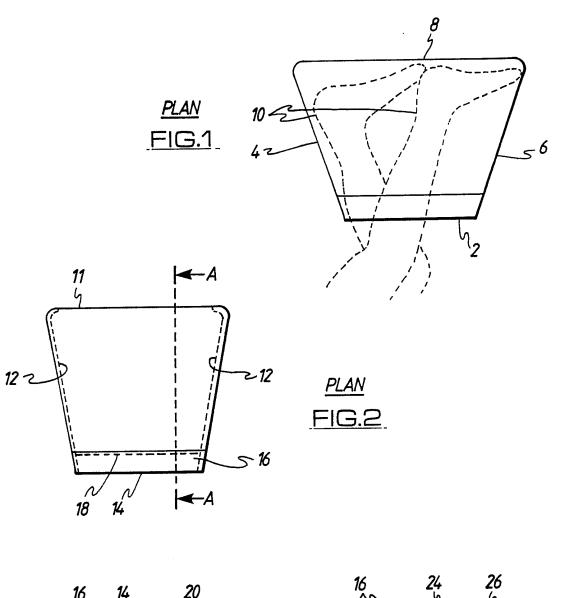
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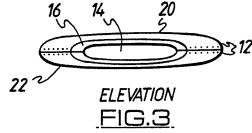
## (54) Foot muff

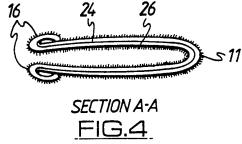
(57) The invention relates to a foot comforter or warmer, the foot comforter comprises an envelope of flexible material which ideally comprises a number of layers of material separated by wadding, the envelope having an opening at an edge for the insertion of feet, the edge being formed into a cuff, and the envelope widening interiorly of the opening in order to provide maximum comfort for the user. The foot warmer may be provided with a removable inner pouch which is attached to the foot warmer about the cuff thereof. Alternatively, the foot warmer may be formed in a bed sheet or bed cover in order to provide a foot comforter for use when in bed. The muff may take the form of a figure eg a foot, cat or hedgehog - see fig. 12 not shown.

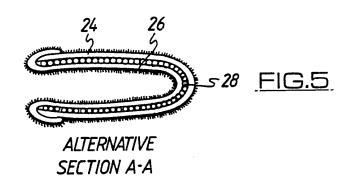


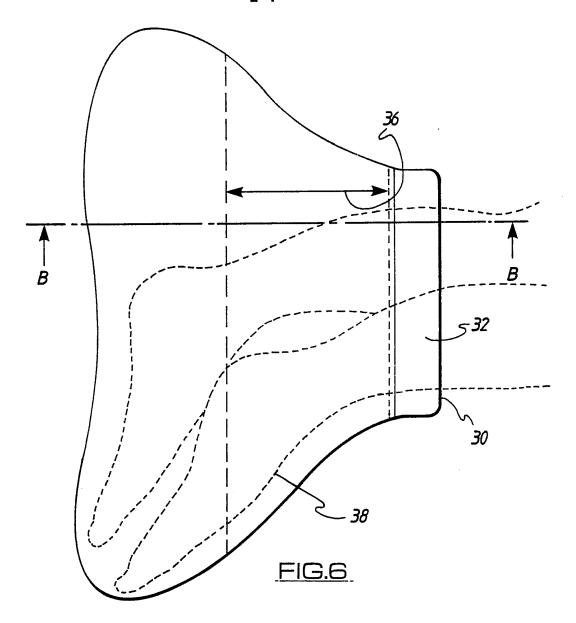
At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

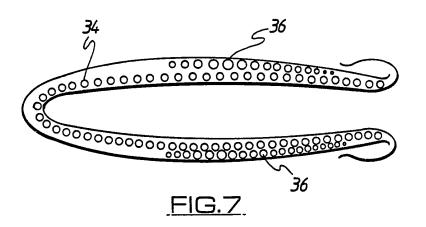


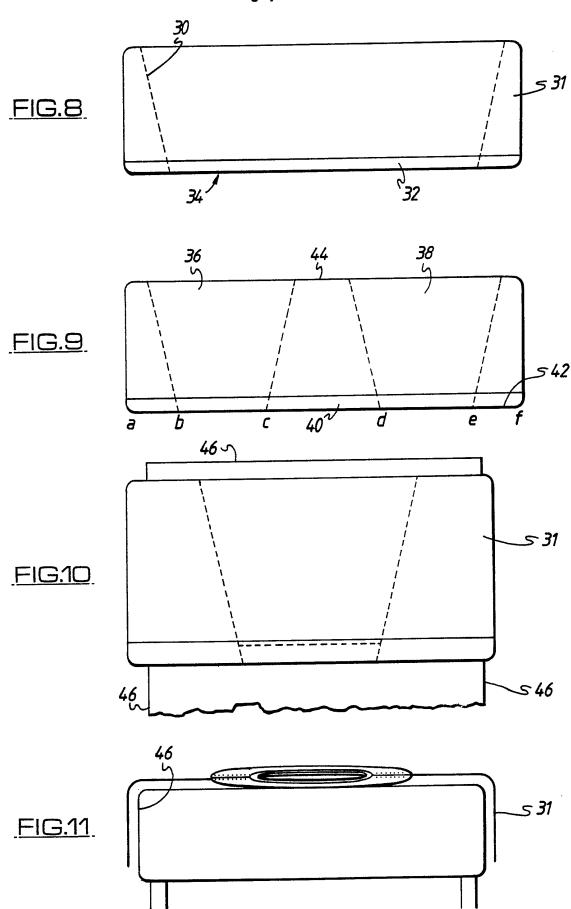


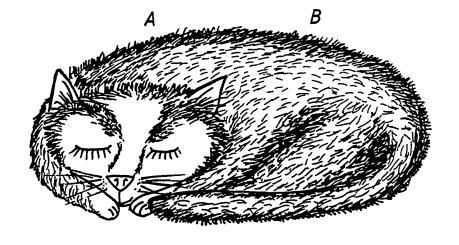


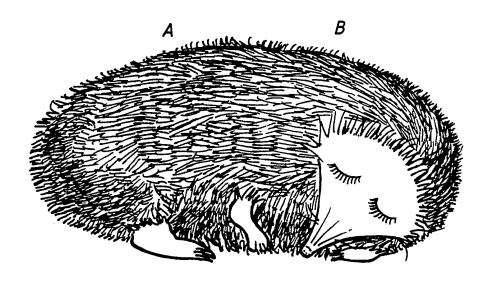












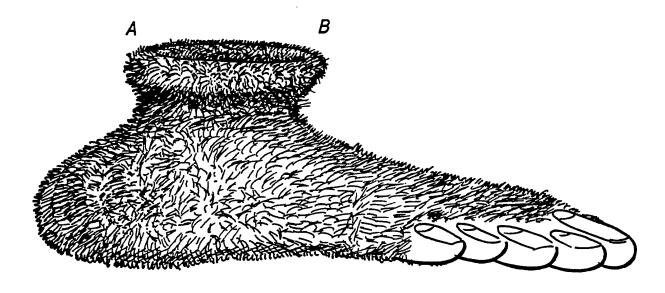


FIG.12

## Foot Warmer

This invention relates to a feet warmer for use particularly, but not exclusively, in a bed.

It is known to provide rigid boot-like articles into which both feet can be inserted for warmth when in a sitting position, but such would be unsuitable for use in a bed. It is also known to provide relatively flexible liners for shoes, and, of course, bed socks, but these items are designed to accommodate only one foot each, and to encase the foot closely.

I have discovered that it is a particular benefit in warming the feet in bed, for two-or more-feet to be able to make intimate contact with one another whilst encased within an insulating cover to prevent loss of heat.

According to one aspect of my invention, therefore, I provide a foot comforter comprising an envelope of flexible material, the envelope having an opening at an edge for the insertion of the feet, and widening interiorly of the opening.

The envelope may be simply constructed of two pieces of sheet material of similar shape, attached to one another around their peripheries, leaving a portion of the periphery unattached to provide the opening. If required, a gussett may be provided between the peripheries of the pieces. Alternatively, a single piece of material may be folded along an edge, preferably the edge remote from the opening, and the free edges attached together between the opening and the fold, with or without an intermediate gussett.

The preferred shape of the envelope is essentially frustoconical, the opening being in the shorter of the

opposed parallel sides. Preferably, but not essentially, the inclined sides are symmetrical.

Whilst the above shapes depend on straight sides, other shapes include similar figures but with curved sides. Moreover, for use by children, the envelope could be made to an outline representing, say, an animal or other object.

Less satisfactory, perhaps, but within the scope of my invention, the envelope could be square or rectangular, in which case the opening would extend incompletely along an edge thereof. Moreover, the envelope could be part circular with the opening along the short chord thereof, or part elliptical, with the opening along the short chord parallel to the longer axis thereof. Whereas, above reference has been made to the openings being along an edge of the envelope, it is within the scope of the invention for the opening to be formed in one face of the envelope, adjacent an edge.

The opening may be provided with a cuff or may be elasticated.

The envelope shape may be defined by stitching within a pair of flexible, superimposed sheets of greater superficial dimensions. If one of the dimensions represented the width of a bed, the superimposed sheets could be provided with two foot comforter envelopes side by side.

Among suitable flexible materials for the manufacture of the foot comforter are woven or knitted fabrics of wool or other natural or synthetic fibres, fur fabrics, or felt, though it is believed that it is important that the surface which will contact the feet in use will be soft. The fabric may be quilted. Of possible suitability are so-called thermal

fabrics such as Damart (Trade Mark) and Thermolon (Trade Mark). The outer surface may be decorated.

The faces of the envelope, each referred to above comprising a single sheet, may, in fact each comprise two layers with or without intermediate padding or filling materials to increase the thermal insulation properties. Alternatively, the envelope may comprise an inner or lining pouch enclosed within an outer pouch of similar construction again with or without intermediate padding, the inner being attached to the outer at the cuff permanently by stitching or removably by buttons or press studs, or by the use of touch and close material, in order that the lining may be removed from the The padding may be formed from wadding outer for cleaning. It may be uniformly distributed material or loose filling. over the envelope, but there is advantage in providing the padding, or a greater thickness of padding, in a zone around the envelope parallel to the opening and at such distance therefrom as to support the ankles of the wearer in use, giving a cushion effect to the seat and allowing them more freedom of movement.

According to a further aspect of my invention I provide, in a bed, a foot comforter comprising an envelope or pouch of flexible material, having an opening for the insertion of the feet and an interior wide enough for the reception of at least two feet.

Embodiments of the invention will now be described with reference to the accompanying drawings of which:

Fig. 1 is a plan view of a foot comforter in one embodiment.

Fig. 2 is a plan view of a comforter in an alternative embodiment.

- Fig. 3 is a front elevation of the embodiment of Fig. 2.
- Fig. 4 is a section on the line A-A Fig. 2.
- Fig. 5 is a section corresponding to Fig. 4 but of an embodiment not otherwise shown.
- Fig. 6 is a plan view of a further embodiment and
- Fig. 7 is a section on the line B-B of Fig. 6.
- Fig. 8 is a plan view of a further embodiment.
- Fig. 9 is a plan view of yet a further embodiment.
- Fig. 10 is a plan view of a foot of a bed incorporating the foot comforter.
- Fig. 11 is a front elevation of the embodiment of Fig. 10.
- Fig. 12 shows a plan view of four different foot comforters with outline representing animals and a foot.

Referring now to Fig. 1, the foot warmer is a frustoconical envelope comprising two superimposed layers of flexible material, having an opening along the shorter two of the parallel sides, from which outwardly sloping sides 4 and 6 lead to the base 8. Sides 4 and 6 and base 8 are closed. The figure shows, in dotted lines, the outline 10 of feet and lower legs to indicate the relative sides of the envelope.

Fig. 2 shows a similar envelope, but with less steeply sloping sides. It is constructed of a single layer comprising two superimposed sheets (as will be explained in

relation to Fig. 4), folded over at end 11. The dotted line 12 represents stitching by means of which the folded layer is joined together along the inclined sides. At the opening end 14, the edges are folded back outwardly to form a cuff 16, which is hemmed along stitch line 18.

Fig. 3 shows upper 20 and lower 22 folds of the layer and more clearly the opening 14 and the cuff 16.

Fig 4 shows that the envelope is constructed of outer 24 and inner 26 sheets of material superimposed with pile or nap outwards.

Fig. 5 represents a comforter of similar construction except that between the sheets 24 and 26 is a filling layer 28.

Fig. 6 shows a foot comforter of particularly advantageous shape. It is similar to that shown in Fig. 1 but the sides are curved to allow the material to lie more closely to the top and bottom of the seat when in a resting position. The comforter is symmetrical so as to provide a similar environment for the feet whatever position the person may lie in; that is to say the user can turn over in bed, moving his feet from the position shown in dotted lines 38, without turning the comforter over or taking his feet out of the comforter, and without loss of comfort. In this context it may be mentioned that some couples may find it particularly comforting to "share" a single foot comforter, which may mean that a somewhat wider envelope having a rather larger opening should be provided.

As in the Fig. 5 embodiment the opening is surrounded by a collar or cuff 32. In addition to an overall insulating padding 34 there is a ring of contoured wadding 36 of greater thickness intermediate its edges.

Fig. 8 shows a foot comforter for a double bed comprising two superimposed sheets of rectangular shape, corresponding in width to the width of a bed, within which is a single, wide, frustoconical shape is defined by lines of stitching 30. Outwardly of the inclined sides of the shape are wings 31 which as shown in Fig. 8 below may be extended downwardly of the bed mattress. As in the previous described embodiment, the comforter has a cuff 32 which extends not only the length of the opening 34 which extends between the inclined lines but also of the length of the wings.

In Fig. 9, two separate frustoconical shapes 36 and 38 are defined by lines of stitches side by side, within the same pair of superimposed rectangular sheets, folded along line 44. Again there is a cuff 40 extending the length of the rectangle. It is to be understood that along the line 42 representing one of the longer sides of the rectangle, the superimposed sheets are stitched together along length portions a-b, c-d and e-f, whilst length portion b-c and d-e represent openings for the shapes 36 and 38 respectively.

Turning now to Figs. 10 and 11, these show a foot comforter of the general form of Fig. 8, in use on a single bed represented by numeral 46. Fig. 10 shows that the wings lateral of the frustoconical shape can be folded downwardly of the edges of an underlying mattress, so that the comforter can be secured in position of the bed by means of other bedding such as duvet or bed sheets.

In Fig. 12 we show some fanciful shapes, as examples of many, which could be applied as mere decoration to a foot comforter of the Fig. 1 construction. However, the frustoconical shape is not an absolute essential and the comforter envelope may be defined by the outlines of the shape shown here by

stitching, leaving an opening A-B in each case.

As indicated above the foot comforters as described may be constructed in many different ways and of different materials. Thus, where we have referred to superimposed sheets, stitched together, it will be understood that one of the stitch lines could be replaced by a fold. Again, if the material were to be a knitted fabric, it could be easily knitted in tubular form without the need for any subsequent stitching.

From the description given it will be clear that the foot comforter is intended to be laid in a bed between the layers of bedding where the occupant lies or the occupants lie and in such a position as to allow the feet to be inserted through the opening into the envelope. It may be convenient, when making the bed, first the place the comforter about two-thirds the way down from the bed head; the user (s) will then, on inserting the feet, push the comforter down to the most comfortable position.

And further, it is within the scope of the invention to encorporate a heating element between the outer and inner layers of the comforter.

In the instance where a removable inner pouch is provided in the foot warmer, the inner pouch will have substantially the same shape as the outer pouch, and will be attached to the outer pouch ideally about the cuff 32 by folding the upper most edge of the inner pouch over the upper most edge of the outer pouch and attaching the two edges there together by means of releasable fasteners for example tabs of velcro (Trade Mark).

## CLAIMS

- 1. A foot comforter comprising an envelope of flexible material, the envelope having an opening at an edge for the insertion of feet, and widening interiorly of the opening.
- 2. A foot comforter according to claim 1 wherein the envelope is constructed of two pieces of material of similar shape attached to one another around their peripheries, leaving a portion of the periphery unattached to provide an opening.
- 3. A foot comforter according to claim 2 wherein there is provided a gussett between the peripheries of the pieces.
- 4. A foot comforter according to claim 1 wherein a single piece of material is folded along an edge and at least one free edge is attached together.
- 5. A foot comforter according to claim 4 wherein the edge remote from the opening is folded.
- 6. A foot comforter according to claim 4 or 5 wherein there is provided a gussett.
- 7. A foot comforter according to any preceeding claim wherein the envelope is essentially frustoconical.
- 8. A foot comforter according to claim 7 wherein the opening of the envelope is in the shorter of the opposed parallel sides.
- 9. A foot comforter according to claims 7 or 8 wherein the inclined sides are symmetrical.
- 10. A foot comforter according to any of claims 1 to 6

wherein the envelope is adapted to form an outline of a predetermined figure.

- 11. A foot comforter according to claims 1 to 6 wherein the envelope is square.
- 12. A foot comforter according to claims 1 to 6 wherein the envelope is rectangular.
- 13. A foot comforter according to claims 11 or 12 wherein the opening extends incompletely along an edge thereof.
- 14. A foot comforter according to claims 1 to 6 wherein the envelope is part circular.
- 15. A foot comforter according to claim 14 wherein the opening is provided along a short chord of the circular portion.
- 16. A foot comforter according to claims 1 to 6 wherein the envelope is part elliptical.
- 17. A foot comforter according to claim 16 wherein the opening is along a short chord parallel to the longer axis of the ellipse.
- 18. A foot comforter according to any preceeding claim wherein the opening is provided with a cuff.
- 19. A foot comforter according to claim 18 wherein the cuff is elasticated.
- 20. A foot comforter comprising an envelope of flexible material the envelope having an opening at an edge for the insertion of feet and the envelope being defined by means of

stitching within a pair of flexible superimposed sheets of greater superficial dimensions.

- 21. A foot comforter according to claim 20 wherein the sheets are provided with two or more foot comforter envelopes.
- 22. A foot comforter according to claim 21 wherein the envelopes are positioned side by side.
- 23. A foot comforter according to any preceeding claim wherein the flexible material comprises a plurality of layers.
- 24. A foot comforter according to claim 23 wherein padding is provided between at least two layers of flexible material.
- 25. A foot comforter comprising an envelope of flexible material, the envelope having an opening at an edge for the insertion of feet and the envelope comprising an inner pouch enclosed within an outer pouch.
- 26. A foot comforter according to claim 25 wherein the inner pouch has the same shape as the outer pouch.
- 27. A foot comforter according to claim 25 or 26 wherein the inner pouch is attached to the outer pouch at the opening thereof.
- 28. A foot comforter according to claim 27 wherein the inner pouch is attached by means of a releasable attachment.
- 29. A foot comforter according to claims 25 to 28 wherein the flexible material comprises a plurality of layers.
- 30. A foot comforter according to claim 29 wherein padding is

provided between at least two layers.

- 31. A foot comforter according to claim 30 wherein padding is provided of a greater thickness in a zone around the envelope parallel to the opening and at such distance from the opening to support the ankles of the wearer when in use.
- 32. In a bed, a foot comforter comprising an envelope or pouch of flexible material having an opening for the insertion of the feet and an interior wide enough for the reception of at least two feet.