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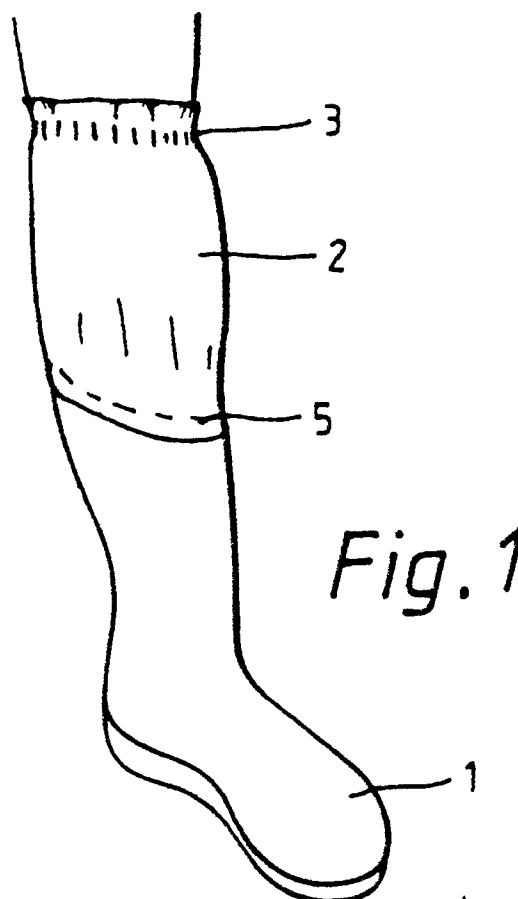
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54 Improvements in waterproof footwear.

57 A waterproof boot (1) has a water-resistant leg cover extension (2) sealably attached to an upper portion of the boot (1) so that when extended it surrounds the wearer's leg above the knee. The extension (2) is sufficiently flexible to be collapsed to form a cuff around the exterior of the top of the boot (1) and a holding cuff (4) is provided to hold the extension in the collapsed condition about the upper part of the boot.



IMPROVEMENTS IN WATERPROOF FOOTWEAR

This invention relates to improvements in waterproof footwear and in particular to waterproof footwear which provide lightweight, flexible, water resistant leg cover extensions to give added protection for the wearer.

Most waterproof footwear, for example wellington boots, only extend, at the most, to just below the knee of the wearer. However there has always been a need for water resistant footwear extending on and above the knee but such protection was often at the expense of loss of freedom of movement for the wearer. In particular waders and waterproof trousers have been used in the past but both are cumbersome and heavy to wear. The present invention seeks to provide therefore waterproof footwear which provide water resistant protection on and above the knee which are lightweight and sufficiently flexible to avoid a loss of freedom of movement for the wearer.

The present invention provides waterproof footwear comprising a waterproof boot, a water resistant leg cover extension sealably attached to an upper portion of the waterproof boot wherein the water resistant leg cover extension is sufficiently flexible to be collapsed, when not in use, to form a cuff around the exterior of the upper portion of the waterproof boot and when in use is extended to surround the wearer's leg from the top of the boot to a position above the knee; retaining means for retaining the water resistant leg cover about the wearer's leg when in use in the extended position; and holding means for holding the water resistant leg cover extension in the collapsed condition about the upper portion of the waterproof boot when not in use.

Embodiments according to the invention will now be described, by way of example only, with reference to the following accompanying drawings, in which:

Figure 1 is a perspective view of a first embodiment according to the invention with a leg cover extension in use,

Figure 2 is a second perspective view with the leg cover extension not in use, and

Figure 3 is a perspective view of a second embodiment according to the invention.

Waterproof footwear (1) in the form of a wellington boot has a water resistant leg cover extension (2). The leg cover extension (2) is sealably attached to the upper portion of the waterproof boot at 5 using waterproof adhesive (such as a neoprene based adhesive) in such a manner as to ensure that no ingress of water along the line of attachment may occur. The leg cover extension (2) surrounds the wearer's leg when extended, from

the top of the waterproof boot to a position above the knee, as shown in Figure 1. The leg cover extension (2) is sufficiently flexible that it does not impede the wearer's movements when in use and may be collapsed down (by rolling or folding) to form a cuff about the top of the exterior of the waterproof boot when not in use.

When in use, the leg cover extension (2) is held in position about the wearer's leg by retaining means (3). As seen in Figure 1 the retaining means (3) is in the form of an annular elastic member attached to the top end of the leg cover extension (2) opposite to the end of the leg cover extension attached to the waterproof boot. The elastic grips the wearer's leg gently and so holds the leg cover extension (2) in place. As may be seen in Figure 3 however other retaining means may be used to hold the leg cover extension in place when in use such as one or more straps (3A). The straps (3A) are attached at one end to the leg cover extensions and at the other end by a suitable device, to a belt or belt loops or some other means, provided about the waist of the wearer. In addition, other similar retaining means for example a drawstring through the top end of the leg cover extension would be appropriate.

When the leg cover extension (2) is not in use it is sufficiently flexible, as stated earlier, that it may be collapsed down to form a cuff about the top of the waterproof boot. To hold the leg cover extension (2) in the form of a cuff there is provided a stretch cuff (4). The stretch cuff (4) forms a second extension member fixed to the top of the boot, is short relative to the leg cover extension, and is located within the leg cover extension. When the leg cover extension (2) is not in use the stretch cuff (4) is stretched to cover and hold in position the collapsed leg cover extension (2) as shown in Figure 2. the stretch cuff (4) may be made from any suitable partly elastic material for example ribbed knitted wool. In this example the stretch cuff is secured on the inner wall of the boot and the leg extension is bonded to the outside surface of the boot.

The boot is made of a relatively rigid and self supporting material such as rubber or a P.V.C. material. The leg cover extension is made separately from thin flexible sheet such as cotton reinforced P.V.C. sheeting, which is not self supporting.

The invention is not limited to the details of the foregoing example.

Claims

1. Waterproof footwear comprising a waterproof boot, a water resistant leg cover extension sealably attached to an upper portion of the waterproof boot wherein the water resistant leg cover extension is sufficiently flexible to be collapsed, when not in use, to form a cuff around the exterior of the upper portion of the waterproof boot and when in use is extended to surround the wearer's leg from the top of the boot to a position above the knee; retaining means for retaining the water resistant leg cover about the wearer's leg when in use in the extended position; and holding means for holding the water resistant leg cover extension in the collapsed condition about the upper portion of the waterproof boot when not in use.

2. Waterproof footwear as claimed in claim 1 wherein the holding means comprises a second extension member fixed to the upper end of the boot, located within said leg cover extension whereby when said leg cover extension is collapsed, said second extension member may be positioned to cover and hold the collapsed water resistant leg cover extension in position around the outside of the upper part of the boot.

3. Waterproof footwear as claimed in claim 2 wherein said second extension member comprises a stretch cuff.

4. Waterproof footwear as claimed in claim 3 wherein said stretch cuff comprises a knitted sleeve.

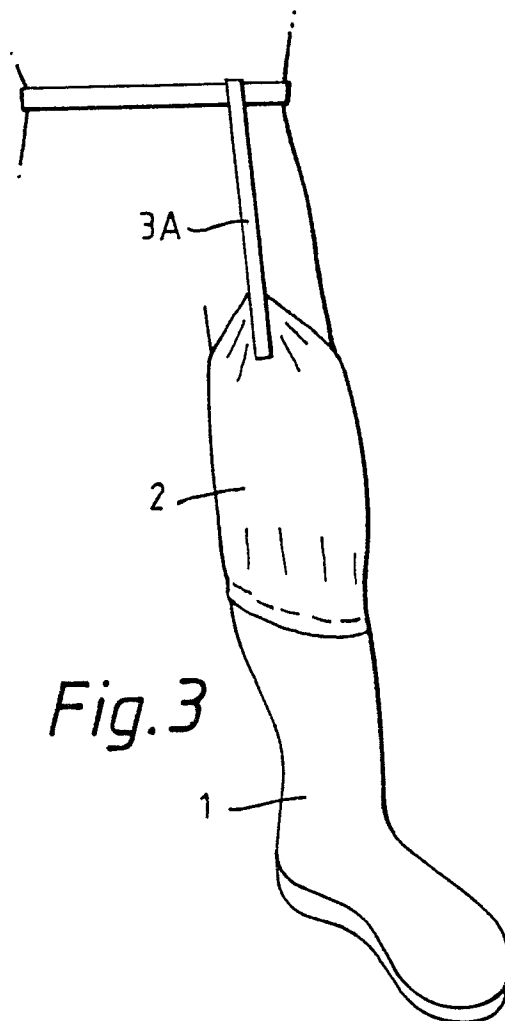
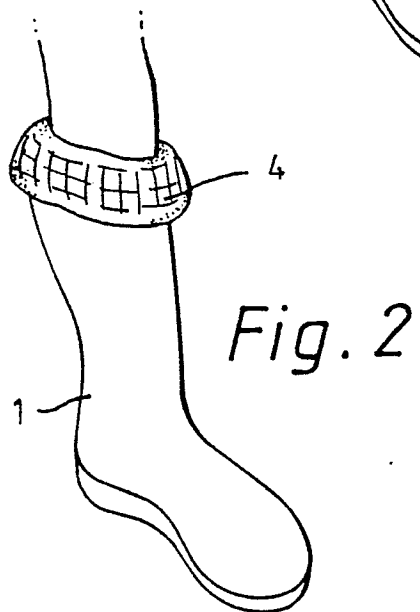
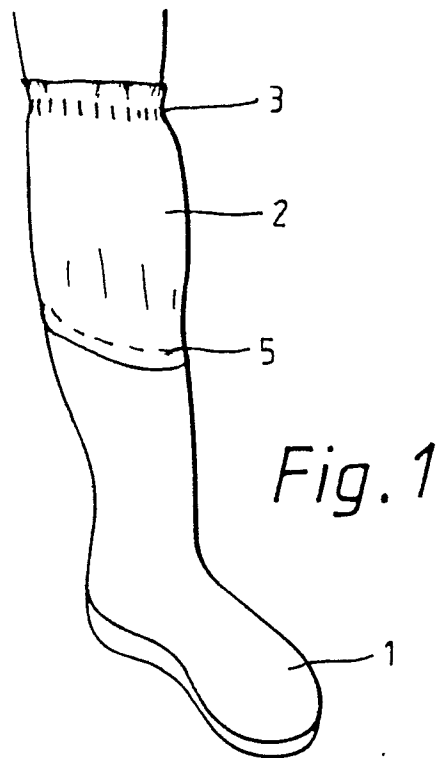
5. Waterproof footwear as claimed in any one of claims 2 to 4 wherein said second extension member is short relative to said leg cover extension.

6. Waterproof footwear as claimed in any one of the preceding claims, wherein the retaining means comprises an annular elastic member attached to the top end of the water resistant leg cover extension opposite to the end attached to the upper portion of the waterproof boot.

7. Waterproof footwear as claimed in any one of claims 1 to 5, wherein the retaining means is in the form of one or more straps, the or each strap being attached at one end to the water resistant leg cover extension and being adapted at the other end for attachment to a belt or other means at the wearer's waist.

8. Waterproof footwear as claimed in any one of claims 1 to 5, wherein the retaining means is a drawstring threaded through the top end of the water resistant leg cover extension opposite to the end attached to the upper portion of the waterproof boot.

9. Waterproof footwear as claimed in any one of claims 1 to 8 wherein said leg cover extension is secured to the upper part of said boot by bonding with waterproof adhesive.





DOCUMENTS CONSIDERED TO BE RELEVANT			EP 90303173.0
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.')
A	DE - A1 - 3 606 837 (TEBBE) * Fig. 1-14; claims 1-30 * --	1-4, 6, 8	A 43 B 7/12
A	GB - A - 2 171 289 (KNOWLES) * Fig. 1-7; claims 1-10 * --	1, 3	
A	US - A - 4 516 336 (NISSENBAUM) * Fig. 1-12; claims 1-15 * --	1-3, 4, 6	
A	US - A - 4 532 724 (OKOSHI) * Fig. 1-2; claims 1-13 * --	1, 3	
A	GB - A - 2 161 364 (COLDWELL) * Fig. 1-3b; claims 1-12 * --	1, 3, 7-9	
A	GB - A - 2 132 072 (K.R.ASSOCIATES INC.) * Fig. 1-6; claims 1-5 * ----	1-3, 6-9	TECHNICAL FIELDS SEARCHED (Int. Cl.')
			A 43 B
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 20-06-1990	Examiner CZASTKA
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 L : document cited for other reasons & member of the same patent family, corresponding document	