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(54) **Clothes hanger**

(57) The present invention relates to a clothes hanger having two arms (2) and hooking means (3) connected centrally to the two arms (2) so as to support the clothes hanger (1) in a raised manner. The clothes hanger (1) also comprises a distribution member (7) which is connected to the arms (2) underneath the hooking means (3) in a central zone (5) of the clothes hanger (1). The distribution member (7) has an inlet mouth (8), designed to receive a flow of air from air supply means (10) associated with it during a drying step,

and an outlet mouth (9) designed to expel said air flow towards the article of clothing (20). By so doing, the air flow allows drying, in the hung position, of the articles of clothing (20) which are placed wet on the clothes hanger (1). Advantageously the arms (2) are provided with a plurality of grooves (11) designed to allow air to flow towards a zone (14) where the article of clothing (20) is held on the clothes hanger (1), situated above the arms (2).

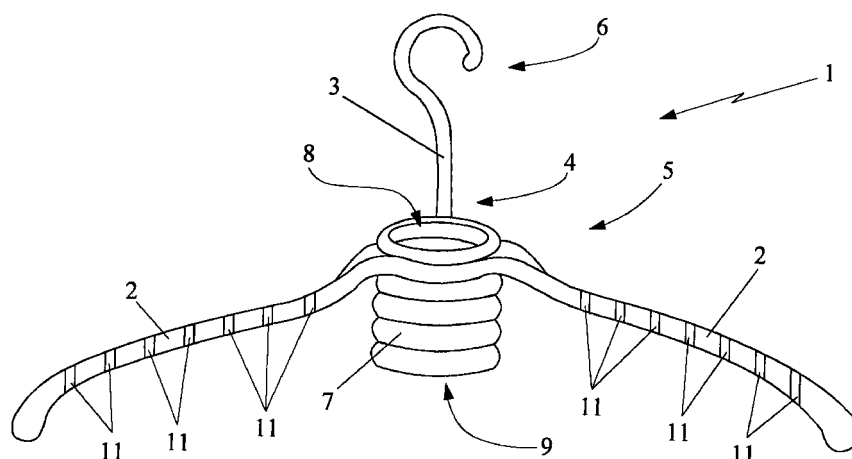


Fig. 1

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Description

[0001] The present invention relates to a clothes hanger suitable for use both in a domestic environment and in an industrial environment and able to support substantially any type of article of clothing.

[0002] In particular it must be pointed out that the clothes hanger in question is intended to be used advantageously to dry articles of clothing in the hung position.

[0003] As is known at present, articles of clothing are dried either by means of centrifuging machines provided with systems for internal ventilation using hot air or, more commonly, by hanging them on special clothes racks.

[0004] In both cases, the articles of clothing retain, once they have reached the dried condition, numerous creases resulting from the previous wet condition. This is due partly to the fact that the articles of clothing, during drying, are not arranged in a perfectly extended position.

[0005] Therefore, once the articles of clothing are dry, they must generally first be ironed and then arranged on special clothes hangers in order to preserve their ironed condition over time and store them away until the time when they are used.

[0006] Both these operations increase the time needed to prepare the articles of clothing so that they are ready for use.

[0007] It should also be remembered that drying of the articles of clothing using clothes racks is per se fairly long and the time needed to carry out this operation depends on the atmospheric conditions (humidity and temperature) whether this be performed in closed environments or in open environments.

[0008] As is known, in order to overcome the problem of ironing, more recently articles of clothing made with fabrics which do not have any creases once dried (referred to in the technical jargon of the sector as "no-iron fabrics") have become widespread.

[0009] Obviously the result is correspondingly better the more the articles are dried in an extended position.

[0010] Generally, the methods with which the articles are placed on the clothes racks do not result in a drying action which allows the characteristics of these fabrics to be fully exploited.

[0011] Moreover, using the drying systems of the known type referred to above, the articles of clothing consisting of no-iron fabrics must also be transferred once dried onto special clothes hangers before they are used. The inconvenience of this latter operation partly limits the ease of use of articles made of no-iron fabrics.

[0012] The main object of the present invention is therefore that of overcoming the drawbacks associated with systems for drying and preparing articles of clothing of the known type, by providing a new clothes hanger which allows the articles of clothing to be dried

quickly while keeping them in a substantially extended position.

[0013] A further object of the present invention is that of providing a clothes hanger which is practical, constructionally simple and allows articles of clothing made of no-iron fabric to be dried quickly so that they are in a condition ready to be put away hung up inside special enclosures before being worn.

[0014] These and other objects are all achieved by the clothes hanger in question having two arms on which an article of clothing is placed, hooking means which are connected centrally to the two arms in order to support the clothes hanger in a raised manner, and a distribution member connected to the arms underneath the hooking means in a central zone of the clothes hanger. The distribution member has an inlet mouth which is designed to receive a flow of air from air supply means which can be associated with it during a drying step, and an outlet mouth which is designed to expel this air flow towards the article of clothing. In so doing, the air flow allows drying, in the hung position, of the articles of clothing which are placed wet on the clothes hangers. In accordance with a further characteristic feature of the invention the arms are provided with a plurality of grooves which are designed to allow air to flow towards a zone where the article of clothing is held on the clothes hanger, situated above the arms.

[0015] The technical characteristics of the invention, in accordance with the abovementioned objects, may be determined from the contents of the claims indicated below and the advantages thereof will emerge more clearly from the detailed description which follows, with reference to the accompanying drawings, which show a purely exemplary and non-limiting embodiment in which:

- Figure 1 shows a schematic side view of the clothes hanger according to the present invention;
- Figure 2 shows a schematic plan view of the clothes hanger according to Fig. 1;
- Figure 3 shows a schematic side view of the clothes hanger according to Fig. 1 with associated air supply means;
- Figures 4, 5 and 6 show schematically three different articles of clothing supported by the clothes hanger in question.

[0016] In accordance with the accompanying drawings, 1 denotes in its entirety the clothes hanger according to the present invention.

[0017] Said clothes hanger consists essentially of two arms 2 which are able to receive and support an article of clothing 20, and hooking means 3 which are connected centrally to the arms 2 so as to support the clothes hanger 1 in a raised manner. The two arms 2

are identical to one another and extend in opposite directions along a common path.

[0018] The hooking means 3 consist, in the case of the examples shown in the accompanying figures, of a simple hook having a bottom end 4, which is rigidly connected to the clothes hanger 1 in a central zone 5 which is formed between the two arms 2, and a curved top end 6 which is designed to engage with an external support element (not shown) for supporting the clothes hanger 1 in a raised position.

[0019] In the region of the abovementioned central zone 5, underneath the hooking means 3, a distribution member 7 is fixed onto the two arms 2.

[0020] Said distribution member has an inlet mouth 8, arranged at the top in the vicinity of the hooking means 3, and an outlet mouth 9 arranged at the bottom so as to be inserted inside the article of clothing 20 once the latter has been placed on the clothes hanger 1 (see Figs. 4, 5 and 6, in which the articles of clothing are, respectively, a pair of trousers, a skirt and a T-shirt).

[0021] The distribution member 7 has, operationally associated with it, during a step involving drying of the article of clothing 20, air supply means 10 which are able to introduce a flow of air (which is preferably hot) into the inlet mouth 8.

[0022] In this way, when the article of clothing 20 is placed wet on the clothes hanger 1, the flow of air which emerges from the inlet mouth 9 allows drying thereof in the hung position. By so doing the article of clothing 20 dries in a substantially extended position, thus reaching the dried condition substantially without the formation of creases.

[0023] The air supply means 10 may consist (especially in a domestic environment) of a hair drier provided with an air emission element (comparable to the element indicated by the number 10 in the figure) able to be engaged with the distribution member 7 by being partially inserted inside it through the inlet mouth 8.

[0024] Advantageously it is possible to close with pegs the bottom ends of the articles of clothing 20 which are hung on the clothes hangers 1 so as to force the whole air flow to pass through the fabrics thereof, preventing the air from being dispersed through the bottom ends of the articles of clothing 20 themselves.

[0025] The distribution member 7 may have any configuration without thereby departing from the scope of the present inventive field. In particular in the case of the example illustrated in the accompanying figures, reference has been made to a distribution member 7 consisting of a substantially cylindrical element with a single inlet mouth 8 and a single outlet mouth 9.

[0026] With reference to Figs. 1, 2 and 3 it can be seen that the arms 2 are provided with a plurality of substantially vertical grooves 11 able to allow the air to flow between the article of clothing 20 which rests on the arms 2 and the arms 2 themselves.

[0027] As a result of this special arrangement, every part of the article of clothing 20 may be rapidly

and thoroughly dried. In particular, it is envisaged using closing means 12 (for example clothes pegs) which are able to keep the top edges 13 of the article of clothing 20 next to one other in a zone 14 where said article is held, situated above the arms 2, so as to allow the latter to support the article of clothing 20 on the clothes hanger 1.

[0028] The presence of the grooves 11 ensures a continuous supply of air towards the holding zone 14, resulting in complete drying thereof.

[0029] For the sake of constructional simplicity, the two arms 2 are made structurally as a single body (for example from plastic material), said body being provided centrally with an opening 15 inside which the distribution member 7 is inserted and fixed.

[0030] Each arm 2 is divided up, in the region of the central zone 5, into two sections 16 and 17 which are substantially identical and which, curving away from and then joining back up the corresponding section of the other arm 2, form the opening 15 into which the distribution member 7 can be inserted and fixed.

[0031] In accordance with a preferred constructional solution of the clothes hanger 1 according to the present invention, the hooking means 3 are mounted on a section 17 in the region of the central zone 5.

[0032] It should be noted that the clothes hanger 1, at the end of the drying step, allows the articles of clothing 20 consisting of fabrics of the no-iron type (i.e. fabrics which do not require ironing once dried) to be stored away by arranging them hung directly in special enclosures (for example cupboards). In other words, these articles of clothing, after they have been placed on the clothes hanger 1 according to the present invention and dried on them, prior to being worn, do not need to be ironed or transferred onto other support members. Therefore, in accordance with a method of use of the present invention, the article of clothing 20 made of no-iron fabric, once it has been placed on the clothes hanger 1, after it has been washed and is still wet, is no longer removed from it until the moment when it is used.

Claims

1. Clothes hanger having two arms (2), on which at least one article of clothing (20) can be placed, and hooking means (3) connected centrally to said two arms (2) so as to support said clothes hanger (1) in a raised manner, characterized in that it comprises a distribution member (7) which is connected to said arms (2) underneath said hooking means (3) in a central zone (5) of said clothes hanger (1), said distribution member (7) having an inlet mouth (8), designed to receive a flow of air from air supply means (10) associated with it during a drying step, and at least one outlet mouth (9) designed to expel said air flow towards said article of clothing (20) so that, when said article of clothing (20) is placed wet on said clothes hanger (1), said air flow allows dry-

ing thereof in the hung position.

2. Clothes hanger according to Claim 1, characterized in that said distribution member (7) consists of a substantially cylindrical element. 5

3. Clothes hanger according to Claim 1, characterized in that said two arms (2) are provided with a plurality of grooves (11) which are designed to allow air to flow towards a zone (14) where said article of clothing (20) is held, situated above said arms (2), thus allowing drying thereof. 10

4. Clothes hanger according to Claim 1, characterized in that said two arms (2) consist of a single body which is provided centrally with an opening (15) inside which said distribution member (7) is inserted and fixed. 15

5. Clothes hanger according to Claim 4, characterized in that each said arm (2) is divided up in the region of said central zone (5) into two sections (16, 17) which are substantially identical and which, curving away from one another, form said opening (15), and joining up again extend so as to form the arm (2) opposite thereto with respect to said opening (15). 20 25

6. Clothes hanger according to Claim 5, characterized in that said hooking means (3) are connected at the top of said sections (16, 17) in the region of said central zone (15). 30

7. Clothes hanger according to Claim 3, characterized in that said zone (14) where said article of clothing (20) is held is operationally associated with closing means (12) designed to keep next to one another top edges (13) of said article of clothing (20) which are arranged above said arms (2) so as to enable the latter to support the article of clothing (20), allowing air to reach said holding zone (14) via said grooves (11). 35 40

8. Clothes hanger according to Claim 1, characterized in that said air supply means (10) consist of a hair drier provided with an air emission element able to be engaged with said distribution member (7), being inserted at least partially inside it through said inlet mouth (8). 45

9. Clothes hanger according to Claim 1, characterized in that it is possible to store away articles of clothing (20) made of no-iron fabrics and placed on said hanger in the wet condition, until the moment when they are worn without the need for removing them from said clothes hanger, while subjecting the latter directly to said drying step. 50 55

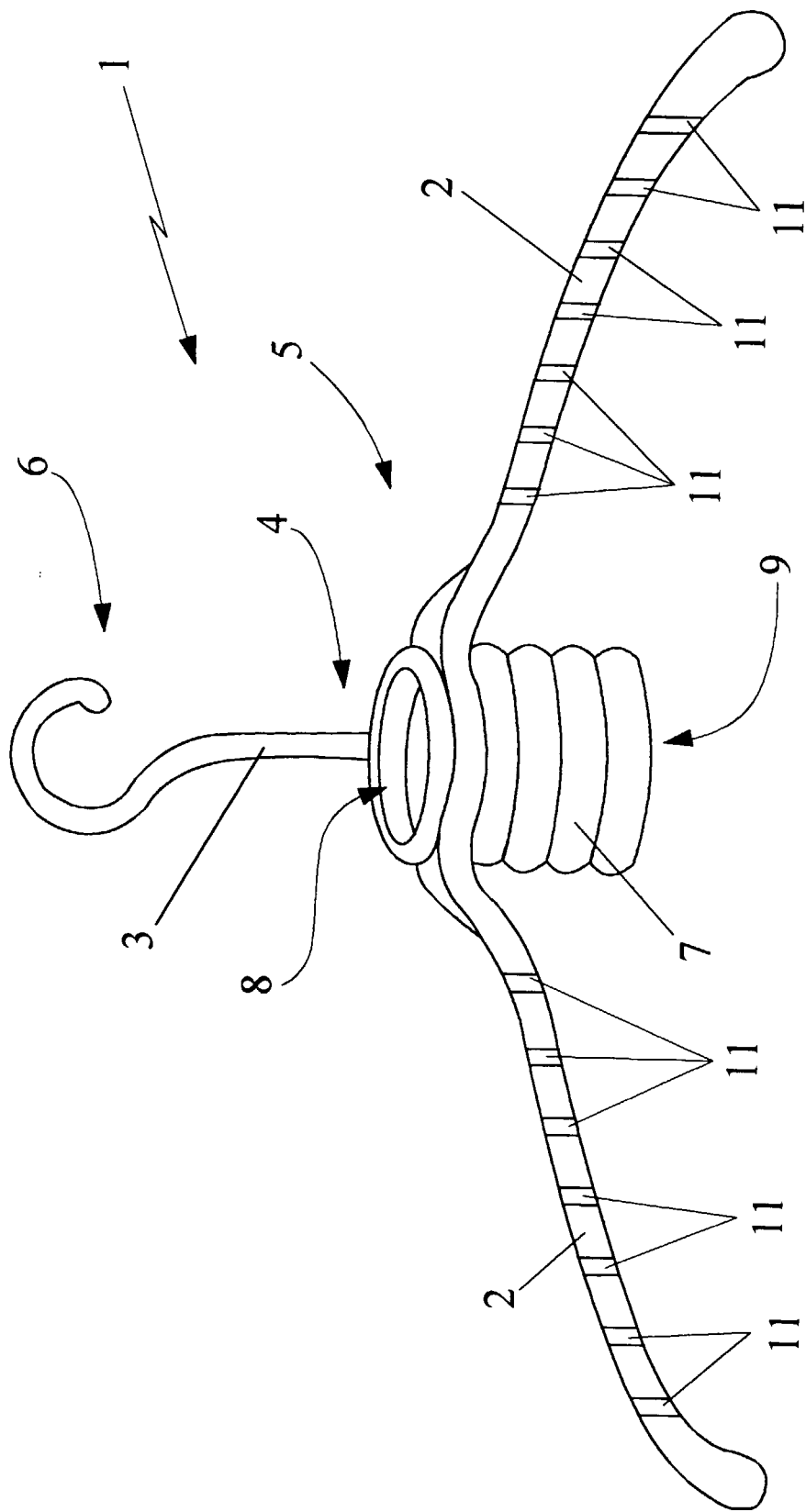


Fig. 1

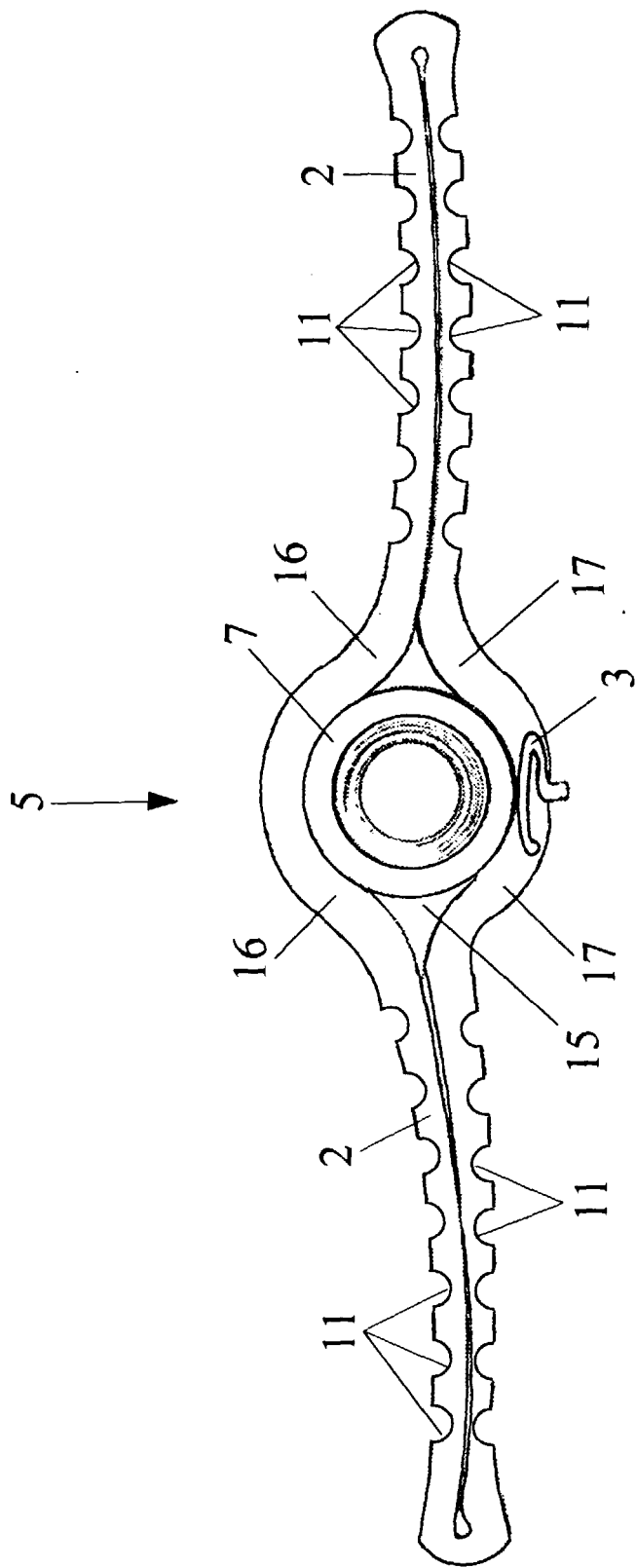


Fig. 2

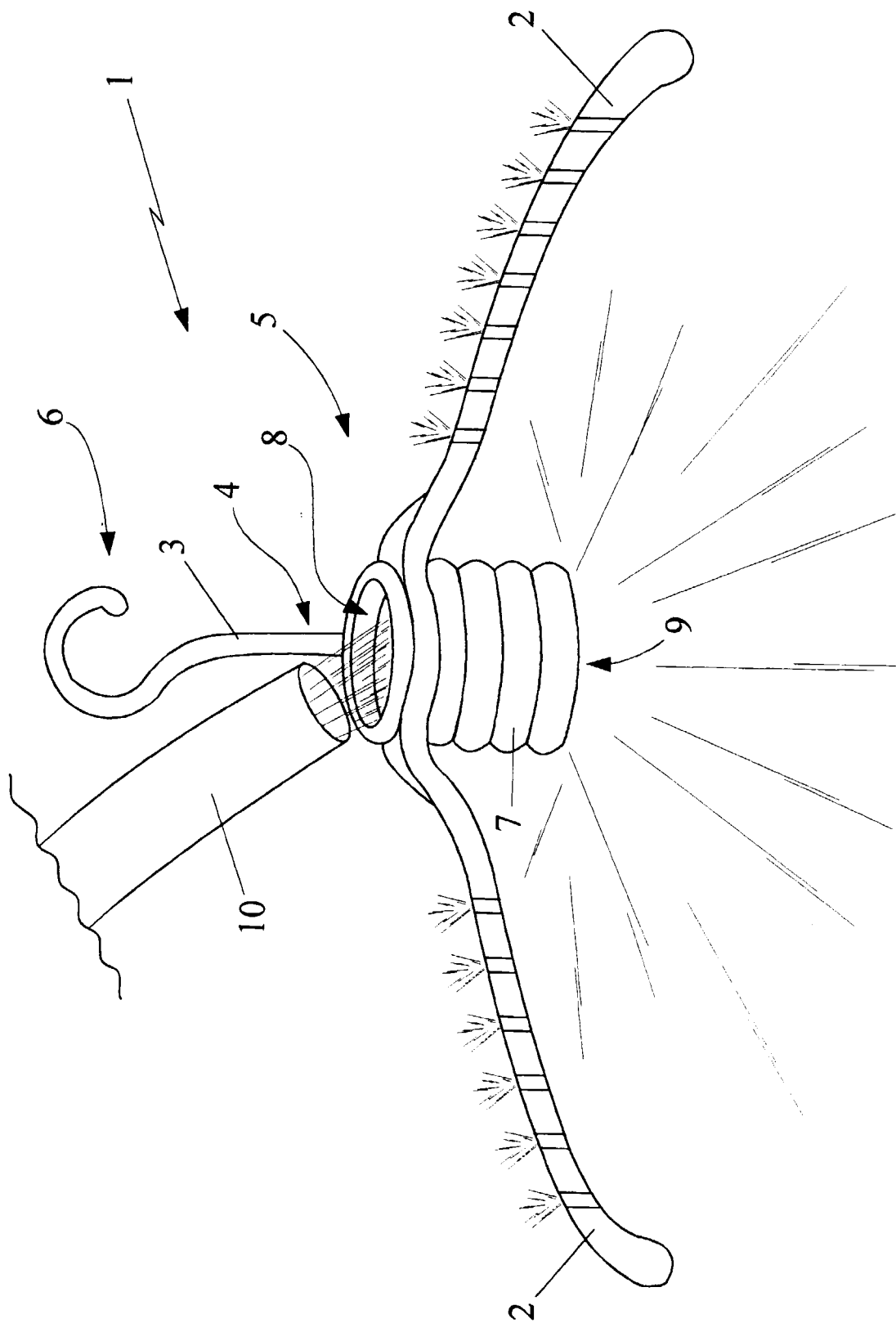


Fig. 3

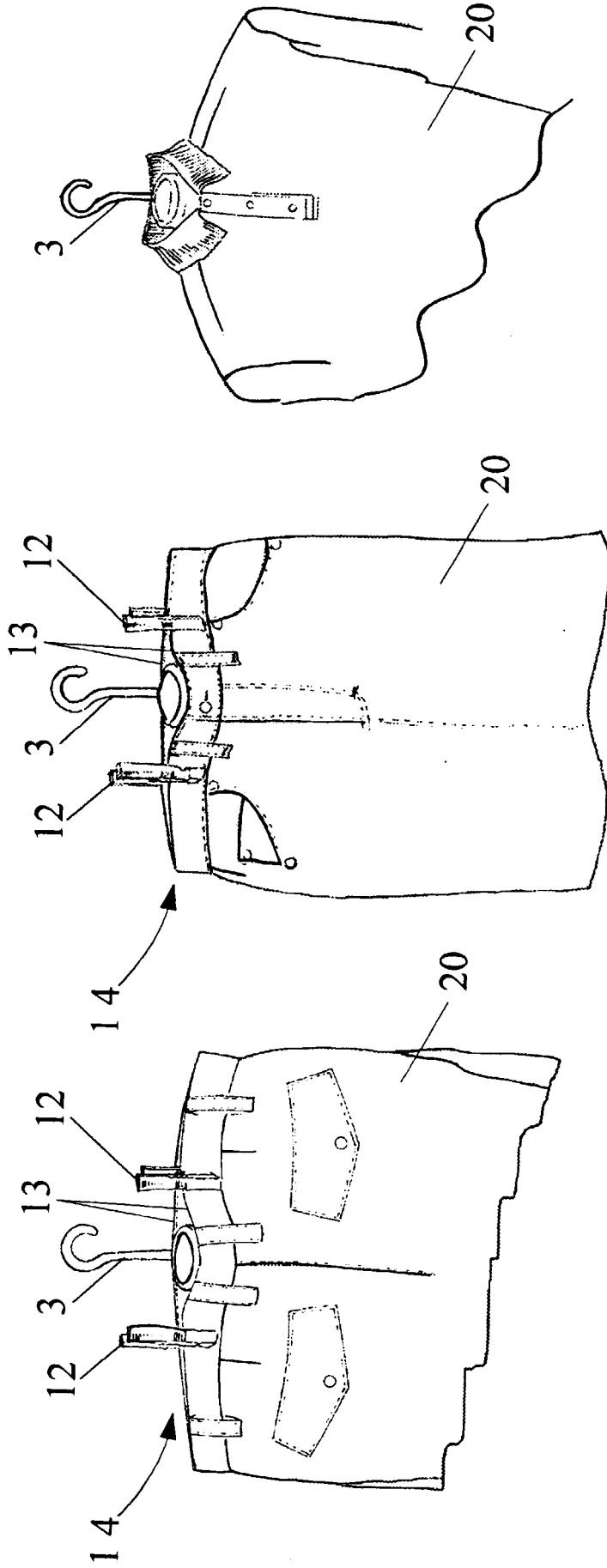


Fig. 4

Fig. 5

Fig. 6



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EUROPEAN SEARCH REPORT

Application Number
EP 98 83 0649

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.6)
X A	US 4 592 497 A (G. FOURNIER) 3 June 1986 * the whole document * ---	1,2,8,9 4,6	D06F59/02
X	EP 0 808 938 A (CHEN CHAO-YANG) 26 November 1997 * column 2, line 7 - line 39; figures * ---	1,2,8,9	
X A	CH 597 822 A (D. OGIZ) 14 April 1978 * the whole document * ---	1,2,9 4,8	
A	FR 1 375 666 A (J. DAMEZ) 1 February 1965 * the whole document * -----	1,2,8,9	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			D06F
Place of search		Date of completion of the search	Examiner
THE HAGUE		19 March 1999	Courrier, G
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 98 83 0649

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19-03-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4592497 A	03-06-1986	FR 2542599 A EP 0119146 A	21-09-1984 19-09-1984
EP 808938 A	26-11-1997	NONE	
CH 597822 A	14-04-1978	NONE	
FR 1375666 A	01-02-1965	NONE	