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(54) Garment.

The invention relates to a garment, in particular a dress or a blouse provided with a front piece, a back piece, sleeves as well as with a neck. The part of one of the pieces joining up with the neck is formed by two parts separated along a dividing line at least substantially extending in the longitudinal direction of said piece. Detachable fastenings are provided, which extend from the free ends of the sleeves, through the sleeves and through the piece in question, up to the dividing line, so as to detach or interconnect, as the case may be, the parts of the garment located above and under the detachable fastening.

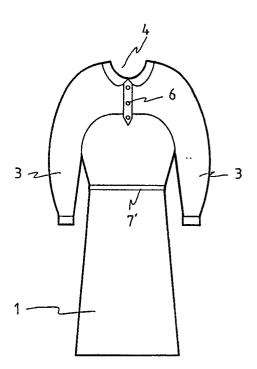


Fig 1

The invention relates to garments, in particular intended for invalids.

Dressing and undressing invalids, in particular older persons, whose arm and leg joints are stiff, presents a great deal of difficulties in practice. When the usual garments such as dresses, blouses, shirts and the like are used, such garments must be pulled over the head and the stiff arms, which often can only be done in a frustrating and painful manner, in particular with demented persons, who frequently offer resistance when being dressed and undressed. Apart from the problems which this causes for the invalids themselves, it also requires a great deal of time and effort of the nursing staff.

In order to meet this problem to a certain extent it has been usual so far to use garments for the invalids in question which are a few sizes larger than is actually necessary for the person in question. This leads to an unattractive appearance, however, which is unpleasant both to the invalid himself as to his surroundings.

The object on which this invention is based is therefore to obtain clothing which is adapted for invalids, in such a manner that while a normal appearance of the garment and the best possible fit are maintained the treatment of the invalid, such as dressing and undressing, can take place in an efficient manner.

According to a first aspect of the invention this objective is accomplished with a garment, in particular a dress or a blouse provided with a front piece, a back piece, sleeves as well as with a neck, whereby the part of one of the pieces joining up with the neck is formed by two parts separated along a dividing line at least substantially extending in the longitudinal direction of said piece, in that detachable fastenings are provided, which extend from the free ends of the sleeves, through the sleeves and through the piece in question, up to the dividing line, so as to detach or interconnect, as the case may be, the parts of the garment located above and under the detachable fastening.

By using such a construction the upper part of the piece in question, with the parts of the sleeves joining up with said upper part, can be laid open wide, which will particularly facilitate putting on or taking off, as the case may be, the garment in question.

Preferably the detachable fastenings are zip fasteners, which can be opened quickly and simply and which can be provided so as to be invisible in the garment.

Another aspect of the invention relates to a garment, in particular a shirt, provided with a front piece, a back piece as well as with a neck, whereby according to the invention a longitudinal side of the one piece is detached from the other piece at

one side of the shirt, from the upper side of the shirt up to hip level, whilst near the upper side of the shirt means are provided to secure the one piece to a shoulder part of the shirt that is connected to the other piece.

Also here the garment may be opened very far in order to put on or take off said garment, so that it can be easily provided on an invalid's body, whilst once it is provided and closed the appearance of the shirt is hardly different from a normal shirt.

Yet another aspect of the invention relates to a garment provided with a front piece and a back piece, which are connected by shoulder pieces located on either side of a neck, whereby according to the invention one piece is at its bottom end provided with an extension, which can be detachably secured with its end remote from the piece in question to the bottom end of the other piece by attachment means, in such a manner that the extension can function as a pair of trousers.

In this manner a one-piece garment comprising a shirt and a pair of trousers is obtained, which is easy to put on and take off, whilst at the same time any incontinence napkins can be easily provided or removed, as the case may be.

The invention will be explained in more detail hereafter, with reference to a few embodiments of garments according to the invention.

Figure 1 shows a front view of a garment in the shape of a dress.

Figure 2 shows a back view of the dress illustrated in Figure 1.

Figure 3 shows the upper part of the dress illustrated in Figure 1, with the fastenings undone.

Figure 4 shows a view of a shirt in open condition.

Figure 5 shows a view, corresponding with Figure 4, of a shirt in closed condition.

Figure 6 shows a part of the shirt illustrated in Figures 4 and 5, seen from the other side.

Figure 7 shows a view of a combination of a shirt and pants, with the pants part in the closed condition.

Figure 8 shows a side view of Figure 7, with the pants part in open condition.

Figure 9 shows a view of a pair of tights adapted in a manner according to the invention.

Figure 10 shows a side view of Figure 9.

Figure 11 shows a view of a pair of underpants to be folded open, in entirely unfolded condition.

Figure 12 shows a view of the underpants illustrated in Figure 11, in partially closed condition.

Figure 13 shows the underpants according to Figures 11 and 12, in entirely closed condition.

Figure 14 shows a view of an embodiment of a pair of trousers in closed condition.

Figure 15 shows a part of the trousers illus-

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trated in Figure 14, in open condition.

Figure 16 shows a front view of a shirt.

Figure 17 shows a back view of the shirt illustrated in Figure 16.

Figure 18 shows a front view of a men's cardigan.

Figure 19 shows a back view of the cardigan illustrated in Figure 18.

Figure 20 shows a front view of a ladies' cardigan.

Figure 21 shows a back view of Figure 21.

Figure 22 shows a view of a wraparound skirt in open condition.

The dress illustrated in Figures 1 and 2 is provided with a front piece 1, a back piece 2 and sleeves 3. A dividing line 5 extending into the front piece joins up with the neck 4, whereby in the closed condition of the dress illustrated in Figure 1 the parts of the front piece located on either side of said dividing line are attached to each other by fastening means, preferably press studs 6.

As appears in particular from Figure 3 zip fasteners 7 and 8 are provided in the front piece and the sleeves joining said front piece, said zip fasteners being illustrated in the unzipped condition in Figure 3. Said zip fasteners 8 extend from points located near the cuffs 9 of the sleeves 3 up to the dividing line 5.

It will be apparent that when the zip fasteners 7 and 8 are unzipped and also the press studs 6 are undone, the dress can be easily provided over the upper body of the wearer of the dress, whilst at the same time the arms of the wearer can be easily inserted into the sleeves, without the arms having to be bent in an unpleasant manner thereby. The zip fasteners 7 and 8 can thereby be sown into the dress in such a manner that they are "invisible" in the closed condition depicted in Figure 1. As will furthermore be apparent from Figures 1 and 3, the lowermost press stud may thereby be provided in such a manner that said press stud connects the facing extending along the dividing line 5 to a part of the dress located under the zip fasteners, so that the various parts are well-joined together.

Preferably a band 7 is stitched into the inner side of the dress at waist level. An elastic will be tacked into said band, said elastic preferably being adjustable in longitudinal direction. When such an elastic band is used at the level of the waist seam, an attendant can slid the skirt part under the elastic band when the toilet is being used, which will significantly facilitate assisting the patient.

Figures 4 - 6 show a shirt, in particular a nightshirt. The nightshirt is again provided with a front piece 10, a back piece 11 as well as with sleeves 12.

At one side of the shirt the back piece 11 is detached from the front piece, along the part ex-

tending from the shoulder up to hip level, so that the upper part of the back piece can be folded open, in the manner illustrated in Figure 4, for dressing or undressing. After dressing the upper end of the detached part of the back piece can be fastened on the shoulder part connected to the front piece by attachment means, preferably press studs 13. In order to obtain an adequate fastening of the shirt the front piece is thereby provided with a \pm 20 cm wide overlap part 14 thereby extending from the shoulder part up to hip level, which is overlapped by the back part 11 in the closed condition of the shirt such as depicted in the Figure.

Although in the above mention is made of a front piece 10 and a back piece 11, the shirt is preferably made such that the piece 11 may be worn at the chest side or at the back side, whichever is desired.

Figures 7 and 8 show a one-piece combination of underpants and shirt.

The shirt is provided with a front piece 15 and a back piece 16, which are at their upper ends connected by shoulder bands 17. Said shoulder bands are divided in two at their upper ends, and the loose ends of said shoulder bands can be attached together by fastening means, preferably press studs 18. The shoulder bands 17 have an effective width of ± 3 cm.

The back piece 16 is provided with an extension 19, whereby the width of said extension gradually decreases towards its free bottom end. As is illustrated in Figure 7 the free end of the extension can be attached to the bottom end of the front piece 15 by fastening means, preferably press studs 20, so as to form pants.

Dependent on the patient's condition the onepiece combination of underpants and shirt thus obtained can be pulled over the patient's head if the extension 19 is detached from the front piece, so as to be passed to the front between the patient's legs and be attached to the front piece, after first providing a possible incontinence napkin, or the combination is put on in the same manner as pants are put on, after the press studs 18 have been undone, upon which the press studs 18 are fastened, and possibly also the press studs 20, insofar as this has not yet been done prior to putting on the combination.

Preferably an elastic is worked into the edges of the part 19 forming the pants, so as to be able to ensure a good fit to the user's legs and an adequate retaining of the incontinence napkin.

Such a combination of shirt and pants is easy to put on and take off, whilst also incontinence materials can be easily exchanged. All this will save the attendant a great deal of time.

At the same time it has become easier to carry

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out a medical examination of the patient.

Besides that the garment does not have any unpleasant seams or edges.

The garment described above with reference to Figures 7 and 8 lends itself particularly well for use in combination with a pair of tights illustrated in Figures 9 and 10.

Said pair of tights 22 has the usual model, whereby the crotch part between the two tights parts has been cut out, however, so that a wide opening is provided at that location.

It will be apparent that when such a pair of tights is used it will not be necessary to take off the tights in order to open the pants part of the garment illustrated in Figures 7 - 8.

Figures 11 - 13 show an embodiment of separate underpants, which are in fact formed by a piece of material formed of two at least substantially triangular parts 24 and 25, which are interconnected by an intermediate piece 26. The larger triangular part 24 forms the back piece of the underpants, whilst the smaller triangular part forms the front piece of the pants.

Preferably an elastic border 27, 28 is incorporated in the opposed, more or less parallel boundary edges of the two triangular parts 24 and 25 respectively.

Preferably an elastic 29 is also incorporated in the edges of the intermediate piece and in the boundary edges of the triangular parts 24 and 25 joining up with said intermediate piece.

As is illustrated in Figure 12 the uppermost corner points of the triangular part 24 can be folded back in front of the body and e.g. be attached together by means of a press stud 30, so that in that case the pants will be held on the user's body by means of the elastic boundary edge 27. Then the part 25 can be folded back through the user's legs and be attached to the band 27 by means of press studs 31 provided on the ends of the band 28, as illustrated in Figure 13. The underpants are particularly well-suited for accommodating incontinence material, which are easy to exchange by undoing the front piece 25.

Such a pair of underpants is e.g. also very well suited for being worn in combination with the trousers illustrated in Figures 14 and 15.

Said trousers comprise a waist band 33 attached to the upper edge of the back piece 32, which waist band can be fastened and undone by means of a press stud 34. The waist band will be provided with an elastic, so as to prevent the trousers from coming down.

The front piece of the trousers, which is visible in Figure 14, is formed by a flap 35, which is detachably secured, by means of press studs 36, to the waist band 33 near its upper end. When used as men's trousers the flap 35 will be provided

with a fly 36 in the usual manner.

The trousers look like normal trousers and may also be used as normal trousers having a fly. Besides that it is possible, by detaching the upper edge of the flap 35 from the waist band, to pivot the flap into the position illustrated in Figure 15, in which the trousers are folded open up to a point located under pockets 38 provided on the back piece 32. It will be apparent that by using such a flap it will be much easier to put on and take off the trousers.

Figures 16 and 17 illustrate a shirt 39, which is provided with a usual fastening 40 at its front end.

As is illustrated in Figure 17, however, the shirt is divided at the back side, whereby the two parts of the back piece may partially overlap one another, as is indicated in Figure 17. The two separate parts of the back piece can thereby be fastened along a desired height by suitable fastening means, e.g. press studs 41 or the like.

It will be apparent that a shirt to be opened in this manner will be easy to put on and take off.

Figures 18 and 19 show a possible embodiment of a cardigan, a men s cardigan 42 in the illustrated case. In the front piece of the men s cardigan a usual fastening 43 comprising press studs, a zip fastener or the like is provided. At one side of the cardigan the front piece and the back piece are furthermore detachably connected together by means of a zip fastener 44.

It will be apparent that by unzipping the zip fastener 44 it will be easy to put on and take off the cardigan. Possibly the front piece and the back piece may be connected together on either side of the cardigan by means of zip fasteners.

Figure 20 shows an embodiment of a cardigan in the shape of a ladies' cardigan 45. Figure 20 shows the front side and Figure 21 shows the rear side of the cardigan. As will be apparent from the Figures the cardigan may look like a usual cardigan again. The front piece and the back piece are detachably connected together under the armholes thereby, by means of press studs 46 in the illustrated embodiment, although it will be apparent that also other fastening means, such as zip fasteners or the like may be used.

Figure 22 shows a wraparound skirt, which will be suitable in particular for women who have to use a wheelchair. As illustrated in Figure 22 the wraparound skirt is built up of a front piece 47, a back piece 48, and an auxiliary front piece 49, which, when the skirt is worn, will extend under the front piece 47.

In the waist band 50 there are preferably provided sliding pieces 51 containing elastic, which are movable in the longitudinal direction of said band, which sliding pieces can be adjusted and fastened in such a manner that the skirt assumes

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the required size.

On the toilet the skirt can be easily opened and remain behind in the wheelchair, after which it will be easy to put it on again.

From the foregoing it will be apparent that by using the constructions according to the invention garments can be obtained which may have an appearance which is usual of garments and which is adapted to the current fashion, as well as a good fit adapted to the user, whilst it will still be easy to put on and take off said garments, which is very important both for the user and for the attendant.

Claims

- 1. A garment, in particular a dress or a blouse provided with a front piece, a back piece, sleeves as well as with a neck, whereby the part of one of the pieces joining up with the neck is formed by two parts separated along a dividing line at least substantially extending in the longitudinal direction of said piece, characterized in that detachable fastenings are provided, which extend from the free ends of the sleeves, through the sleeves and through the piece in question, up to the dividing line, so as to detach or interconnect, as the case may be, the parts of the garment located above and under the detachable fastening.
- 2. A garment according to claim 1, characterized in that the detachable fastenings are zip fasteners.
- **3.** A garment according to claim 1, characterized in that said detachable fastenings extend through the sleeves and the front piece.
- 4. A garment, in particular a shirt, provided with a front piece, a back piece as well as with a neck, characterized in that a longitudinal side of the one piece is detached from the other piece at one side of the shirt, from the upper side of the shirt up to hip level, whilst near the upper side of the shirt means are provided to secure the one piece to a shoulder part of the shirt that is connected to the other piece.
- 5. A garment according to claim 4, characterized in that in the closed condition of the shirt the detachable end of the one piece overlaps an overlap piece attached to the other piece.
- 6. A garment provided with a front piece and a back piece, which are connected by shoulder pieces located on either side of a neck, characterized in that one piece is at its bottom end provided with an extension, which can be de-

- tachably secured with its end remote from the piece in question to the bottom end of the other piece by attachment means, in such a manner that the extension can function as a pair of trousers.
- 7. A garment according to claim 6, characterized in that the shoulder bands are provided with attachment means, by which the parts of the shoulder bands connected to the front piece and the back piece are detachably connected together.
- 8. A garment in the shape of a panty, in particular for se in combination with the garment according to claim 6 or 7, characterized in that the panty has no crotch part.
- A pair of underpants consisting of a piece of material formed of two at least substantially triangular parts, which are interconnected by means of an intermediate piece connecting the parts together, whereby the triangular part of the underpants forming the back piece is larger than the triangular part of the underpants forming the front piece, and whereby an elastic is incorporated in the boundary edges extending at least substantially parallel to each other of the ends of the triangular parts directed towards each other, and whereby press studs are provided at the ends of the boundary edge of the back piece containing elastic, so as to attach said ends together at the front side of the user's body, whilst the boundary edge of the front piece provided with elastic can be attached to the boundary edge of the back piece provided with elastic by means of press studs.
- 40 10. A pair of trousers provided with a waist band containing elastic, which can be attached to the back piece of said trousers, and with a flap provided at the upper part of the front piece, which flap can be fastened to the waist band by means of press studs provided near its upper edge, and which can be folded down after said press studs have been undone, about a line located near the lower sides of the trouser pockets, whilst a usual fly may be provided in said flap.
 - 11. A shirt provided with a usual fastening at its front side, characterized in that the back piece of the shirt is divided, and that means, in particular press studs, are provided so as to detachably connect the two parts of the back piece together.

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- **12.** A shirt according to claim 11, characterized in that the two parts of the back piece overlap in the closed condition of the shirt.
- 13. A cardigan provided with a front piece and a back piece, characterized in that at one side of said cardigan the parts of the cardigan located under an armhole are detachably connected together.

14. A cardigan according to claim 13, characterized in that the front piece and the back piece of said cardigan are interconnected by means of a zip fastener.

15. A cardigan according to claim 13, characterized in that the front piece and the back piece of said cardigan are interconnected by means of press studs.

16. A wraparound skirt provided with a back piece and two pieces joining up with each other on either side of said back piece, which latter pieces may be folded so as to overlap each other at the front side of the user's body, whilst sliding pieces containing elastic, which are adjustable in the longitudinal direction of a waist band of said skirt, are incorporated in said waist band.

17. A set of clothes provided with at least some of the garments according to any one of the preceding claims.

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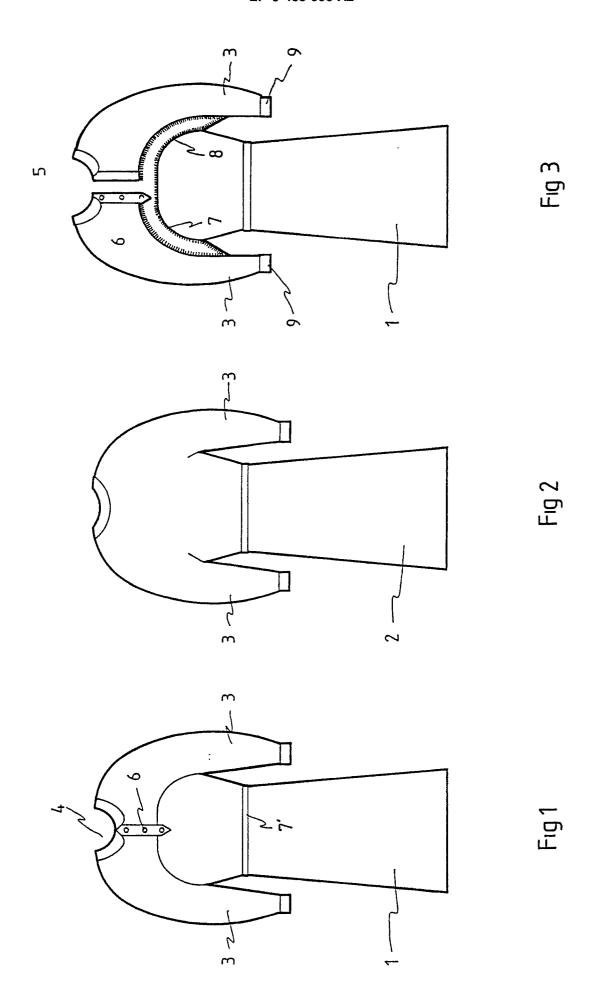
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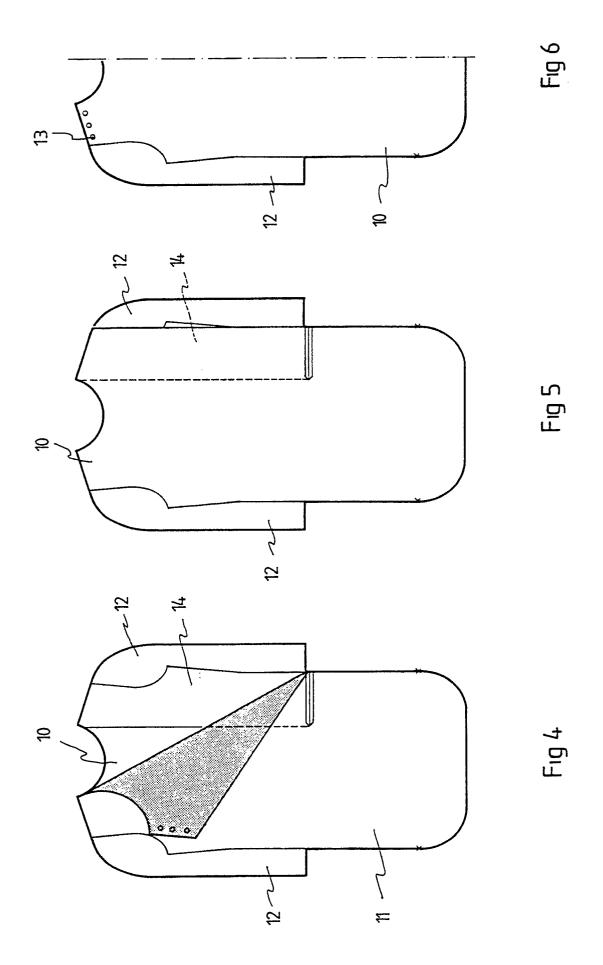
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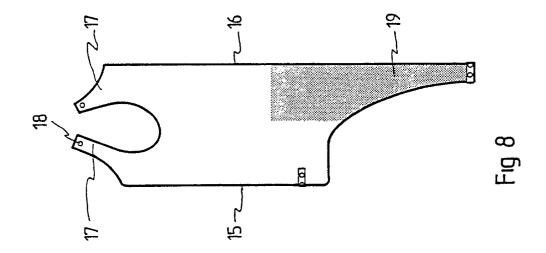
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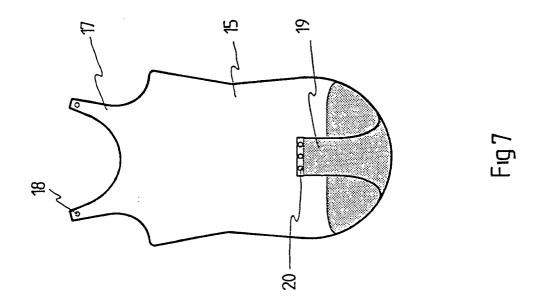
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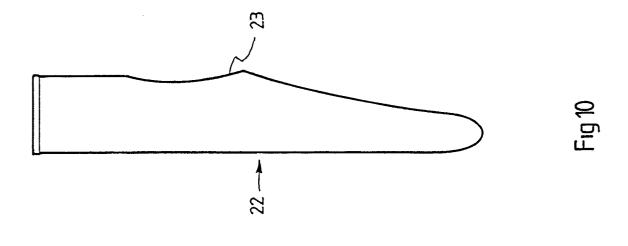
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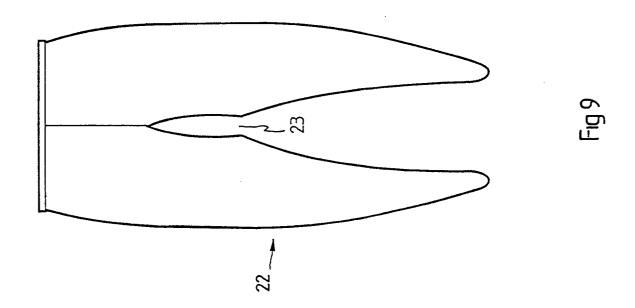


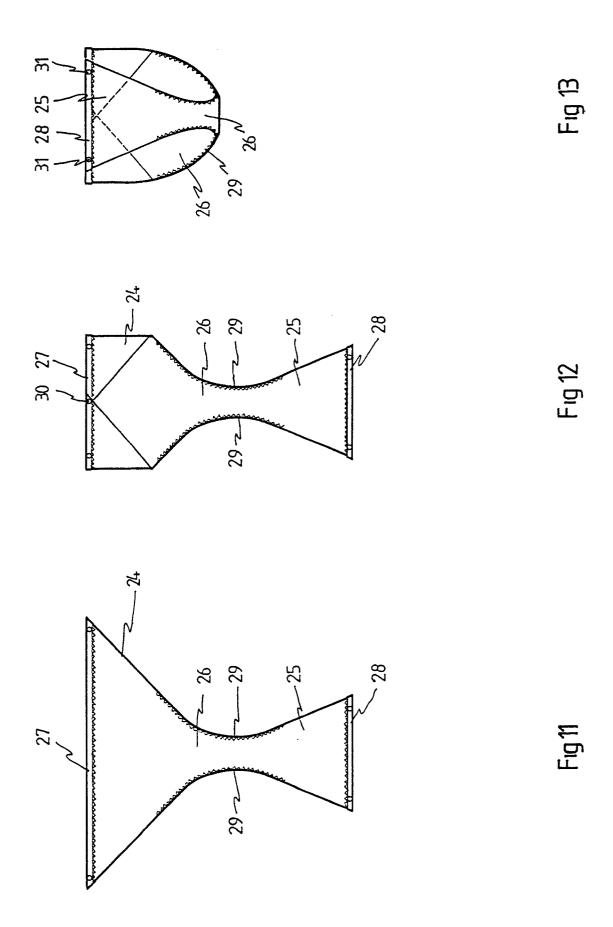


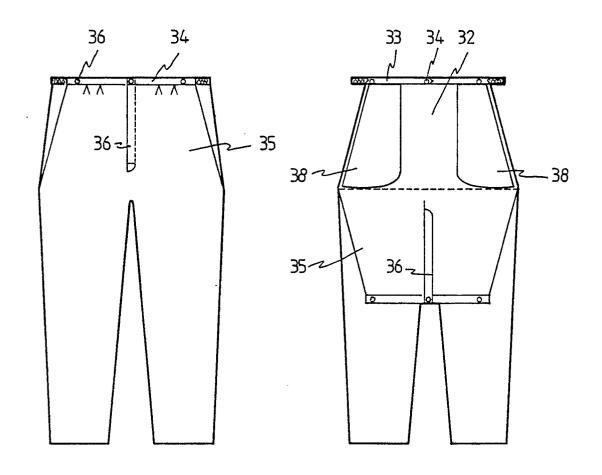






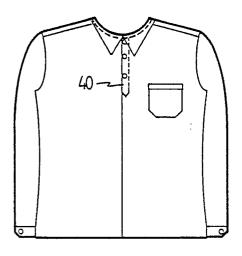












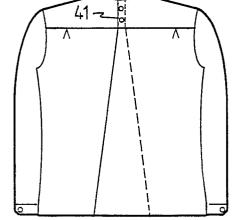


Fig 16 ²

Fig17

