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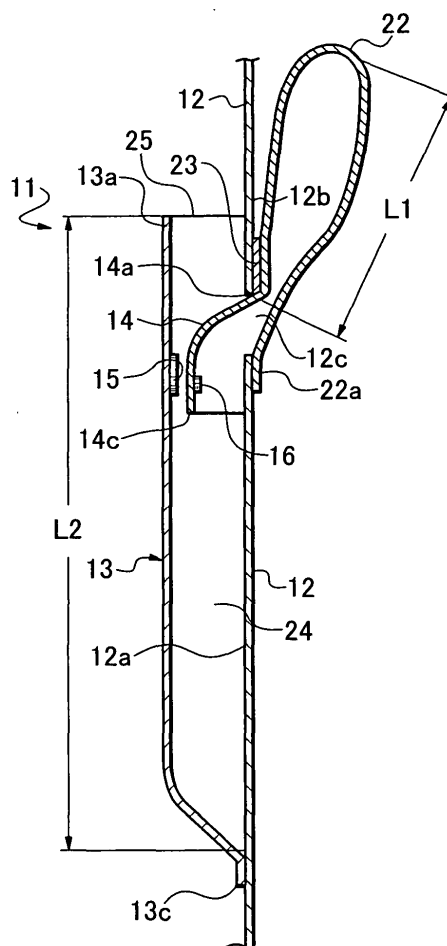
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(54) **Article-dropping proof pocket for garments**

(57) An article-dropping proof pocket (11) for garments is capable of preventing small articles from springing out and falling down from the pocket even if a person wearing the garment bends downward or moves quickly. The pocket (11) comprises a piece of seal cloth (14) having a side sewn in the vicinity of the top opening (25) and at an inside of the article-containing space (24) for closing the opening of the pocket, and fastening means (15, 16) attached both to another side of the piece of seal cloth and to an outside of the article-containing space for releasably sealing the top opening of the pocket, and a bag-like catch extension (22) formed in the vicinity of the sewn side of the piece of seal cloth so as to communicate with the article-containing space, for retaining the articles therein.

Fig. 3



Description

[0001] The present invention relates to a pocket for garments, particularly to a pocket preventing small articles from slipping off from the inside even if a person wearing the garment bends downward or moves quickly.

[0002] Such an article-dropping proof pocket is disclosed in Japan Patent 2000-136413(A). A button is fastened to the garment within the pocket by sewing with thread, and the pocket cloth has a buttonhole made therein. A small article with a loop string is put in the pocket, and the button passes through the loop string and the buttonhole for fastening, thereby preventing the small article from slipping off from the pocket.

[0003] Articles having no loop strings, such as eyeglasses or purses, however, cannot be prevented from slipping off from such article-dropping proof pocket.

[0004] Inconveniently, an article with a loop string cannot be put in the article-dropping condition without passing the button through the loop string and the buttonhole of the pocket, and the article cannot be taken out of the pocket without removing the button from the buttonhole and the loop string.

[0005] An article with a loop string can be prevented from falling out of the pocket and from being lost, but it may happen that the article springs out of the pocket to hang down outside.

[0006] There is a demand for preventing all small articles having no extra means such as loop strings from slipping off from the pocket, still permitting them to be kept in and taken out of the pocket readily.

[0007] To attain this object, a pocket in a garment having an article-containing space for containing articles, and a top opening is improved according to the present invention by comprising a piece of seal cloth having a side sewn in the vicinity of the top opening and at an inside of the article-containing space; fastening means attached both to another side of the piece of seal cloth and to an outside of the article-containing space for releasably sealing the top opening of the pocket; and a bag-like catch extension formed in the vicinity of the sewn side of the piece of seal cloth so as to communicate with the article-containing space, for retaining the articles therein.

[0008] With this arrangement, small articles can be kept in the pocket, which is so sealed that they cannot be allowed to slip off from the pocket even if a person wearing the garment should bend downward or move quickly. When a person wearing the garment bends downward, the article can be caught by the bag-like catch in the pocket, thus preventing the unsealing of the pocket, which otherwise, might be caused if the article should be heavy.

[0009] The bag-like catch extension may have a length being at least one third of a length of the article-containing space.

[0010] The piece of seal cloth may be of a material softer than a material of the garment. The fastening

means may comprise a magnet member attached to the outside of the article-containing space and a magnetic object attached to said another side of the piece of seal cloth. The magnet member may comprise a flexible magnet sheet.

[0011] These arrangements facilitate the putting-in and taking-out of small articles from the pocket. Use of the softer piece of seal cloth and the combination of the flexible magnet sheet and the magnetic object causes a person wearing the garment to feel nothing strange; the articles can easily be put in and taken out of the pocket.

[0012] The piece of the seal cloth may be lined with a reinforcement piece attached thereto. The reinforcement piece effectively prevents the twisting of the piece of seal cloth to assure that it provides the good sealing function. The reinforcement piece may be a thin sheet of synthetic resin or metal.

[0013] Other objects and advantages of the present invention will be understood from the following description of pockets according to some preferred embodiments of the present invention, which are shown in accompanying drawings.

Fig.1 is a front view of a pocket 11 according to a first embodiment of the present invention;

Fig.2 is a front view of the pocket whose pouch cloth 13 is partly cut and removed to show the seal cloth 14;

Fig.3 is a longitudinal section of the pocket taken along the line 3-3 in Fig.1;

Fig.4 is a similar longitudinal section of the pocket, but showing that a small article 21 is put into the pocket;

Fig.5 is a similar longitudinal section of the pocket when a person wearing the garment stoops down with the small article 21 put in the pocket;

Fig.6 is a front view of a pocket 31 according to a second embodiment of the present invention;

Fig.7 is a longitudinal section of the pocket taken along the line 7-7 in Fig.6;

Fig.8 is a similar longitudinal section of the pocket, but showing that a small article 21 is put in the pocket;

Fig.9 is a similar longitudinal section of the pocket when a person wearing the garment stoops down with the small article 21 put in the pocket;

Fig.10 is a front view of a pocket 41 according to a third embodiment of the present invention; and

Fig.11 is a longitudinal section of the pocket taken along the line 11-11 in Fig.10.

[0014] Figs.1 to 5 show a pocket 11 according to the first embodiment of the present invention. Referring to Figs.1 to 3, a pocket 11 comprises a small, flat cloth or pouch cloth 13 sewn onto the outer side 12a of the garment cloth or material 12 to define an article-containing space 24 with the top edge 13a open, and a bag-like

catch extension 22, which extends from a part of garment cloth lying behind the pouch cloth 13. The bag-like catch extension 22 has a piece of seal cloth 14 integrally connected to the end of the bag-like catch extension 22 so that the seal cloth 14 may be close to the opening 25 of the pocket 11.

[0015] The pouch pocket 11 can be sewn into any kind of garment such as a utility shirt, a polo shirt, a shirtwaist or blouse, a suit, a jacket, trousers, a skirt, a working dress or a jumper. The jacket or jumper can have pockets sewn to its outer and inner sides.

[0016] The garment materials include nylon, polyester, vinylon and any other synthetic or chemical fibers, cotton, linen, silk and any other natural fiber materials, and natural or synthetic leather, whatever materials the garment may be formed of.

[0017] Referring to Fig.3, a lateral slit 12c is made in the garment cloth 12, and the slit 12c is somewhat shorter than the opening 25 of the pocket 11.

[0018] The pouch cloth 13 is sewn onto the garment cloth 12 on opposite sides 13b,13b and a bottom side 13c, leaving the upper edge 13a open to define the opening 25, via which a small article or articles can be put in the article-containing space 24.

[0019] The pouch cloth 13 has a magnet member 15 attached to its inner side, which magnet member 15 can apply an attractive force to a magnetic object attached to the seal cloth 14, as hereinafter described (fastening means). The magnet member 15 preferably comprises a flexible magnet sheet, which causes the person wearing the garment to feel little or no strange touch.

[0020] Referring to Figs.1 and 2, the seal cloth 14 is somewhat shorter than the pouch cloth 13 in lateral dimension. The seal cloth 14 is sewn on its upper side 14a onto the garment cloth 12 at the upper portion of the lateral slit 12c, while opposite sides 14b,14b and a bottom side 14c remain unsewn. The seal cloth 14 is preferably made of a softer material than the garment and the pouch cloth, so that the person wearing the garment may feel little or no strange touch.

[0021] As seen from Figs.1 and 3, the upper edge 14a of the seal cloth 14 is at a lower level than the upper edge 13a of the pouch 13, and therefore, the seal cloth 14 is hidden behind the pouch, and cannot be seen from the outside of the pocket.

[0022] As seen from Fig.3, the upper edge 14a of the seal cloth 14 is connected to the bag-like catch extension 22, which is sewn via an intervening reinforcement cloth 23 onto the inner side 12b of the upper portion of the lateral slit 12c formed in the garment cloth 12. The lower edge 22a of the bag-like catch extension 22 is sewn onto the lower edge of the lateral slit 12c.

[0023] Thus, the space in the bag-like extension 22 communicates with the article-containing space 24 of the pocket 11 via the lateral slit 12c.

[0024] The size L1 of the bag-like catch extension 22 preferably is at least one third of the size L2 of the pocket 11. Referring to Fig.5, when a person wearing the gar-

ment bends his upper body down, the article 21 is displaced from the article-containing space 24 to the space in the bag-like extension 22 via the slit 12c, thereby keeping the article 21 held in the pocket 11.

[0025] The reinforcement cloth 23 effectively makes the entrance on the rear side free of any wrinkle, keeping it stiff enough to facilitate insertion of a small article 21 into the article-containing space 24.

[0026] The reinforcement cloth 23 is sewn onto the garment cloth 12 to be below the upper edge 13a of the pouch cloth 13, thus facilitating insertion of articles 21 into the article-containing space 24.

[0027] As seen from Figs.2 and 3, the magnetic object 16 is attached to the inner side of the seal cloth 14 in confronting relation with the magnet member 15, so that they may be magnetically attracted and stuck to each other, thereby sealing the pocket 11 with the seal cloth 14. The magnetic object 16 may be of pulverized magnetic material, flexible magnetic wires or short magnetic plates. The magnetic object 16 may comprise three or more sector divisions which can be combined into a circle. Advantageously, a circular combination of such sectors can be responsive to a salient article for changing its shape to conform to the salient portion of the article.

[0028] Other fastening means than the magnetic fastening means 15, 16 may be used. For example, two pieces of pressure-sensitive tape, or hooks and loops may be used instead. Advantageously, this sort of tape is as soft as the garment or seal cloth, and therefore, presence of any foreign substance may not be perceived.

[0029] In use, when an article 21 is put into the pocket 11, the pouch 13 is pushed lightly to allow the magnet member 15 to attract the magnetic object 16, whereby the pocket 11 is sealed with the seal cloth 14, as seen from Fig.4.

[0030] Assuming that the person wearing the garment bends his upper body down, the article 21 is displaced from the article-containing space 24 to a space in the bag-like catch extension 22, as seen from Fig.5. The sealing cannot be pried by the weight of the article 21.

[0031] Even his vigorous movement does not allow the article 21 to spring up from the pocket, by the presence of the seal cloth 14 and the bag-like catch extension 22.

[0032] Advantageously, a pair of eyeglasses, a cellular phone and any other fragile article can be put in such a sealing pocket at ease, because of no fear that they comes out and falls on the ground.

[0033] When the article 21 is taken out, a finger is inserted into the opening 25 to easily separate the magnet member 15 and the magnetic object 16 apart from each other, and then the article 21 can be taken out as usual.

[0034] Figs.6 to 9 show a pocket according to the fourth embodiment of the present invention. In these drawings same portions as the pocket 11 according to the third embodiment are indicated by same numerals as used in Figs.1 to 5. Detailed descriptions including

those in respect of what materials they are made of are omitted.

[0035] The pocket 31 comprises a small, flat cloth or pouch cloth 33 sewn onto the rear side 32b of the garment cloth or material 32 to define an article-containing space 24 inside with the top edge 32c open, and a bag-like catch extension 22 extending from the pouch cloth 33. The bag-like catch extension 22 has a piece of seal cloth 14 integrally connected to the end of the extension 22, lying behind the garment cloth 32.

[0036] The pocket 31 can be sewn into a suit, jumper and trousers and other clothes, not only on the outside but also on the inside of the garment.

[0037] As seen from Figs.6 and 7, the lateral opening 32c of predetermined length is made to allow small articles to be put in the article-containing space 24.

[0038] The lower extension 32e of the upper part 32g of garment cloth 32 is behind the lower part of garment cloth 32, and the lower extension 32e is sewn on the opposite sides 32f,32f onto the garment cloth 32. Thus, the seal cloth 14 is hidden behind the garment cloth 32 and cannot be seen from the outside of the garment.

[0039] A magnet member 15 is attached to the inside of the garment cloth 32. The magnet member 15 can apply an attractive force to a magnetic object 16 attached to the seal cloth 14, as hereinafter described. The magnet member 15 is preferably of a flexible magnet sheet, which causes the person wearing the garment to feel little or no strange touch.

[0040] Referring to Fig.6, the seal cloth 14 is somewhat shorter laterally than the opening 32c. The seal cloth 14 is sewn on its upper side 14a onto the lower end of the upper part 32g of the garment cloth 32, while opposite sides 14b,14b and a bottom side 14c remain unsewn. The seal cloth 14 preferably is made of a softer material than the garment 32 or pouch cloth 33, so that the person wearing the garment may feel little or no strange touch.

[0041] As seen from Figs.6 and 7, the magnetic object 16 is attached to the inner side of the seal cloth 14 in confronting relation with the magnet member 15, thus permitting the seal cloth 14 to be releasably stuck to the magnet member 15 (fastening means). The magnetic object 16 may be of pulverized magnetic object, flexible magnetic wires or short magnetic plates.

[0042] As shown in Figs.6 and 7, the seal cloth 14 is lined with a reinforcement piece 17, which is a thin plate of synthetic resin or metal. The reinforcement piece 17 effectively prevents the seal cloth 14 from twisting or bending, thereby assuring the reliable sealing of the pocket 11.

[0043] As seen from Fig.7, the upper edge 14a of the seal cloth 14 is connected to the end of the bag-like catch extension 22, which is sewn onto the garment cloth 32e via the intervening reinforcement cloth 23.

[0044] As described hereinbefore, the bag-like catch extension 22 extends from the pouch 33, which is sewn on the opposite sides 33b,33b and the bottom 33c onto

the garment cloth 32. Thus, the space in the bag-like catch extension 22 communicates with the article-containing space 24.

[0045] As seen from Fig.7, the size L1 of the bag-like catch extension 22 preferably is at least one third of the size L2 of the article-containing space 24. Referring to Fig.9, a person wearing the garment stoops down to allow the article 21 to be displaced from the article-containing space 24 to the space in the bag-like catch extension 22, and then the article 21 is positively held in the pocket 11.

[0046] In use, after an article 21 is inserted from the opening 32c into the article-containing space 24, the pocket 31 is pushed lightly to cause the magnet member 15 to attract the magnetic object 16, thus sealing the pocket 31 with the seal cloth 14, as seen from Fig.8.

[0047] Assuming that the person wearing the garment stoops down, the article 21 is displaced from the article-containing space 24 to the space in the bag-like catch extension 22, as shown in Fig.9. The sealing cannot be pried by the weight of the article 21. Even his vigorous movement does not allow the article 21 to spring up from the pocket, by the presence of the seal cloth 14 and the bag-like catch extension 22.

[0048] Figs.10 and 11 show a pocket 41 according to the fifth embodiment of the present invention. In these drawings, same portions as in the pockets 11 and 31 according to the third and fourth embodiments are indicated by same reference numerals as used in Figs.1 to 5, and Figs.6 to 9 and detailed descriptions including those in respect of what materials they are made of are omitted.

[0049] The pocket 41 comprises a small, flat pouch cloth 43 sewn onto the rear side 42b of the garment cloth or material 42 to define an article-containing space 24 with the top edge 46c open, and a bag-like catch extension 22 from the pouch cloth 43 sewn onto the inner or rear side of the upper part 42g of garment cloth 42. A piece of seal cloth 44 is fastened to the lower end of the upper part of garment cloth 42, thus lying below the opening 45 of the pocket 21 for sealing the article-containing space 24.

[0050] The lateral opening 45 has a predetermined width to allow small articles to be put in the article-containing space 24.

[0051] The pocket 41 has an extra strip of cloth 46 integrally connected to the top of the pocket-defining section 42 of garment cloth. The extra strip of cloth 46 is somewhat harder than the material of garment cloth 42, and is sewn on the opposite sides 46a,46a onto the garment cloth 42.

[0052] A magnet member 15 is attached to an inner or rear side of the extra strip of cloth 46. The magnet member 15 can apply an attractive force to a magnetic object 16 attached to the seal cloth 44, as hereinafter described (fastening means). The magnet member 15 is preferably of a flexible magnet sheet, which causes the person wearing the garment to feel little or no

strange touch.

[0053] The seal cloth 44 is integrally connected to the upper part 42g of garment cloth, and is as wide as the lateral opening 45. The seal cloth 44 is sewn on the opposite sides 44a, 44a onto the garment cloth 42, with the bottom side 44c remaining unsewn. The seal cloth 44 is preferably made of a softer material than the garment material, so that the person wearing the garment may feel little or no odd touch.

[0054] As seen from Fig. 11, the upper edge 44d of the seal cloth 44 is at a lower level than the upper edge 46c of the extra strip of cloth 46, and therefore, the seal cloth 44 is hidden behind the extra strip of cloth 46 and cannot be seen from the outside of the garment.

[0055] The magnetic object 16 is attached to the seal cloth 14. The magnetic object 16 may be of pulverized magnetic metal, flexible magnetic wires or short magnetic plate.

[0056] The pouch cloth 43 is sewn on the opposite sides 43b, 43b and bottom side 43c onto the garment cloth 42 so that the article-containing space 24 may communicate with a space in the bag-like catch extension 22.

[0057] The size L1 of the bag-like catch extension 22 preferably is at least one third of the size L2 of the pocket 31. Even when a person wearing the garment stoops down, the article 21 is displaced from the article-containing space 24 to the space in the bag-like catch extension 22, thus keeping the article 21 held in the pocket 11.

a material of the garment (12).

4. A pocket according to claim 1, 2, or 3 wherein the fastening means (15, 16) comprises a magnet member attached to the outside of the article-containing space (24) and a magnetic object attached to said another side of the piece of seal cloth (14).
5. A pocket according to claim 4, wherein the magnet member (15 or 16) comprises a flexible magnet sheet.
6. A pocket according to any of claims 1 to 5, wherein said piece of the seal cloth (14) is lined with a reinforcement piece (17).
7. A pocket according to claim 6, wherein the reinforcement piece (17) is a thin sheet of synthetic resin or metal.

Claims

1. A pocket (11) in a garment (12) having an article-containing space (24) for containing articles (21), and a top opening (25), comprising:
 - a piece of seal cloth (14) having a side sewn in the vicinity of the top opening and at an inside of the article-containing space;
 - fastening means (15, 16) attached both to another side of the piece of seal cloth and to an outside of the article-containing space for releasably sealing the top opening of the pocket; and
 - a bag-like catch extension (22) formed in the vicinity of the sewn side of the piece of seal cloth (14) so as to communicate with the article-containing space (24), for retaining the articles therein.
2. A pocket according to claim 1, wherein the bag-like catch extension (22) has a length being at least one third of a length of the article-containing space (24).
3. A pocket according to claim 1 or 2, wherein the piece of seal cloth (14) is of a material softer than

Fig. 1

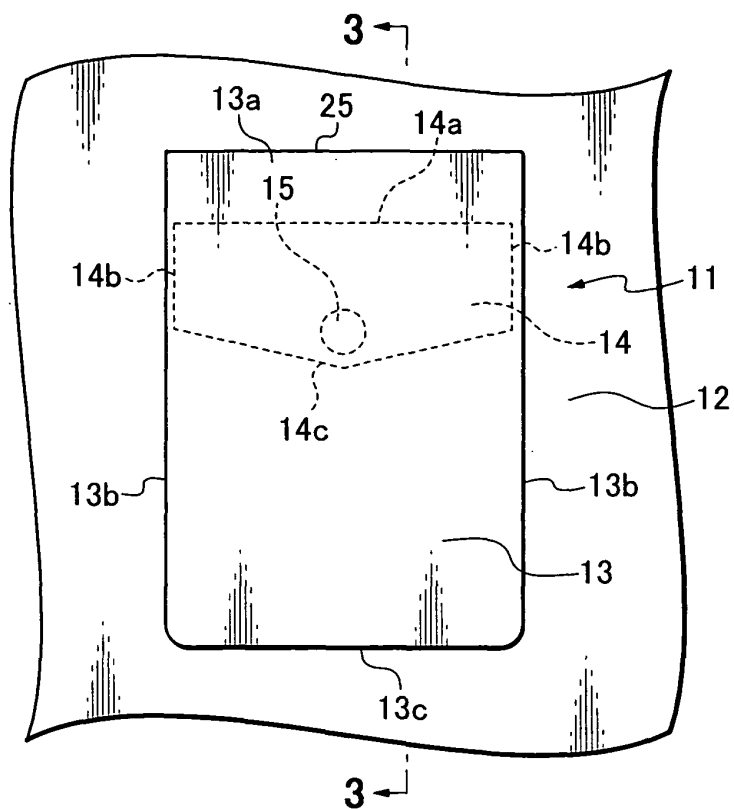


Fig. 2

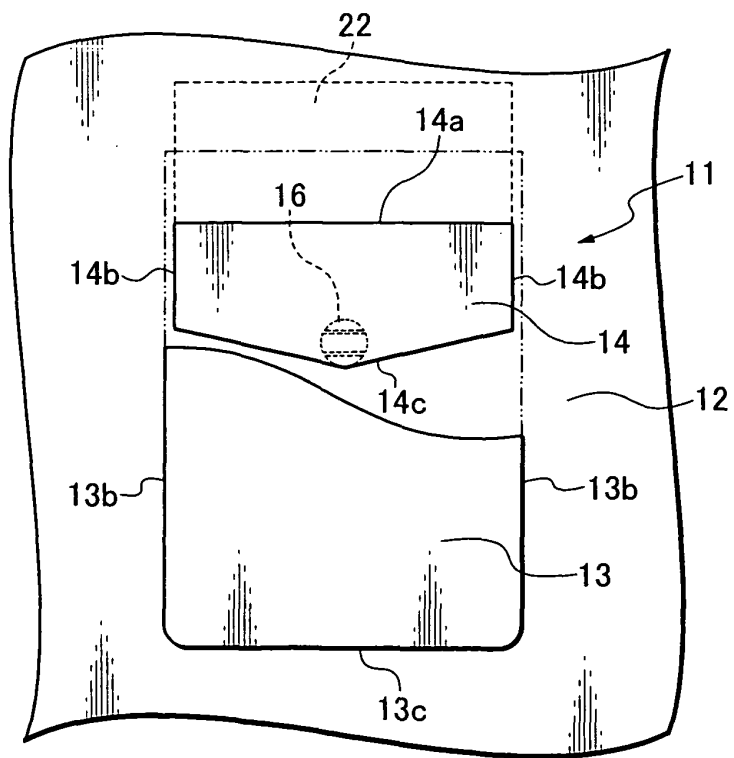


Fig. 3

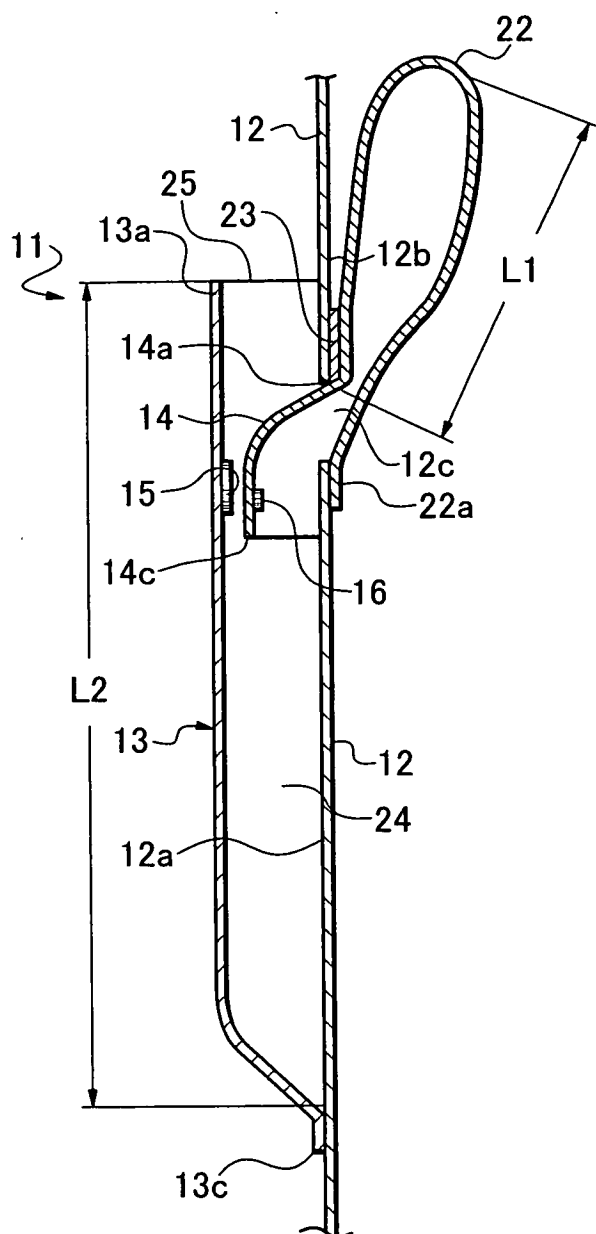


Fig. 4

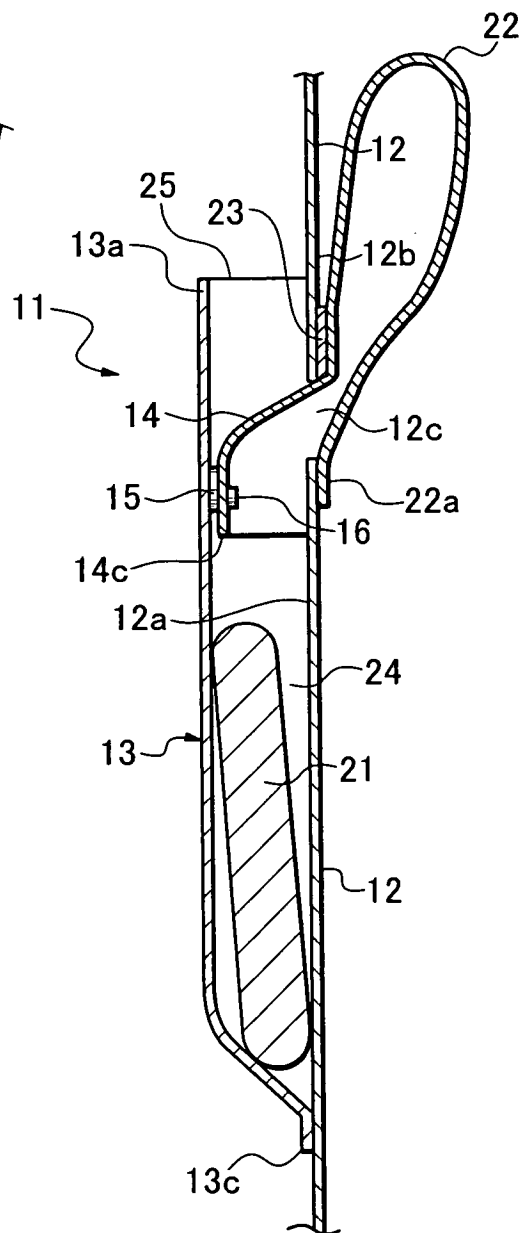


Fig. 5

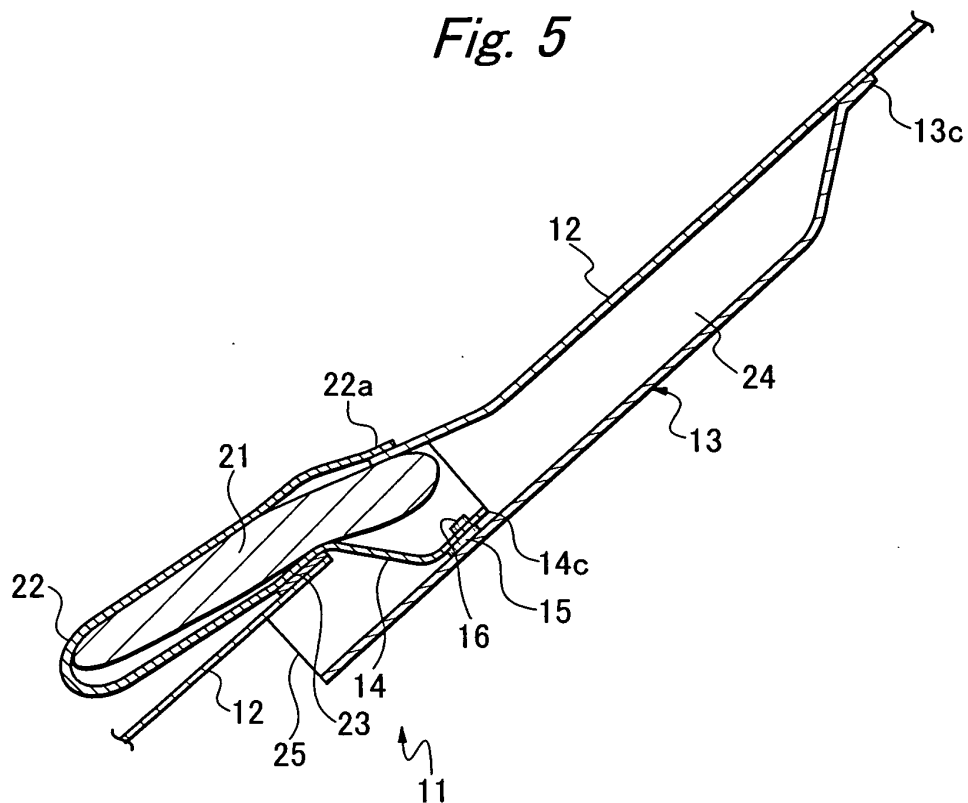


Fig. 6

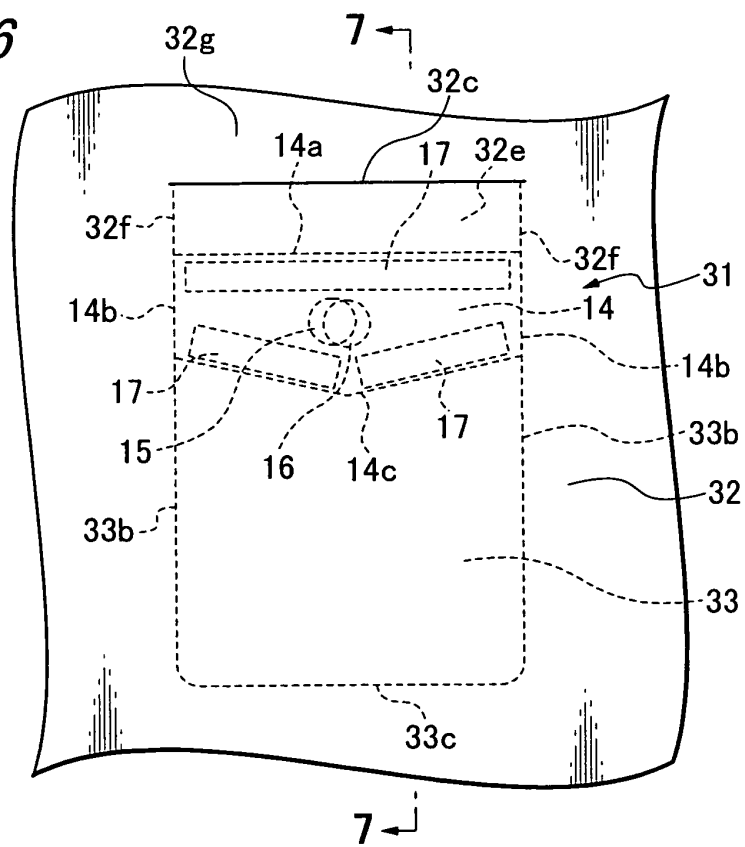


Fig. 7

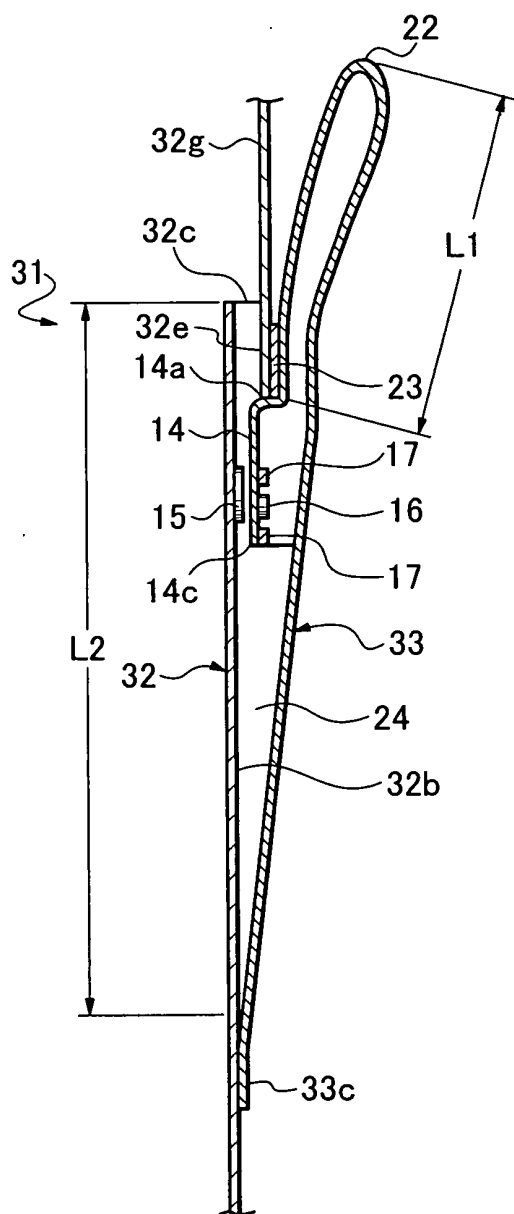
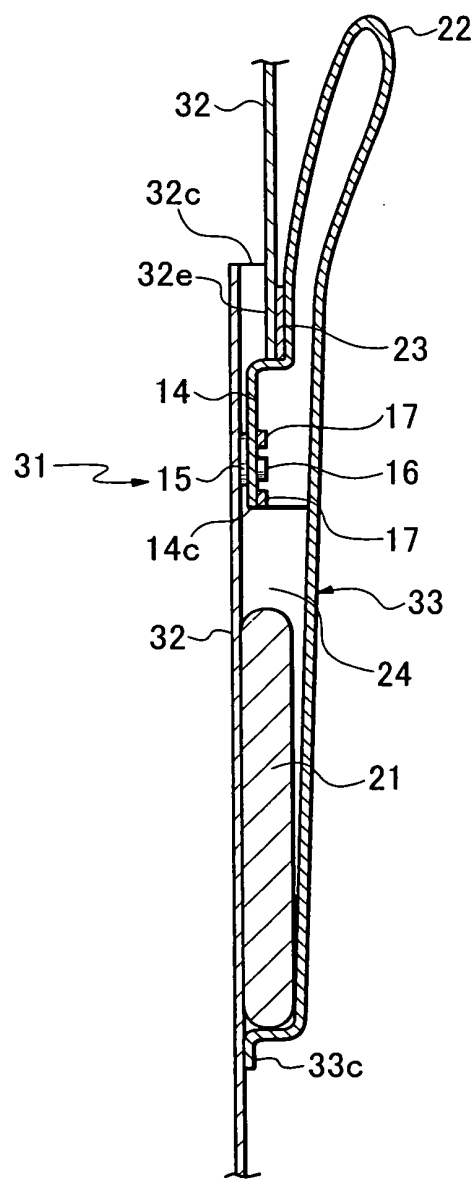


Fig. 8



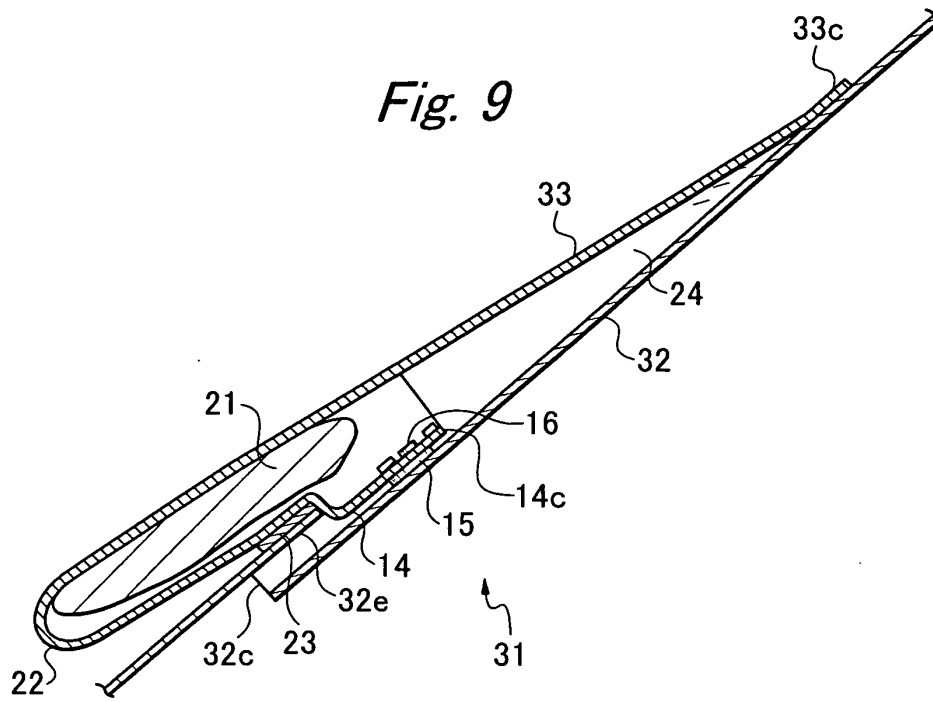


Fig. 10

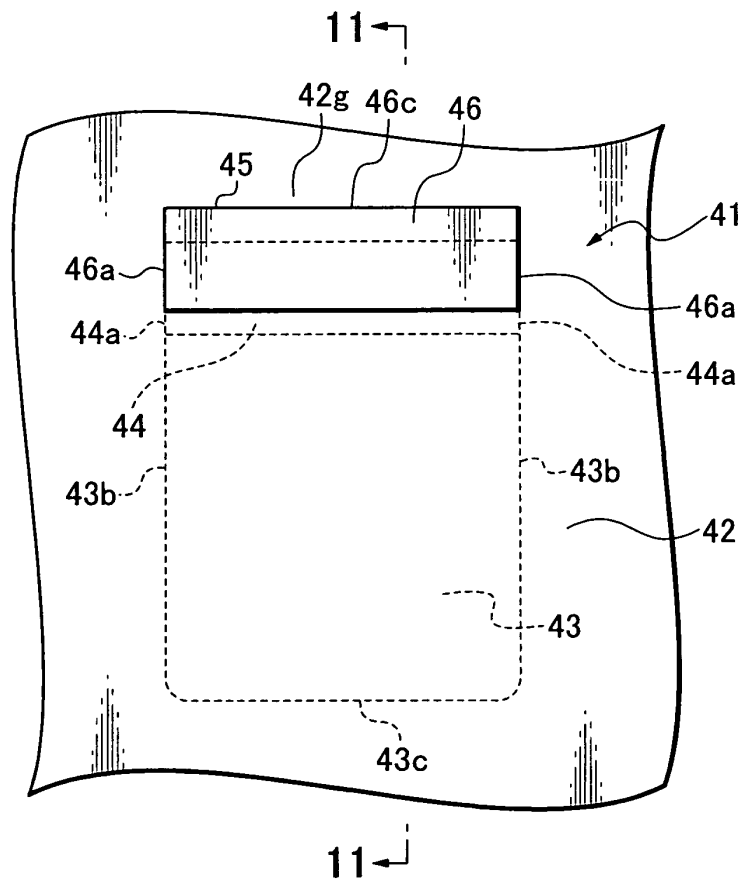


Fig. 11

