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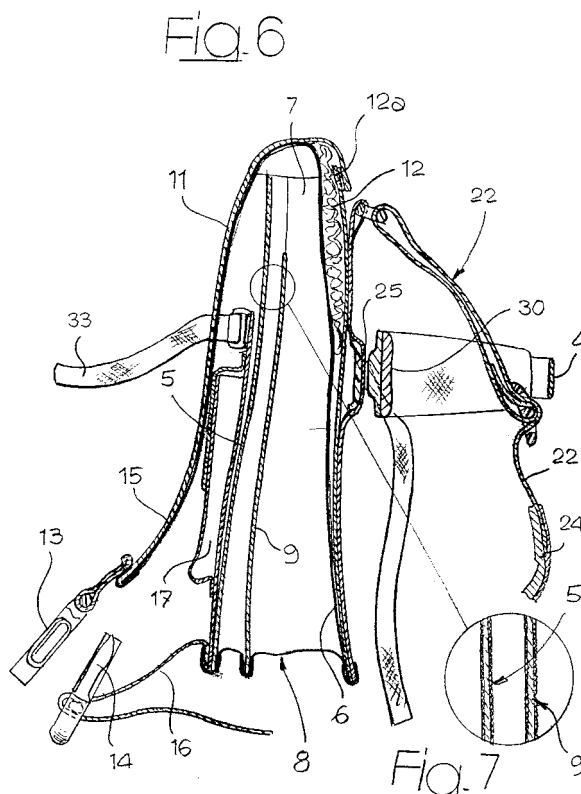
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(54) **Postman's bag or similar**

(57) Bag for postmen or similar use, comprising a containing space (9) which top is open, with a front face (5), a rear face (6) a bottom face (8) and two side faces (7), and a closing flap (11), which is an upper extension of the rear face (6), overlapping said front face (5) at least partially. The bag comprises a strap (22) to be car-

ried on the shoulder and a lumbar strap (4), attached to said rear face (6) including a cushion (30) destined to be placed between the rear face (6) of the bag and the body of the user. Moreover, an elastic stiffener (25) is attached to said rear face (6) which is horizontally elongated, arranged with its surface essentially parallel to said rear face (6).



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Description

[0001] This invention relates to the field of bags and particularly relates to a postman's bag or similar, of the known type, comprising a body of a bag, forming a containing space which top is open, a front face, a rear face, a bottom face and two side faces, and a closing flap, consisting of an upper extension of the rear face overlapping at least part of said front face' so to close the upper part of the bag, and a strap for carrying the bag on the shoulder, which ends are fastened to the rear face.

[0002] Studies and experiences conducted by the applicant in to aforesaid field have led to identify a set of needs and priority functions to be taken into account for designing a bag of this kind. The main identified needs depend both on the type of load to be carried and the environment in which said load is carried. This is because an uneven distribution of the load, such as postal material on long routes mainly in urban areas, requires the predisposition of a container which is easy to access and comfortable to carry. Furthermore, the current regulations in force in the matter of safety at the place of work concentrate attention on preventing hazards to which operators in general may be exposed. This has directed the studies conducted by the applicant towards seeking optimal solutions with reference to economical-anatomical issues deriving from manual transportation of loads.

[0003] The scope of this invention is consequently to make a postman's bag or similar which is able to satisfy all the needs mentioned above in an optimal way.

[0004] In order to attain the scope, this invention relates to a bag of the type stated at the beginning of this description characterised in that it also comprises:

- a lumbar strap, attached to said rear face, including a cushion destined to be placed between the rear face of the bag and the body of the user, and
- an elastic stiffener, attached to said rear face, which is horizontally elongated with its surface essentially parallel to said rear face.

[0005] Thanks to said characteristics, the bag according to this invention relieves part of the weight of the load on the side faces of the bag, limiting the swaying of the baggage due to the kinetic movement of steps, whereby reducing fatigue in the shoulder and cervical areas of the user in time and improving the muscular work of the concerned parts.

[0006] According to a preferred form of embodiment, the ends of said elastic stiffener are secured in a sliding fashion to the rear face and the middle part is free. Said cushion has a horizontal elongated conformation and is arranged over the stiffener with two end portions connected to the ends of the stiffener and the middle part free. The stiffener is guided by the ends by two loops attached to the rear face of the bag, said ends of the

stiffener having two slots for attaching two fastening elements attached to the lumbar strap cushion. Preferably, the stiffener is contoured with two shoulders which co-operate with said loops to prevent the stiffener from disengaging.

[0007] Moreover, preferably, the ends of the cushion are connected to the two sides of the rear face of the bag by means of two adjustable straps which can be pulled to avoid or reduce deformation of the bag, of the rear face in particular, consequently increasing functionality and comfort of use. The straps can also be used to fasten the bag to a rack, e.g. a bicycle or motorcycle. Moreover, a pocket for a flexible cover made of waterproof material, which can be extracted from pocket and applied over the bag to protect the paper material contents from weather conditions, is provided on said closing flap on the upper edge of the rear face. Moreover, in the preferred form of embodiment, the closing flap is equipped with a closing strap which co-operates with the strap attached to the bottom of the front face of the bag, said straps being equipped with quick coupling buckles.

[0008] Moreover, the front face of the bag is preferably equipped with one or more pockets, for example a mobile telephone pocket and a pencil holder.

[0009] Characteristics and advantages of this invention will be illustrated with reference to a preferred embodiment, as non-limiting examples, in the enclosed drawings, whereas:

- figures 1, 2 are two diagrams illustrating the stresses of the body of the users of a bag according to known technique and a bag according to this invention;
- figure 3 is a schematic view of a preferred form of embodiment of the bag according to this invention in the conditions by which it is being carried by a user;
- figure 4 is a blown-up prospective view of the bag according to this invention which closing flap is in lowered position;
- figure 5 is a prospective view of the open bag;
- figure 6 is a cross-section view of the bag illustrated in figure 4;
- figure 4 is a blown-up view of a detail in figure 6;
- figure 8 is a cross-section view on horizontal plane of the open bag;
- figure 9 is a lateral view of the bag which waterproof cover is applied;
- figure 10 is a view of the rear face of the bag with respective flexible stiffener.

[0010] Figure 1 schematic illustrates a user 1 who is carrying a bag 2 according to the known technique, with a single strap 3 to be carried over the user's shoulder. The dotted line indicates the posture that the user tends to assume to balance the weight of the carried load. As can be seen, in this condition, the load is concentrated on one shoulder producing an asymmetric effort on the

upper part of the user's spine.

[0011] As appears from the following description, the bag according to this invention, also indicated by number 2 in figure 2 in the enclosed drawings is equipped both with a shoulder strap 3 and a lumbar strap 4 which allows to considerably reduce the asymmetric effort exerted on the spine.

[0012] Figure 3 in the enclosed drawings illustrates the bag 2 according to this invention while it is being carried with the shoulder strap 3 and the lumbar strap 4.

[0013] With reference to figures from 4 to 10, the bag 2 comprises a bag body made of fabric, including a front face 5, a rear face 6, two side faces 7 and a bottom face 8. The fabric of the bag is stiffened by a panel of any suitable material (for example, synthetic material or cardboard) concealed between two layers of fabric either sewn or glued together along the edge on the front face 5 and on the rear face 6. In the illustrated embodiment, the side faces 7 are shaped as a concertina to confer characteristics of expandability to the body of the bag. Always in the case of the example shown, the two side faces present stiffened edges 7a in their intermediate area (see figure 8) joined to a partition 9 arranged inside the compartment 10 formed by the faces of the bag. The compartment 10 is open at the top and can be closed by means of a closing flap 11 which is an extension of the upper part of the rear face 6 and which can at least partially overlap the front part 5 to close the upper opening of the bag. Also the flap 11 consists of two layers of fabric which are sewn or glued together along the edge forming a pocket for containing a flexible cover 12 made of waterproof material which can be extracted after opening a Velcro strip 12a made along the upper edge of the rear face (see figure 6). The flap 11 can be fastened in closed position by means of the reciprocal engagement of two quick coupling buckles 13, 14 which are fastened to the flap 11 and to the lower edge of the front face 5. The latter is equipped with a pocket 17 for holding a mobile telephone which flap 18 is equipped with a Velcro strip, pencil holder pockets 19 and an addition pocket 20 which size is larger, also equipped with a Velcro strip 21, for example to carry small papers, on the outer side.

[0014] The rear face 6 is connected to the upper ends of a strap 22 to be carried over the shoulder. In the illustrated example, the ends of strap 22 are attached to the rear face through loops 23 (figure 10). The strap 22 is naturally adjustable in length and includes a padded cushion 24 for resting on the user's shoulder. Moreover, with reference to figure 10, an elastic stiffener 25, for example made of synthetic material such as nylon or similar, is attached to the outer surface of the rear face 6. The ends of the stiffener 25 are engaged in a sliding fashion through two loops 26 which are made by two straps 27 which are sewn to the face 6. Conversely, the central part of the stiffener 25 is free with respect to the face 6. However, the stiffener is contoured with two shoulders 28 (figure 10) co-operating with loops 26 to

prevent the ends of the stiffener 25 from being released from the loops. As shown in figure 8, the ends of the stiffener 25 jutting out over the loops 26 have slots 29 (also see figure 10) which serve to anchor a padded cushion 30 which is part of the abdominal strap 4. More precisely, two edges of strap 31 ending with two heads made of plastic material 32 which can be inserted through slots 29 and then arranged in parallel to the stiffener 25 so that they can no longer be extracted through the slots are sewn to the cushion 30. The cushion 30 is thus anchored to the end of the stiffener 25 and its middle part is free. As shown above, cushion 30 extends to a lumbar strap 4 which length is adjustable with a buckle closing device 32 comprising two quick coupling elements which type is described above with reference to the front closing flap of the bag.

[0015] Moreover, two adjustable straps 33 which apply traction to approach the front face to the rear face by means of the usual adjustment devices 34 for adjusting the length of the straps are attached to the two sides of the bag.

[0016] The straps 33 can also be used to fasten the bag to a rack, for example a bicycle or a motorcycle. Finally, the straps 23 extend to the straps 60 (figure 8) connected the ends of the cushion 30. The straps 60 can be pulled to prevent a deformation of the rear face 6 under the weight of the load.

[0017] Naturally, numerous changes can be implemented to the construction and forms of embodiment of the invention herein envisaged, all comprised within the context of the concept characterising this invention.

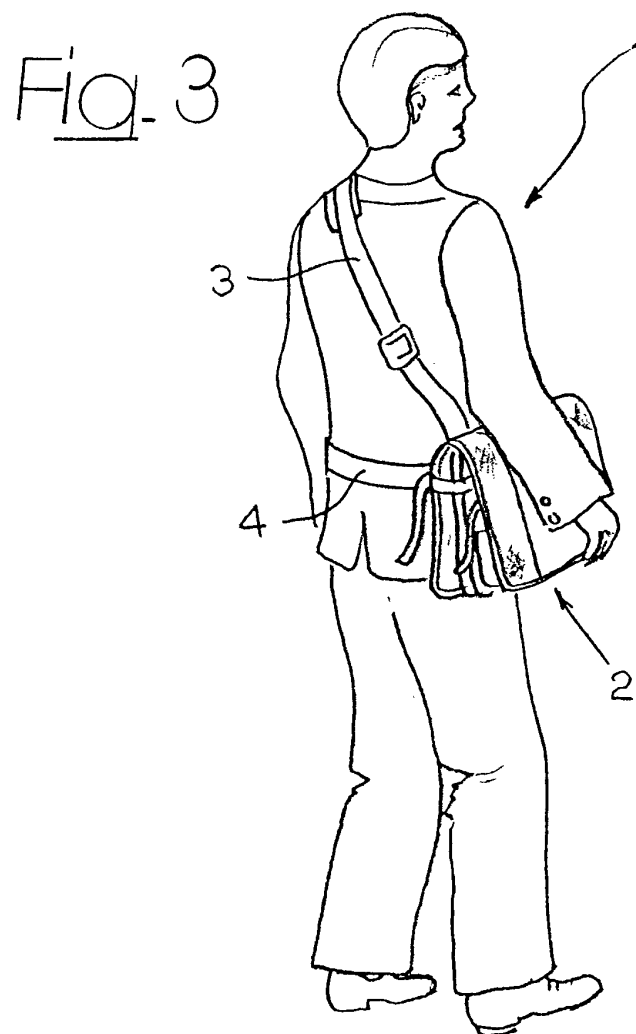
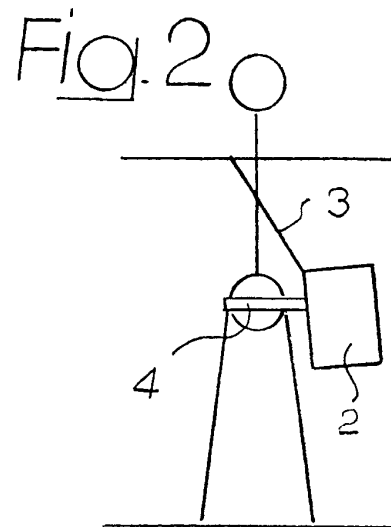
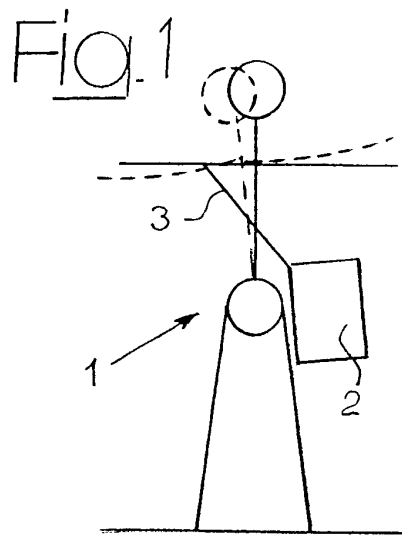
Claims

1. Postman's bag or similar, comprising a body of a bag (2) forming a containing space (10) which top is open, with a front face (5), a rear face (6) a bottom face (8) and two side faces (7), and a closing flap (11), which is an upper extension of the rear face (6), overlapping said front face (5) at least partially so to close the upper opening of the bag, and a strap (22) to be carried on the shoulder which ends are fastened to the rear face (6),
characterised in that said bag also comprises:
 - a lumbar strap (4), attached to said rear face (6) including a cushion (30) destined to be placed between the rear face (6) of the bag and the body of the user, and
 - an elastic stiffener (25), attached to said rear face (6) which is horizontally elongated with its surface essentially parallel to said rear face (6).
2. Bag according to claim 1, characterised in that the ends of said stiffener (25) are engaged in a sliding fashion to the rear face (6), its middle part is free.

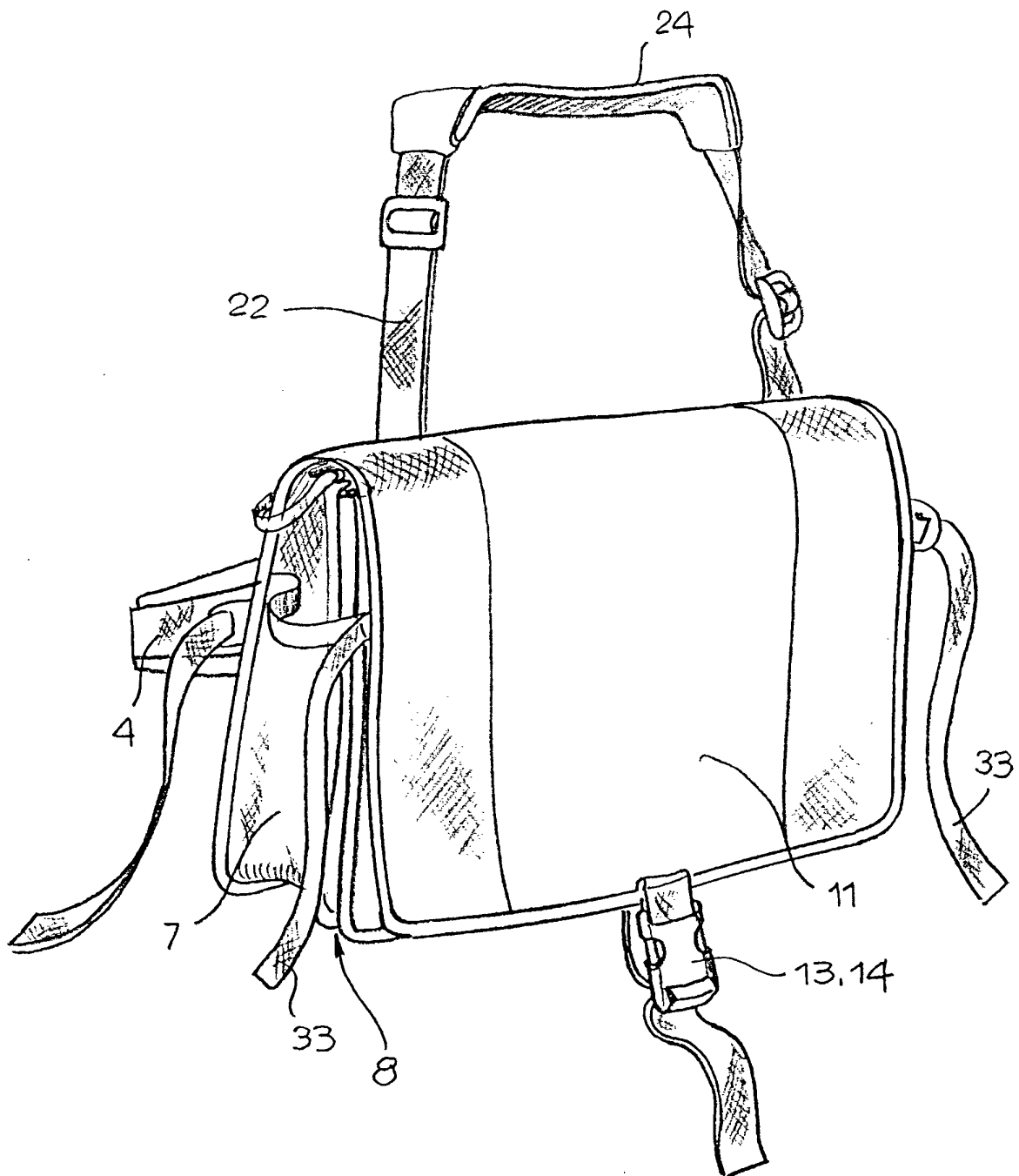
3. Bag according to claim 2, characterised in that said cushion (30) is horizontally elongated and is arranged over the stiffener (25) with two end portions connected to the ends of the stiffener (25) and the middle part is free. 5
4. Bag according to claim 3, characterised in that said stiffener (25) is guided by the ends through two loops (26) which are attached to the rear face (25) with two slots (29) for anchoring two fastening elements (32) connected to the cushion (30) of the lumbar strap (4). 10
5. Bag according to claim 4, characterised in that adjustable straps (33) for adjusting the volume of the compartment are attached to the two side faces (7) of the bag. 15
6. Bag according to claim 4, characterised in that the ends of the cushion (30) of the lumbar strap are also connected to the two sides of the rear face (6) of the bag by means of two adjustable straps (60). 20
7. Bag according to claim 1, characterised in that a pocket (12a) for a flexible cover (12) made of waterproof material which can be extracted from pocket and applied over the bag is provided on said closing flap (11) on the upper edge of the rear face (6). 25
8. Bag according to claim 1, characterised in that said flap (11) has a closing strap (15) co-operating with a strap (16) attached to the bottom of the front face (5) of the bag, said straps (15, 16) being equipped with quick coupling buckles (13, 14). 30
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9. Bag according to claim 1, characterised in that said the front side (5) has one or more external pockets, one of which is for carrying a mobile telephone (17). 35
10. Bag according to claim 1, characterised in that said the front face (5) and the rear face (6) are relatively stiff, while the side faces (7) are shaped as a concertina and connected to an internal partition (9) of the compartment (10). 40
This is essentially as described and illustrated for the specified purposes. 45

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Fla. 4



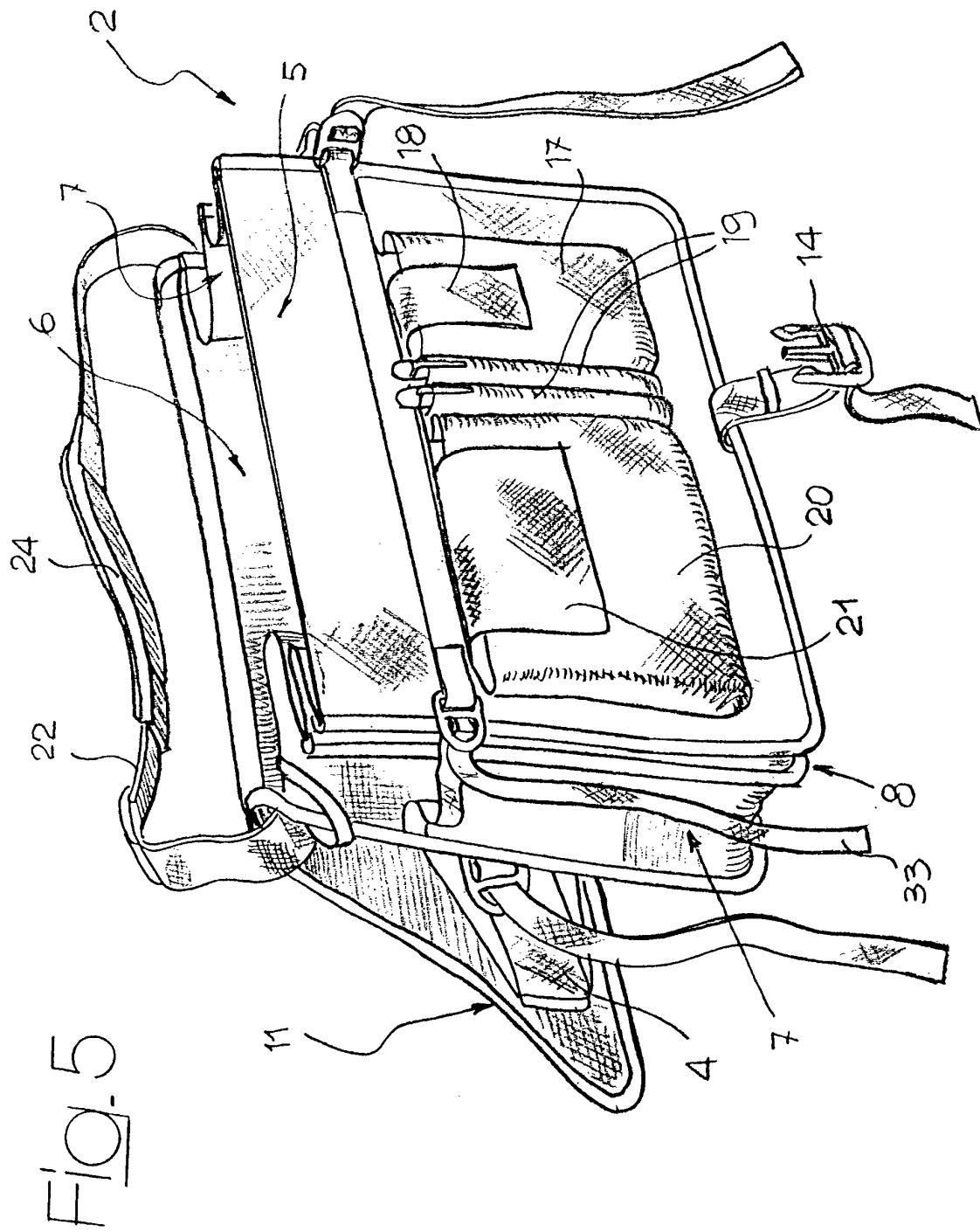
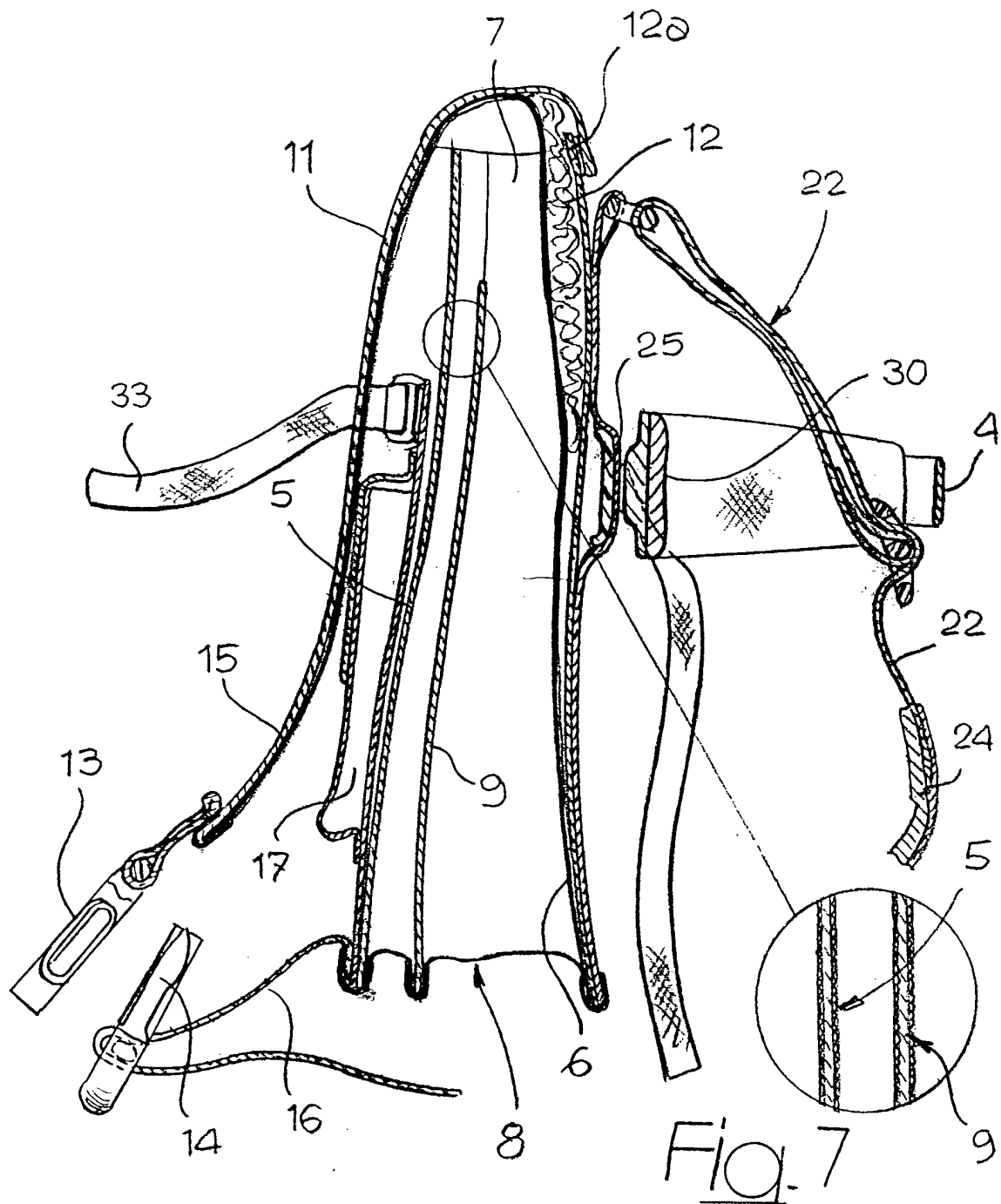


Fig. 6



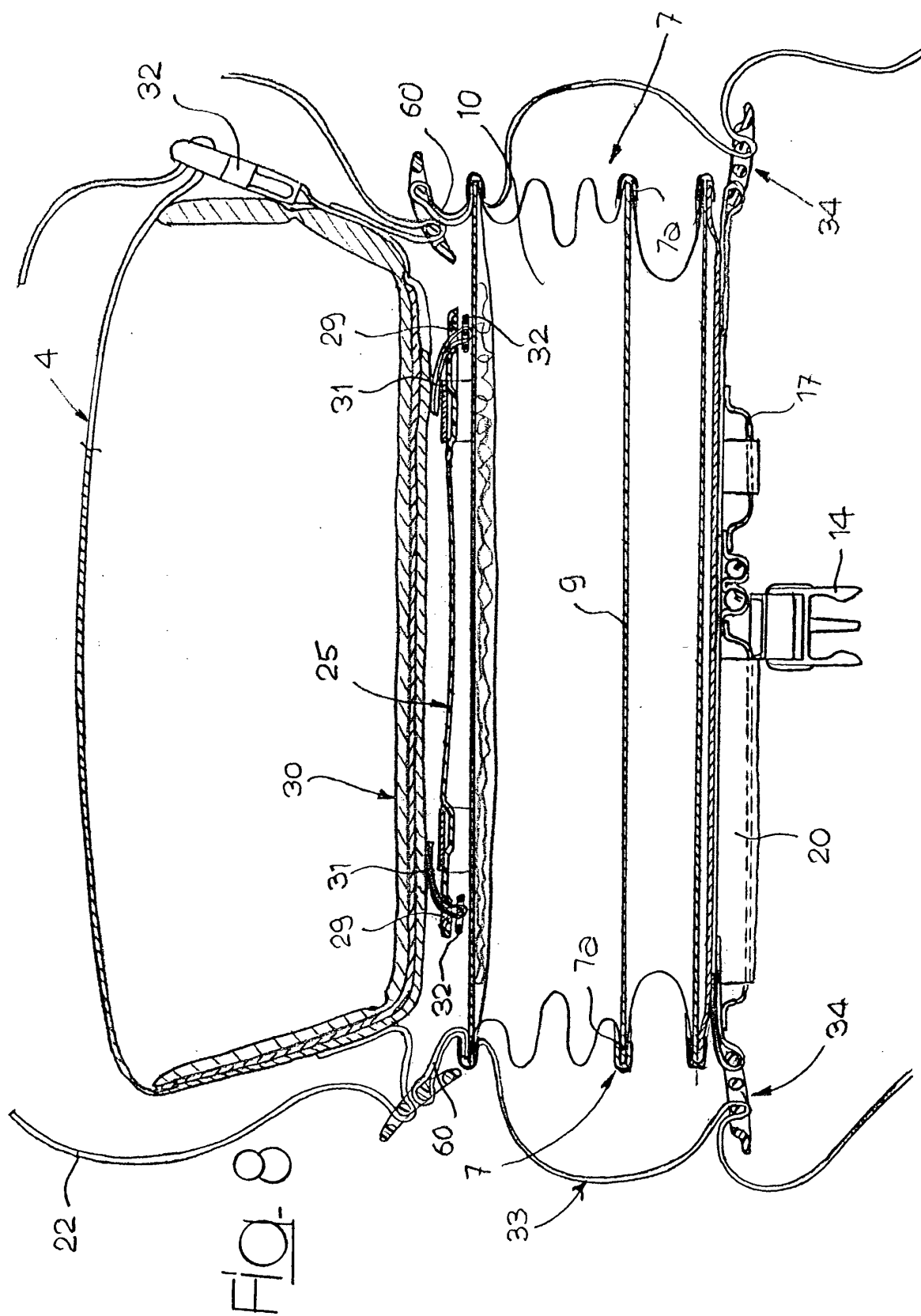


FIG. 9

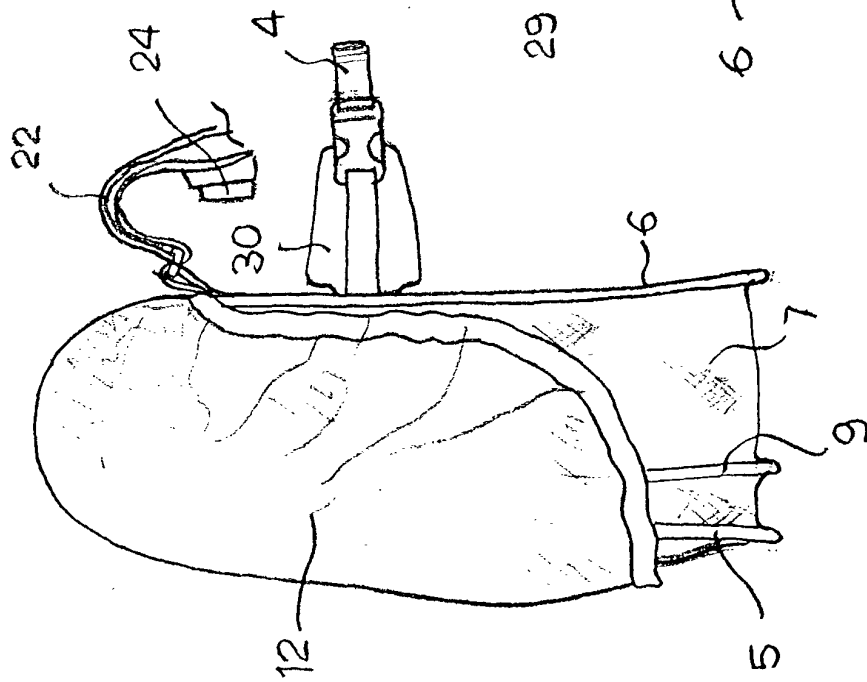


FIG. 10

