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(54) Container.

(57) A container of a size suitable for accommodating a human body includes two substantially similar trough shaped members 3, 5 which are detachably connected together about respective mating free edges, and sealing means 15 being located at said free edges to seal the container to provide a gas or liquid tight seal. Each trough shaped member may be used alone as an open topped container.

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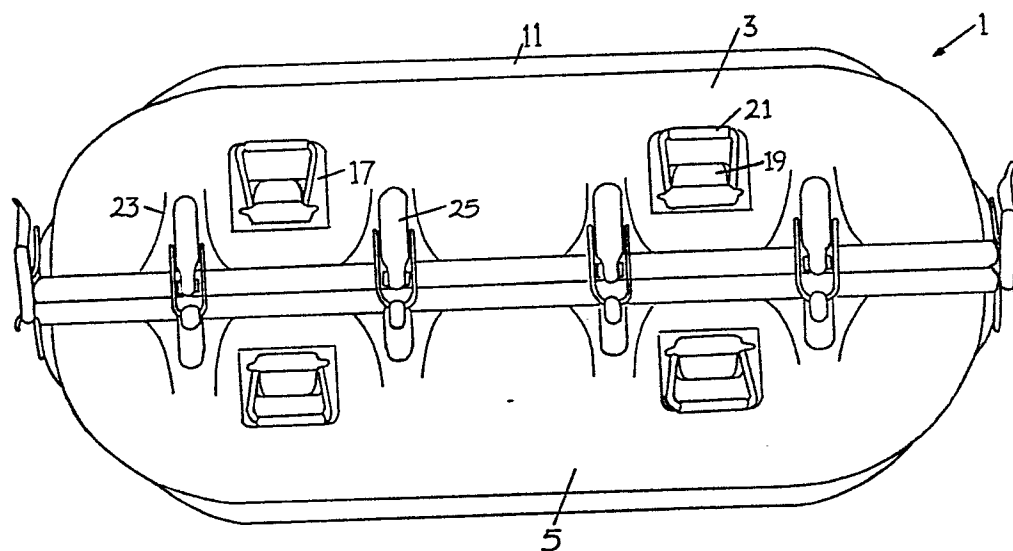


Fig 1

CONTAINER

This invention relates to a container which is of a size suitable for transporting human bodies, although it
5 may be used for carrying many different types of goods and additionally may be used for other purposes.

As a result of a natural disaster, epidemic, explosion, war (including bacterial chemical, civil and nuclear war) or after an accident such as a car, train or
10 plane crash, injured persons and corpses may require immediate transportation from the disaster area. Often such an area is remote or the bodies have to be transported through difficult terrain or atmosphere, such as water after a flood or through dangerous fumes after a fire.
15 Usually the method of transporting an injured person is on a stretcher and corpses are typically transported in large plastic bags.

According to the present invention there is provided a container of a size suitable for accommodating a human
20 body, the container comprising two substantially similar trough shaped members detachably connected together about their respective, mating free edges, and sealing means being located at said free edges to seal the container to provide a gas or liquid tight seal.

25 The container may be used with the two trough shaped members connected together or alternatively each trough shaped member may be used as a separate open topped container.

Preferably the trough shaped members are waterproof
30 and floatable so that they may be used in flood conditions, or, for instance, at sea or on a river.

Preferably the material of the trough shaped members is fireproof so that it can be used to transport, for instance, injured persons or corpses through fire. The
35 container may be used with the two trough shaped members

joined together not only for transporting corpses but also for transporting injured persons, in which case the person may be provided with breathing apparatus so that he may be supplied with air or oxygen should he be in the container
5 for any length of time.

The two trough shaped members are preferably readily connectable together and easily separable. Preferably they are shaped so that they may be nested within each other for compact storage and transport.

10 Preferably the trough shaped members are identical. This has the advantage that only one item need be held in stock, thereby avoiding the confusion that might otherwise occur if it were necessary to match together two different items for use during an emergency or disaster.

15 Preferably each trough shaped member is a deep elongate rounded shell and is preferably formed of a material which has glass reinforced plastics (fibreglass), carbon fibre or any other suitable lightweight but strong plastics material.

20 Preferably each trough shaped member comprises inner and outer spaced apart mouldings. As a result the trough shaped member is a very rigid double skinned structure and, with the skin spaced apart, provides a highly insulated element when forming part of the container. Furthermore,
25 by separately moulding each "skin" the internal and external surfaces of the assembled trough shaped member may be produced with a very smooth finish.

Preferably the sealing means comprise a pair of mating seal elements, each being connected to and extending over
30 the whole of a free edge of any respective trough shaped member, the elements of the pair being for engagement with each other when the troughed shaped members are connected together to form the assembled container. More preferably each seal element is formed of a flexible rubber or rubber
35 like material and has a pair of spaced apart

projections, each extending the entire length of the element and in a direction towards the other element to provide a double seal.

Preferably each trough shaped member is provided with 5 integral, longitudinally extending skids for easy sliding movement.

Preferably the container is provided with a plurality of fastening means whereby the trough shaped members may be detachably connected together. These fastening means may 10 be, for instance, snap, toggle or strap fasteners.

Preferably, the fasteners are provided along each side of the container and more preferably four such fasteners are provided down each side of the container. Where the fasteners have "male" and "female" elements, the male 15 members are preferably provided down one side of a trough member and female members along the other side so that any one trough member can be connected to any other such member.

Preferably each trough shaped member is provided with 20 carrying handles, more preferably with such handles that are located on the sides and the ends of the trough shaped member. The arrangement is preferably such that carrying poles can be easily attached to the trough shaped members to allow them to be converted into stretchers.

25 The trough shaped members or the containers may also be used to transport, for instance, medical supplies, food, liquid or ice to bring supplies into a disaster area and then may be used to carry injured persons or corpses out of the disaster area. When being transported over land or sea 30 the containers or trough shaped members may be connected together so that a plurality of them may be towed one behind the other.

A container in accordance with the present invention will now be described, by way of example only, and with 35 reference to the accompanying drawings, in which:-

Figure 1 is a side elevation of a container in accordance with the present invention;

Figure 2 is a view of the interior of one of the trough shaped members of the container of Figure 1;

5 Figure 3 is a transverse section on the trough shaped member of Figure 2; and

Figures 4A and 4B show in detail the sealing arrangement of the container of Figure 1.

Referring to the accompanying drawings, a container 1
10 in accordance with the present invention comprises two identical trough shaped members 3 and 5. Each trough shaped member 3, 5 has a main body part made of fire retardant fibreglass and in this embodiment the member has a length of about 2m, a depth of about 45cm and a width of
15 about 60cm. Each trough shaped member is gently rounded between the side walls, the end walls and the base and each is formed from two spaced apart mouldings 7 and 9, as illustrated in Figure 3. The two mouldings 7 and 9 are fitted together with an appropriate number of spacing
20 elements, such as fibreglass mats or the like, located therebetween in order to leave an gap between the two mouldings. In this way a very strong and rigid structure is formed with smooth outer and inner surfaces and which provides good thermal insulation. Typically the thickness
25 of each moulding is about 2 to 4mm, preferably about 3mm and the space between the mouldings is about 0.5 to 2mm, preferably about 1mm. The outer moulding 7 is formed with three longitudinally extending integral rounded ribs 11 which form skids to enable a trough shaped member, or an
30 assembled container to be slid easily over a surface.

The continuous edge of the walls of the trough shaped member are turned over to form an integral flange 13 and this flange 13 is provided with a rubber seal member 15 which will be described in detail below.

35 The trough shaped member 3, 5 is formed with two

shallow recesses 17 on each side and a similar shallow recess at each end. Fixed into these recesses are metal plates 19 which carry handles 21 and which are spring urged into the recesses so that they do not protrude from the side of the container when they are not in use. The plates 19 may be attached by rivets directly to the fibreglass body or may be fixed to corresponding plates located between the two skins 7 and 9 in order to give a firmer fixing.

10 The outer skin 7 is formed with a plurality of shallow integral projections 23, four being spaced down each side and two spaced apart at each end of a trough shaped member. Each projection 23 carries one element of a two part fastening device 25, the mating element being located on 15 the other trough shaped member. The fasteners may be of any suitable type including snap or toggle fasteners. Where the fastening includes "male" and "female" elements the arrangement is preferably such that one trough shaped member may be used with any other trough shaped member to 20 form the container. For instance, the male elements may be located on one side and at one end of the trough shaped member and female elements down the other side and the other end.

The features of the recessed handles and the slightly 25 projecting portions for the fasteners are such that the trough shaped members may be readily stacked one inside the other for storage or transport purposes.

Referring particularly to Figure 4, it can be seen that the seal arrangement for the container 1 comprises two 30 seal elements 27 and 29, each seal element being associated with a respective trough member.

Each seal element may be made of a synthetic rubber material such as neoprene. The element is shown in section detached from the trough member in Figure 4A. It is of 35 generally channel shape with a relatively large limb 31

having hollow projections 33 and 35 extending in the same direction from each side edge of limb 31. Opposite projection 35 extends the bight 37 and relatively smaller limb 39 of the element.

5 Figure 4B shows detail of a sealing arrangement of container 1. The sealing elements 27 and 29 are arranged as shown about respective flanges 13 of the trough members 3 and 5. Each seal element is attached to its respective flange by a series of rivets 41 spaced apart about the
10 entire free edge of the trough member. As shown in Figure 4B, the sealing elements are arranged with their corresponding projections 33 and 35 contacting each other when the two trough members are fastened together thereby compressing these projections to form a double seal. Even
15 if the trough members are fastened together in a misaligned manner, or one or both trough members are somewhat distorted from their original shape, so that the projections 33 and 35 do not engage as shown in Figure 4B, there is still every likelihood of a good seal being formed
20 with the projection 33 or 35 of one sealing element engaging firmly with the side of a projection on the other seal element or possibly with the flat part of the seal 45 located between the projections on the other sealing elements.

25 Referring to Figure 2, one or both trough members may be provided with a strip of soft material such as foamed plastics material which covers essentially the whole of the base of the trough member so as to form a comfortable pad on which an injured person may lie.

CLAIMS:

1. A container of a size suitable for accommodating a human body, the container comprising two substantially similar trough shaped members detachably connected together about their respective mating free edges, and sealing means being located at each free edge to seal the container to provide a gas or liquid seal.

2. A container according to claim 1 wherein each trough shaped member is formed of fibreglass.

3. A container according to claim 1 or claim 2 wherein each trough shaped member comprises spaced apart inner and outer plastics mouldings.

4. A container according to any of the preceding claims wherein the sealing means comprise a pair of mating elements, each being connected to and extending over the whole of the free edge of a respective trough shaped member.

5. A container according to claim 4 wherein each seal element is formed from a flexible rubber material having a pair of spaced apart projections each extending the entire length of the seal element and in a direction towards the other element to provide a double seal.

6. A container according to any of the preceding claims wherein each trough shaped member is provided with integral, longitudinally extending skids for easy sliding movement.

7. A container according to any of the preceding claims wherein each trough shaped member is provided with a plurality of fastening means whereby the trough shaped members may be detachably connected together.

8. A container according to any of the preceding claims wherein each trough shaped member is provided with carrying handles attached thereto.

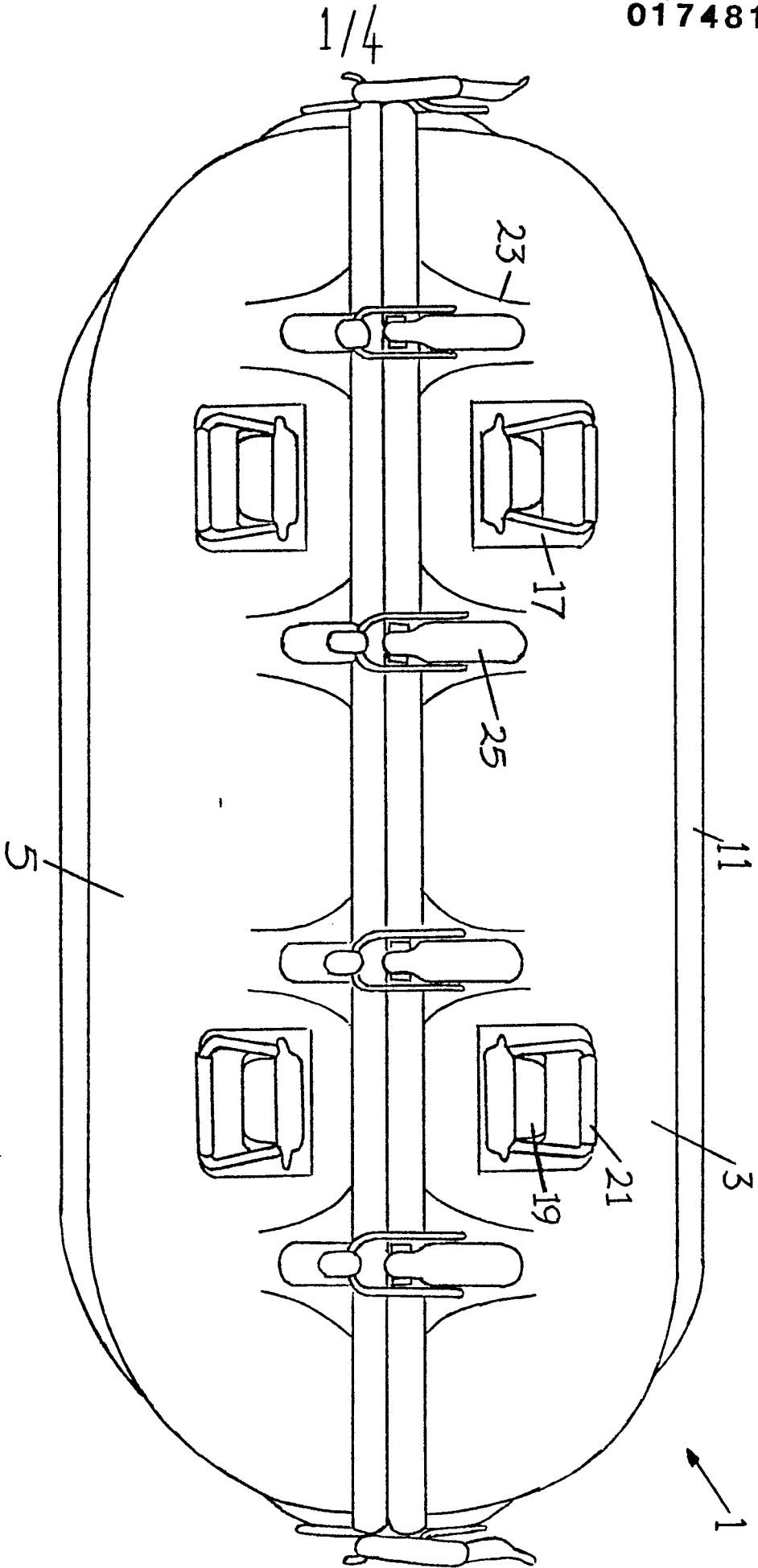


Fig 1

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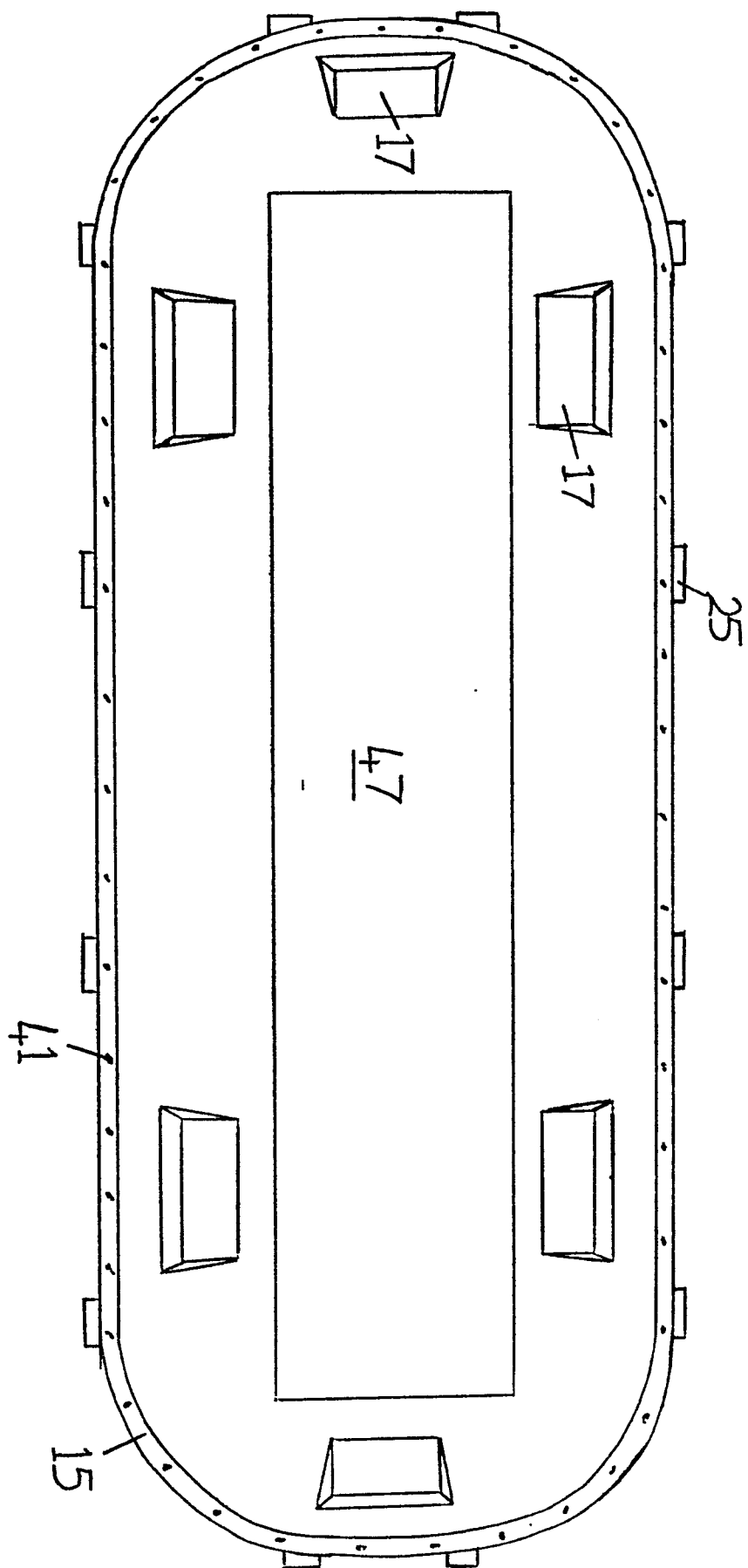


Fig 2

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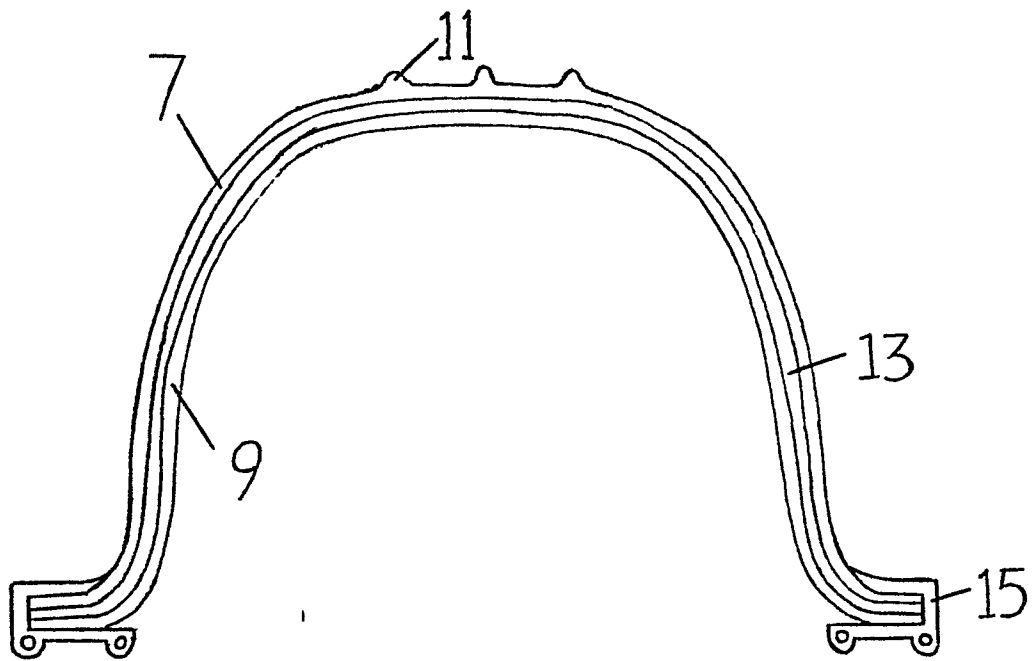


Fig 3

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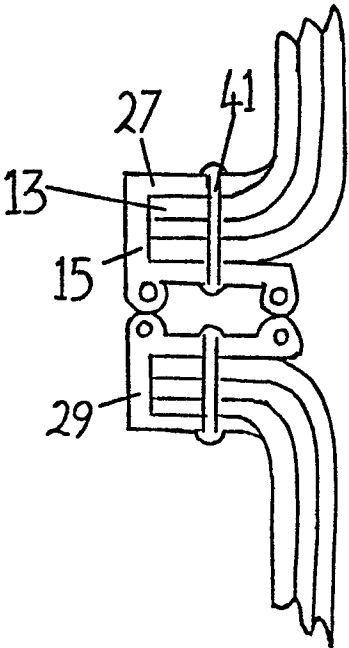


Fig 4B

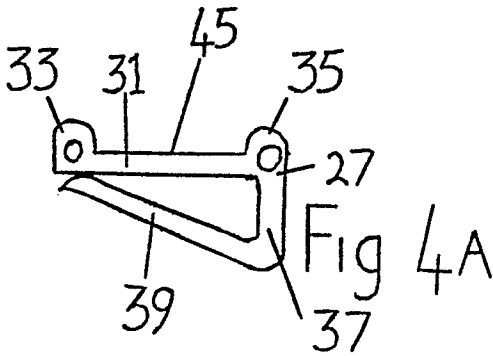


Fig 4A