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(54) **A casualty handle**

(57) A casualty handle (10) to assist in the manoeuvring a casualty, to allow carers or first aid responders to manoeuvre a casualty from a position where they may be in danger, or so that they may receive further treatment. The casualty handle (10) comprises a handle

member (12) provided with a plurality of cut away portions (14). The casualty handle (10), in use, is placed under the casualty to be moved, such that cut away portions (14) of the casualty handle (10) may be grasped by the carer or first aid responder and the patient lifted using the casualty handle (10).

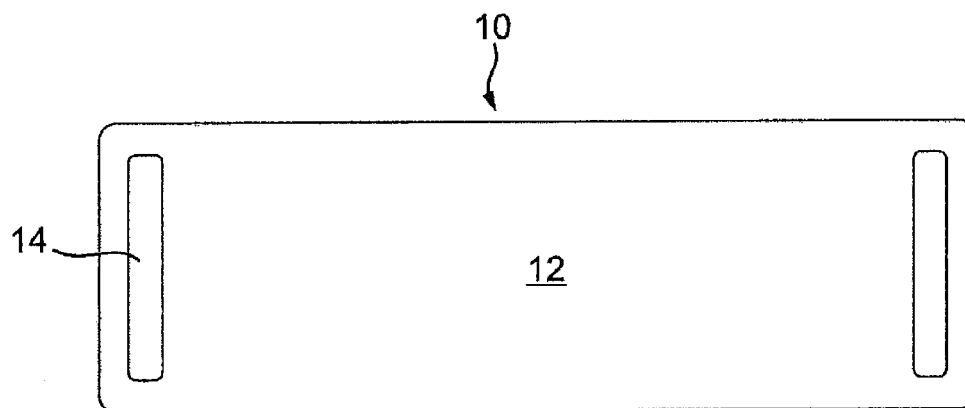


Fig. 1

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Description

[0001] The present invention relates to a casualty handle.

[0002] It is well known that carers or first aid responders are often put into difficult and dangerous situations when it comes to moving incapacitated persons from positions where they may have been injured or to continue there treatment. Generally it is necessary to either manhandle or lift the incapacitated person which places the carer or first aid responder under a lot of strain and risk of muscular and skeletal injury.

[0003] For instance, some motor vehicle accidents end with the occupants of the vehicle being incapacitated inside the cabin of the vehicle either through the action of the cabin being compressed due to damage to the vehicle or through the occupant of the vehicle sustaining injuries that otherwise prevent them moving or being moved from the vehicle.

[0004] In these types of major motor vehicle accidents it is common for emergency services to respond to the scene of the accident and to be responsible for extricating the incapacitated person from the vehicle. To achieve this emergency service crews employ a number of devices which they if necessary may use to cut or separate components of the car so that they may gain access to the vehicle or to clear a path so that the incapacitated person may be removed without risking further injury.

[0005] One of the many problems faced by emergency service crews in this situation is how to safely manoeuvre a possibly injured occupant out of the cabin of the vehicle without causing further injury. In the past emergency service personnel have used the clothing of the casualty to attempt to gain a purchase on the occupant when removing them from the vehicle, however; increasingly it is common for paramedics to cut through the occupants clothing to gain access to any areas requiring treatment.

[0006] The present invention attempts to overcome at least in part the aforementioned disadvantages of previous casualty removal tools

[0007] In accordance with one aspect of the present invention there is provided a casualty handle to assist in the manoeuvring of an incapacitated person from one position to another whilst maintaining body alignment.

[0008] The present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a top view of a casualty handle in accordance with the present invention

Figure 2 is a top view of a casualty handle in accordance with another aspect of the present invention.

Figure 3 is a top view of a casualty handle in accordance with a preferred embodiment of the present invention.

Figure 4, is a top view of a casualty handle in accordance with another preferred embodiment of the present invention.

Figure 5, is a top view of a casualty handle in accordance with yet another preferred embodiment of the present invention.

[0009] Referring to the Figure 1, there is shown a casualty handle for manoeuvring an incapacitated person from one position to another, the casualty handle 10 comprises a handle member 12 that is relatively thin. The casualty handle 10 preferably consists of a polymer material, preferably a plastic material, more preferably high molecular weight polyurethane; although any material with good strength and lack of friction characteristics may be chosen.

[0010] The handle member 12 of the casualty handle 10 is generally elongate and is arranged to be sufficiently long enough to pass under the occupant of a vehicle such that the cut away portions 14 are reachable on either side of the incapacitated person.

[0011] In accordance with a preferred embodiment of the present invention the casualty handle 10 further comprises straps 16 as is shown in figure 2. The straps are arranged to pass through the cut away portion 14 in the casualty handle 10 and then around the end thereof such that the casualty handle 10 is secured in a loop of the strapping 16.

[0012] In accordance with a preferred embodiment of the present invention the casualty handle may further comprise straps 16. The straps are arranged to pass through a slot 18 in the casualty handle and then around the end thereof such that casualty handle is secured in a loop of the strapping 16.

[0013] Figure 3 shows a casualty handle in accordance with the present invention wherein the handle member is generally hexagonal in shape, with the points of the triangle being removed to form a hexagon. The applicant has found that such a shape is beneficial for placing under the hips of a casualty for assisting in the manoeuvring of the casualty.

[0014] Figure 4 shows a casualty handle in accordance with the present invention wherein the handle member is in the shape of a cross. Preferably, the addition projections of the handle member are afforded cut away portion and or straps to assist in the manoeuvring or a casualty.

[0015] Figure 5 shows a casualty handle in accordance with the present invention wherein the handle member is in the shape of a crucifix. The addition projections of the handle member extend from a central portion thereof, such that one projection is substantially longer than the opposing projection. Preferably, the addition projections of the handle member are afforded cut away portion and or straps to assist in the manoeuvring or a casualty.

[0016] In use, for example in a motor vehicle accident situation, the casualty handle 10 is inserted in at least

one position under the incapacitated person about to be moved by emergency service personnel. The casualty handle 10 is inserted by sliding the casualty handle 10 between the occupant and the vehicle, for example, it may be inserted under the buttocks of the occupant and the base of the seat. The cut away portions 14 of the casualty handle 10 are arranged to allow an emergency services worker to gain a handhold such that they may be able to bear some or all of the weight of the occupant of the vehicle.

[0017] In certain situations it may be necessary for more than one casualty handle 10 to be placed under an occupant of the vehicle to assist in holding the occupant in a certain orientation whilst remove them from the vehicle.

[0018] In accordance with another preferred embodiment of the present invention the casualty handle 10 further comprises straps 16 that are arranged to afford personnel additional hand holds as required. Further, if necessary the straps 16 may be placed over a shoulder or other body part so that additional leverage may be provided when lifting or manoeuvring an occupant of the vehicle.

[0019] In accordance with yet another preferred embodiment of the present invention the casualty handle 10 comprises straps 16 that may be arranged to engage straps 16 of other casualty handles 10 that are placed under the occupant of the vehicle to maintain a certain orientation whilst removing the occupant from the vehicle.

[0020] In accordance with yet another preferred embodiment of the present invention the casualty handle 10 comprising straps 16 is arranged to help lift incapacitated persons from a bed or gurney. As such the straps 16 are arranged so that they may engage lifting equipment such as a hook or pulley to allow the incapacitated person to be lifted. In accordance with this preferred embodiment a plurality of casualty handles 10 may be employed to assist in the support of the incapacitated person whilst they are being lifted.

[0021] Modifications and variations as would be apparent to a skilled addressee are deemed to be within the scope of the present invention.

Claims

1. A casualty handle **characterized in that** the casualty handle comprises a handle member, the handle member being provided with a plurality of cut away portions, the casualty handle being arranged, in use, to be placed under a casualty, wherein the cutaway portions provide hand holds to assist in the maneuvering of the casualty.
2. A casualty handle according to claim 1, **characterized in that** the handle member of the casualty handle comprises a plastics material.

3. A casualty handles according to claim 2, **characterized in that** the handle portion comprises a high molecular weight polyurethane material.
4. A casualty handle according to any one of the preceding claims, **characterized in that** the casualty handle further comprises straps to assist in the maneuvering a casualty.
5. A casualty handle in according to claim 4, **characterized in that** the handle member is afforded a plurality of slots through which the straps pass.
6. A casualty handle according to claim 4 or 5, **characterized in that** the strap are provided with a loop portion at an end remote to the handle member to allow the strap to be placed over or around body parts of emergency services personal attempting to maneuver a casualty.
7. A casualty handle according to any one of the preceding claims, **characterized in that** the handle member is generally triangular in shape for placement under the casualty's hips to assist in maneuvering the casualty.
8. A casualty handle according to any one of the claims 1 through 6, **characterized in that** the handle member is generally cross shaped, wherein extending from the center of the handle member in opposing directions are additional handle portions of substantially the same length.
9. A casualty handle according to any one of the claims 1 through 6, **characterized in that** the handle member is substantially cross shaped, wherein extending from the center of the handle member in opposing directions are additional portions, that are of substantially different lengths such that the handle member has proportions similar to a crucifix.

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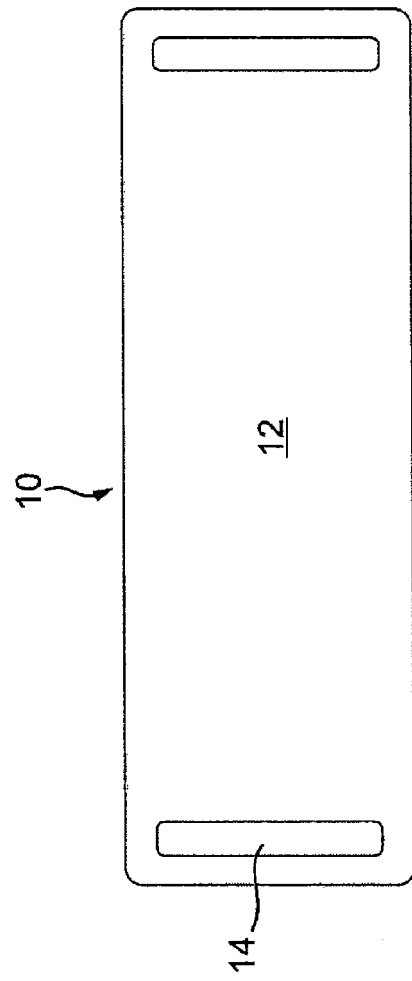


Fig. 1

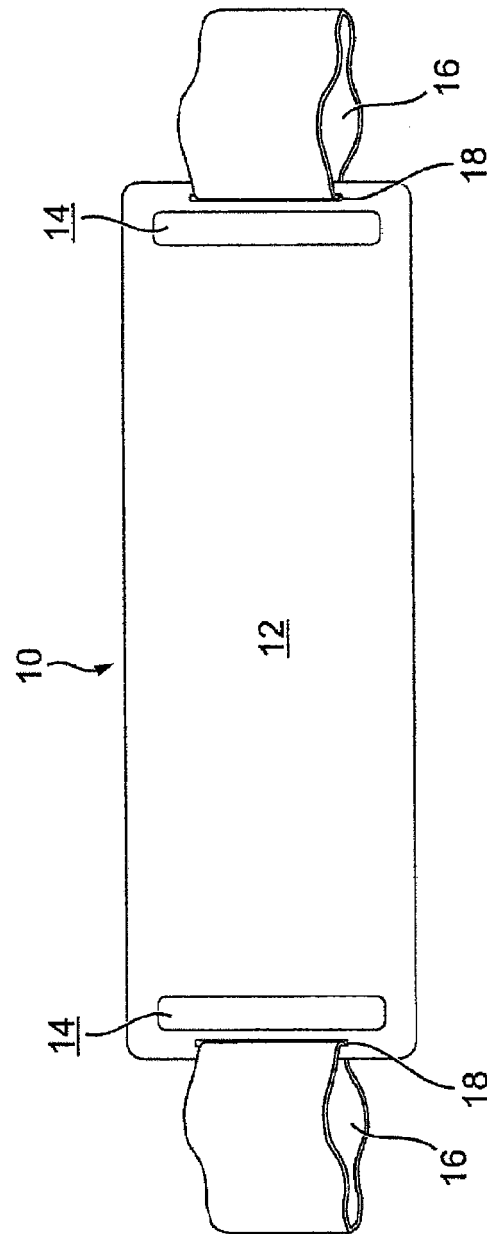


Fig. 2

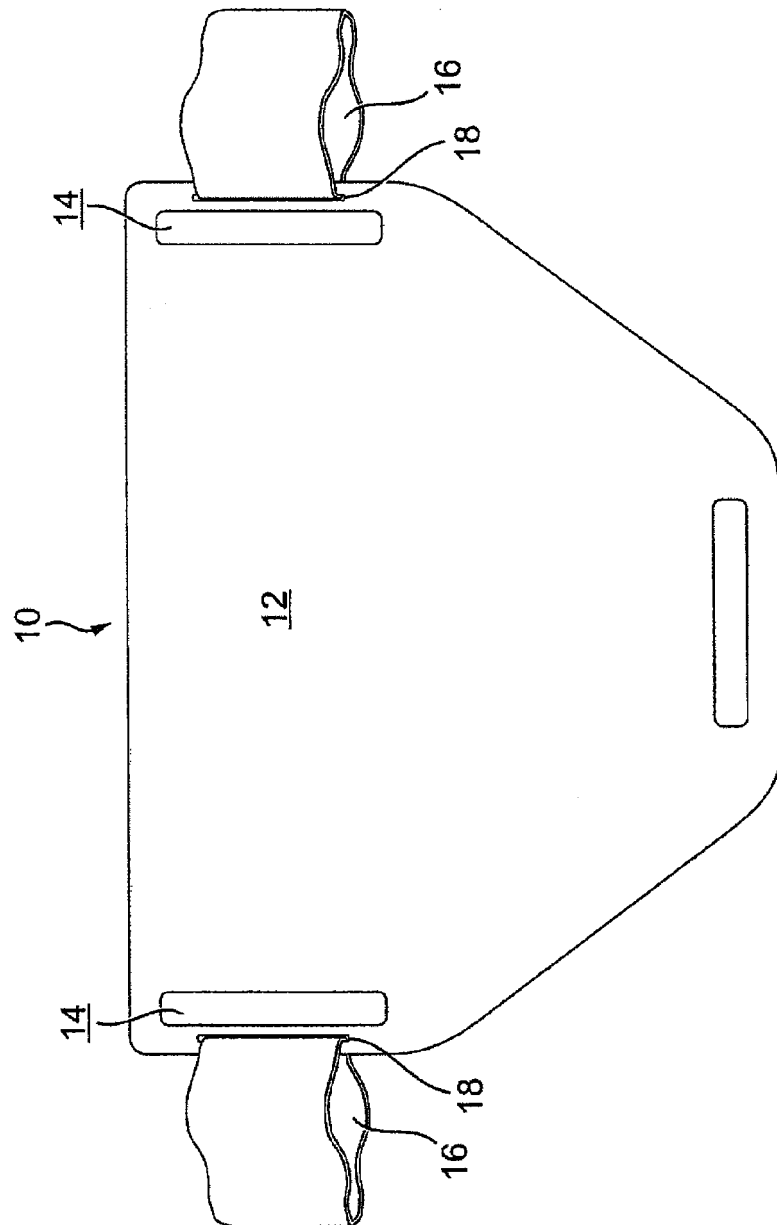


Fig. 3

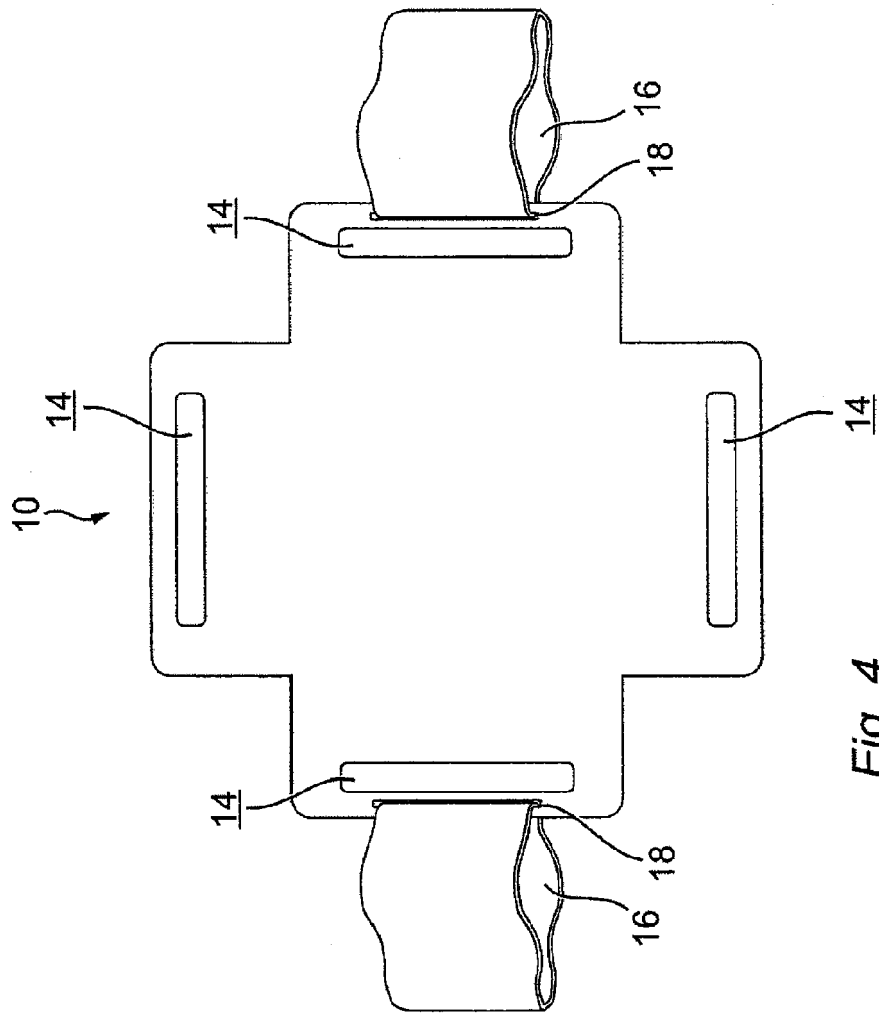


Fig. 4

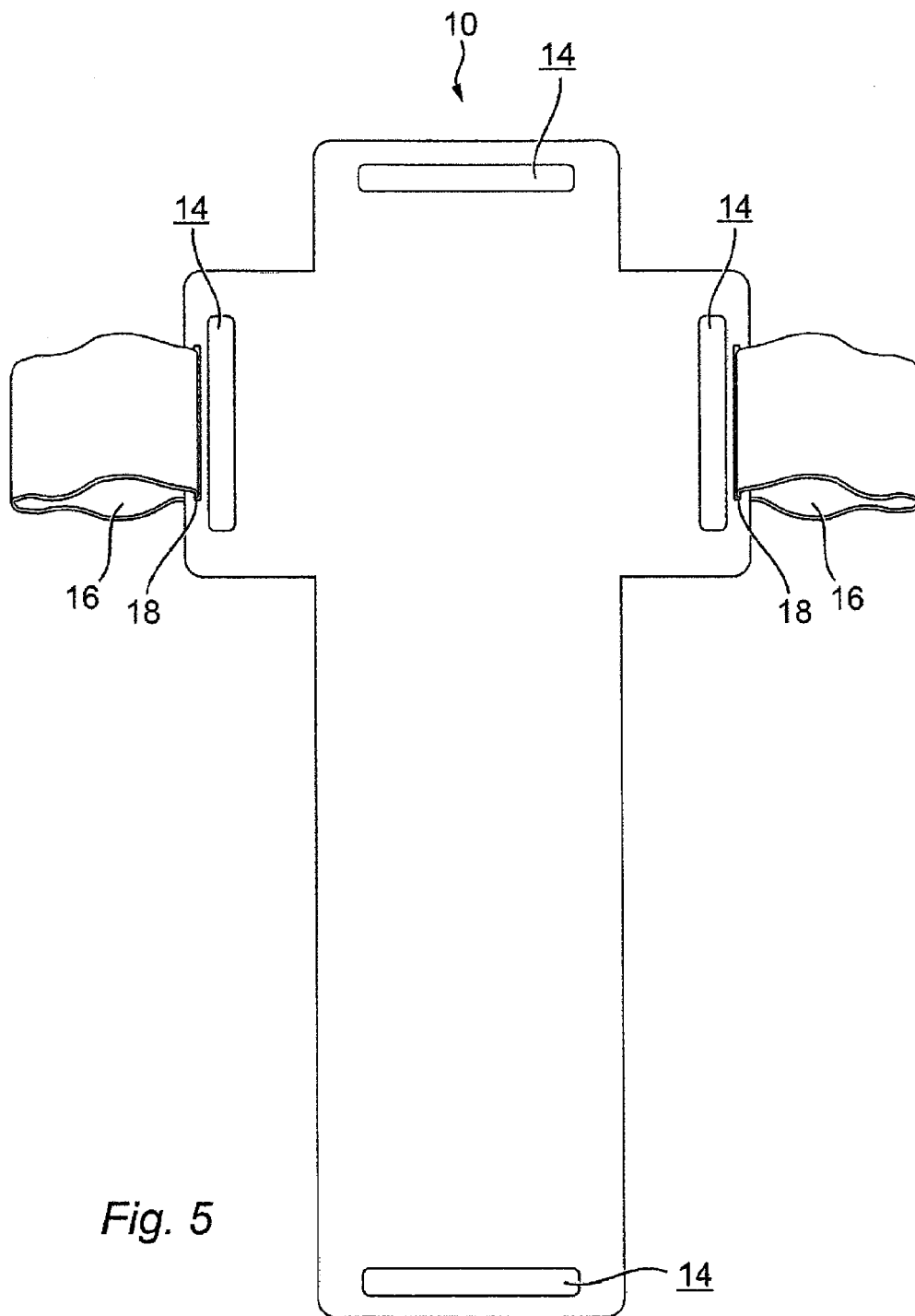


Fig. 5



EUROPEAN SEARCH REPORT

Application Number
EP 13 15 6062

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			A61G A62B
Place of search The Hague		Date of completion of the search 5 June 2013	Examiner Sommer, Jean
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EPO FORM 1503 03.92 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 13 15 6062

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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