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(54) **STRETCHER SUPPORT TO BE INSTALLED IN HEALTH COMPARTMENTS OF AMBULANCES**

(57) The invention provides a stretcher support in which at least one side has such geometry to allow the operator sitting in the ambulance to stay with his/her legs and feet in the most comfortable position while avoiding

bad posture and easier walking. For this reason, the upper surface (3) has greater width, i.e. greater extension, than the lower one (4), defining a recess extending over at least one of the sides.

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Description

[0001] The present invention relates to the field of equipment for rescue vehicles, such as ambulances, for the transportation of injured, ill or disabled people on stretchers, to receive said patients in a health compartment and carry them to a hospital.

[0002] As is known, ambulances are vehicles used for the transportation of patients lying on a stretcher, in turn positioned in the health compartment.

[0003] In particular, a dedicated accessory commonly known as stretcher support, resting on the deck of the vehicle compartment, is used to optimize the loading and unloading of the so-called stretchers (beds provided with retractable legs and swivel wheels).

[0004] Stretcher supports may be fixed, sliding, tilting, cushioned, and their use allows:

- Properly loading the stretcher,
- Taking care of the patient more easily and properly,
- Keeping the stretcher in position,
- Also positioning the patient prone and sloping and moving him/her laterally and vertically into the health compartment, always keeping him/her lying on the stretcher.

[0005] Lifting means are used to allow said positioning.

[0006] Moreover, lateral displacements are allowed by using dedicated guides to carry out displacements even in the presence of heavy weights.

[0007] In addition to that, stretcher supports are provided with compartments for one or more stretchers (spoon-like, spinal boards, etc...) which can be inserted from the foot side by lifting a special flap.

[0008] Fixing systems and/or straps are provided so as to retain the stretcher and/or the patient.

[0009] Normally, these stretcher supports are substantially parallelepiped in shape, i.e. with two sides greater than the head sides; in addition, they have substantially the same extension of their support surfaces for the stretcher (i.e. the upper deck).

[0010] The invention provides a stretcher support in which at least one side has such geometry to allow the operator sitting in the ambulance to be with his/her legs and feet in the most comfortable position while avoiding bad posture and easier walking.

[0011] Said geometry is shaped so as to free more space below the stretcher support surface; in other words, the upper surface has a greater extension than the lower one and such a greater extension is basically substantially arranged on a single side.

[0012] In this way, a recess is defined on at least one of the sides, a space that allows the positioning of the operator's feet which can thus be facing towards the median axis of the support, thus favoring the maneuverability thereof and posture.

[0013] The advantages are those of an effective arrangement of the stretcher in the ambulance during the

patient's management by the operator, who can thus stand sideways with greater comfort.

[0014] Said objects and advantages are all achieved by the stretcher support to be installed in health compartments of ambulances, object of the present invention, which is characterized by the appended claims.

[0015] This and other features will be more apparent from the following description of some of the configurations, illustrated purely by way of example in the accompanying drawings.

- Figure 1 and 2: show the stretcher support according to a top and bottom view, respectively,
- Figure 3, 4 and 5: show two more views of the support,
- Figure 6: shows a cross section of the support with the recess configuration of at least one side highlighted.

[0016] With particular reference to the figures, reference numeral 1 indicates as a whole a stretcher support to be installed in health compartments of ambulances.

[0017] The ambulance is not shown herein since it is prior art; only a portion is shown with reference numeral 2, identifying the rear deck, i.e. the back of the vehicle where the emergency service staff operates and where the stretcher is introduced.

[0018] Support 1 has a substantially parallelepiped geometry, i.e. with greater elongation on two parallel sides with respect to the other two.

[0019] In this way, support 1 has an upper surface 3 and a lower surface 3, substantially parallel.

[0020] Surface 3 is preferably adapted to support a stretcher of any kind or, by extension, to support a patient.

[0021] In operating configuration, the lower surface 4 faces towards deck 2.

[0022] Support 1 further has at least one compartment 7 therein, which can be opened and inspected as well as used, for inserting objects such as preferably a spinal stretcher or a spoon stretcher.

[0023] Reference numeral 8 identifies a tilting slide for facilitating the loading and unloading of the stretcher.

[0024] The invention is embodied by providing a support with geometry and shape of the cross section which allows the operator sitting in the ambulance, both laterally and at the head, to stay with his/her legs and feet in the most comfortable position while avoiding bad posture.

[0025] To this end, as said, support is defined by the upper 3 and lower 4 surface; surface 3 has a greater width than the lower 4 one and such larger extension is substantially arranged on a single side, the left side in the figure and identifiable with length L, indicated as the difference between surfaces 3 and 4.

[0026] In this way, with said configuration, a recess 5 is defined on at least one of the side surfaces, i.e. a space that allows the positioning of the operator's feet which can thus be facing towards the median axis of the support, thus favoring the maneuverability thereof and the

arrangement.

[0027] Advantageously, the recess may be defined by a side having curvature R so as to connect the two upper and lower surfaces of the support.

[0028] The portion with recess 5 may be on one of the long sides or on one of the short sides of the support. 5

[0029] According to a further variant, a long side and a short side may be provided with recess 5.

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Claims

1. Stretcher support (1) to be installed in health compartments of ambulances, of the type comprising an upper surface (3) and a lower base (4) which can be fixed to a deck (2) of the vehicle or ambulance compartment, **characterized in that** at least one side of the support has such a geometry as to allow the operator sitting in the ambulance to stay with his/her legs and feet in the most comfortable position while avoiding bad posture; the geometry is such as to leave a space below the upper stretcher support surface. 15 20

2. Support according to claim 1, **characterized in that** the upper surface (3) has greater width, i.e. greater extension than the lower one (4); in this way, a recess is defined on at least one of the sides, i.e. a space that allows the positioning of the operator's feet. 25 30

3. Stretcher support according to claim 1, **characterized in that** such a greater extension defines a recess (5); one side has curvature (R) so as to connect the two upper and lower surfaces of the support. 35

4. Stretcher support according to claim 1, **characterized in that** the recess (5) is on one of the long sides or on one of the short sides of the support.

5. Stretcher support according to claim 1, **characterized in that** the recess (5) is both on a long side and on a short side. 40 45

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FIG. 1

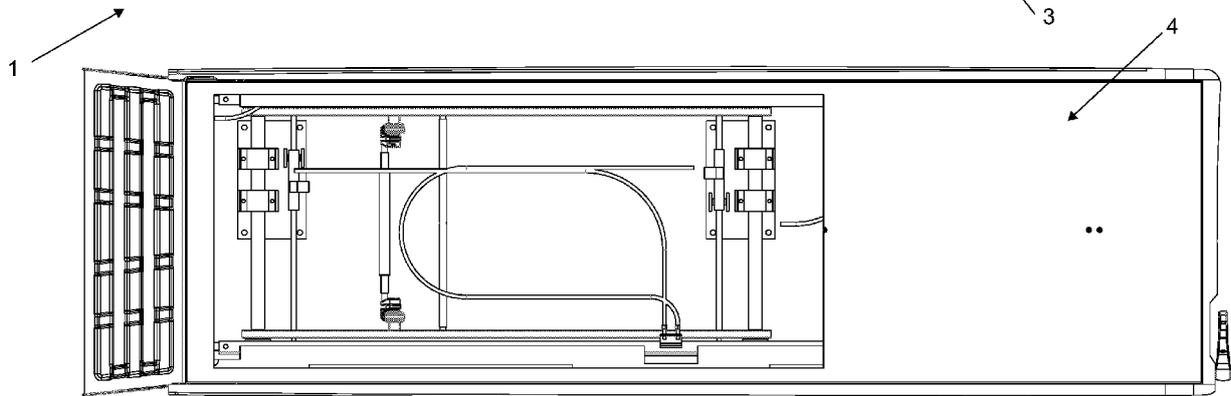
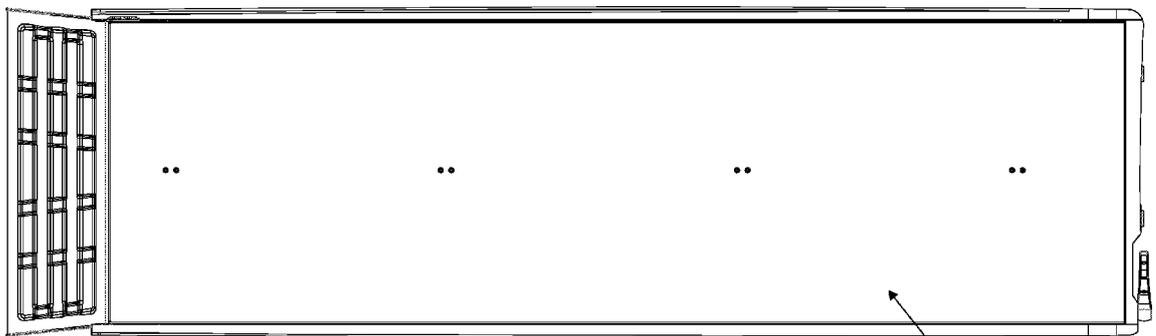


FIG. 2

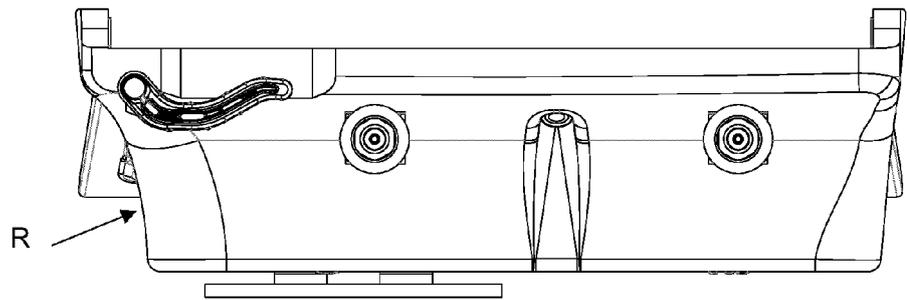


FIG. 3

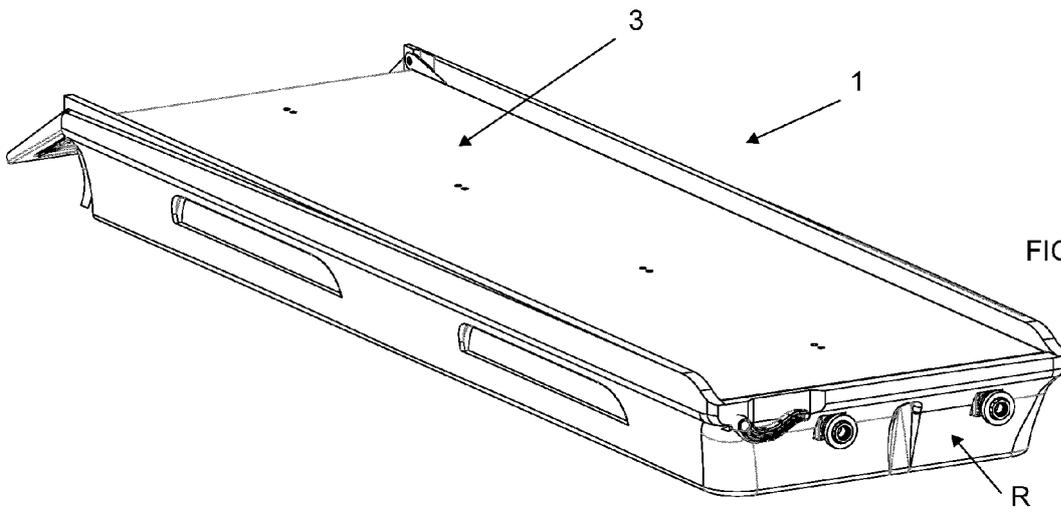
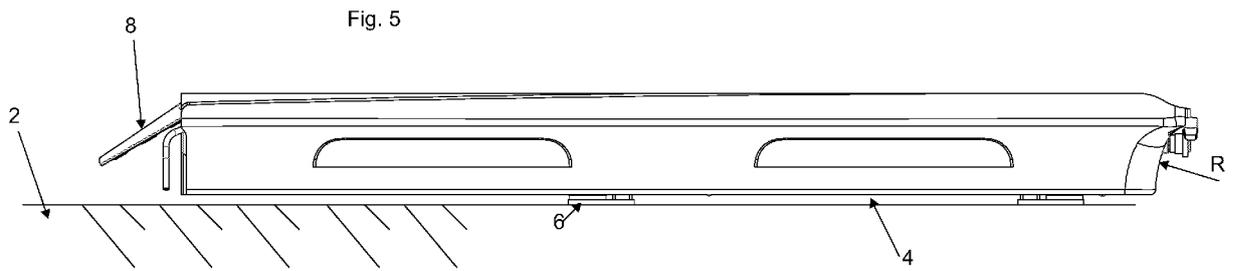
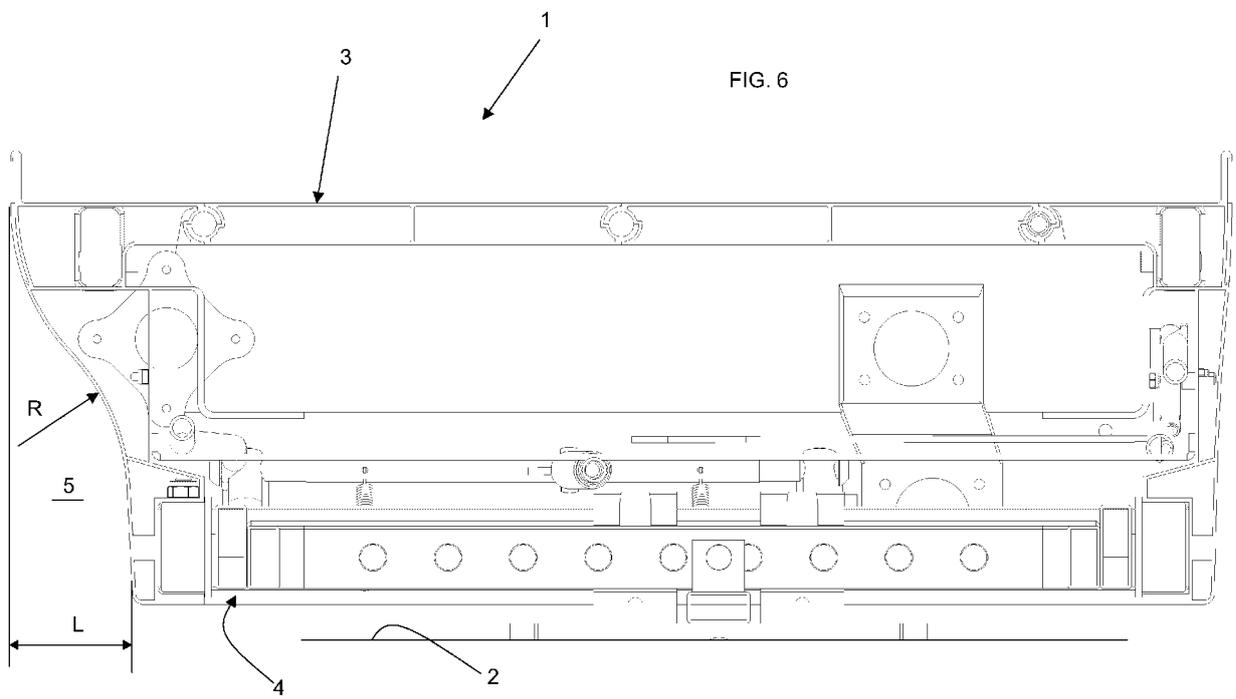


FIG. 4







EUROPEAN SEARCH REPORT

Application Number
EP 16 15 9050

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
			A61G
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 6 July 2016	Examiner Birlanga Pérez, J
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 03/02 (P04C01)

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

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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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-07-2016

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82