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(54) Carrying device, particularly for transporting sports equipment

(57) A carrying device (1), particularly for transporting sports equipment, that comprises at least one grip (2) from which at least one flexible element (3) extends. The flexible element (3) can be removably closed on itself so as to define a seat for accommodating at least one item of sports equipment (100).

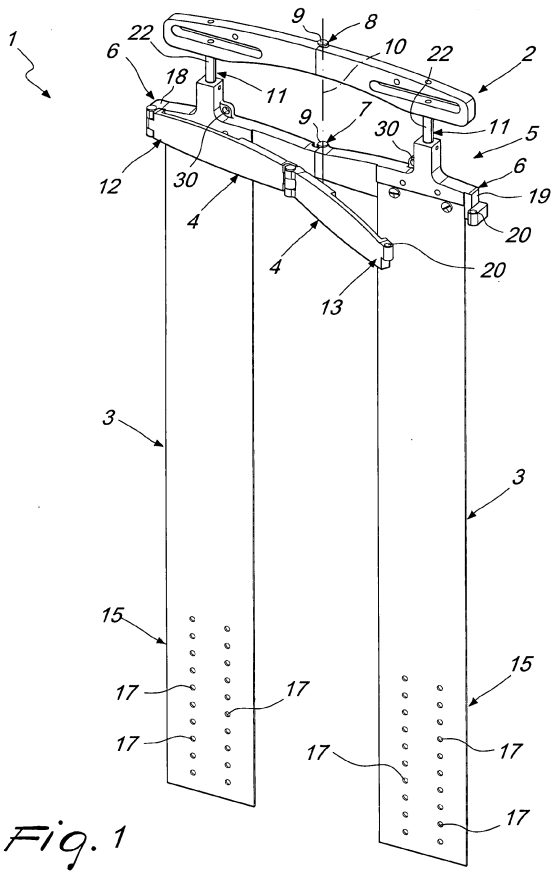

Fig. 1

EP 2 524 720 A1

Description

[0001] The present invention relates to a carrying device, particularly for transporting sports equipment.

[0002] Sporting activities that are practiced on the snow, mainly during winter, are getting increasingly widespread and the best-known of these is skiing.

[0003] This sport is divided into different disciplines, such as for example downhill skiing, cross-country skiing, ski mountaineering and many others.

[0004] Different shapes and sizes of skis are known for the different disciplines, but every ski is an item of sports equipment with an elongated shape that extends mainly along one dimension and has sharp edges.

[0005] The user, in order to be able to go skiing, has to go to a location that is suitable for this activity, and bring the skis with him or her.

[0006] These items of sports equipment do not have holds or grips that facilitate their transport and for this reason the user tends to transport them mainly in two ways: by gripping the skis by hand or by placing them on a shoulder.

[0007] The skis, held together, are gripped mainly in the center of the bindings for the ski boots, which are not installed at the center of gravity of the skis, but are located slightly toward the tails of the skis. Such grip, since it is not at the center of gravity of the ski, tends to make the tips of the skis slide downward, thus requiring the user to continuously check the balance of the skis so that they do not touch the ground.

[0008] Alternatively the skis, again held together, are placed on the user's shoulder and held with one hand gripping the tails of the skis. This mode of transport prevents checking the position of the tips of the skis placed on the user's shoulder, with the heightened risk of accidental contact with other people or with objects present nearby.

[0009] In both modes of transport it must be remembered that the contact between the hand and the sharp edge of the ski is extremely dangerous, indeed in the event of accidental or sudden movement the ski could slide quickly on the glove, thus partly cutting the glove and subsequently injuring the hand.

[0010] In addition to transporting his or her skis, the user uses his or her second free hand to transport the ski poles, thus using both hands for transporting the sports equipment.

[0011] These drawbacks of known type are overcome by devices currently available on the market which allow accommodation of the skis within them, thus offering the user a safe and secure grip. These devices comprise two rigid half shells that can be mutually connected in order to form cavities that accommodate the skis and the corresponding ski poles.

[0012] Such devices of known type are not free from drawbacks, including the fact that they are of considerable size, such as to prevent the user from bringing the device along during the sporting activity. For this reason, once the place where the sporting activity is to be engaged in is reached, the user must temporarily leave the device in a parking place, and hence is forced to return to that place at the end of the sporting activity for the subsequent retrieval of the device.

[0013] Furthermore, the devices could be stolen by malicious persons while the user is engaged in the sporting activity far from the parking place.

[0014] The aim of the present invention is to provide a carrying device, particularly for transporting sports equipment, that compensates for the drawbacks and overcomes the limitations of the known art, by making it possible to avoid having to temporarily leave the device in a parking place when it is not being used for transport.

[0015] Within this aim, an object of the present invention is to provide a device that makes it possible to transport different types of sports equipment.

[0016] Another object of the invention is to provide a carrying device that is easy to implement and economically competitive when compared to the known art.

[0017] This aim and these objects, as well as others which will become better apparent hereinafter, are achieved by a carrying device, particularly for transporting sports equipment, that comprises at least one grip, characterized in that it comprises at least one flexible element that extends from said grip, said flexible element being capable of being closed on itself in order to define a seat for accommodating at least one item of sports equipment.

[0018] Further characteristics and advantages of the invention will become better apparent from the description of two preferred, but not exclusive, embodiments of a carrying device according to the invention, illustrated by way of non-limiting example in the accompanying drawings wherein:

Figure 1 is a perspective view of a first embodiment of a carrying device in a position for use, according to the invention;
Figure 2 is an enlarged perspective view of the carrying device in Figure 1 in an inactive position;
Figure 3 is an enlarged view of a detail of Figure 1;
Figures 4, 5 and 6 are views of successive steps of using a first embodiment of a carrying device, according to the invention;
Figure 7 is a perspective view of a second embodiment of a carrying device, according to the invention;
Figure 8 is an enlarged perspective view of the carrying device in Figure 7 in an inactive position.

[0019] With reference to the figures, a carrying device, particularly for transporting sports equipment, generally designated with the reference numeral 1, comprises at least one grip 2 from which at least one flexible element 3 extends.

[0020] The flexible element 3 can be closed on itself so as to define a seat for accommodating at least one item of sports equipment 100. The flexible element 3 can

be closed on itself due to the presence of fastening means 4 that are associated with the carrying device 1 and that enable the temporary retention thereof.

[0021] More specifically, the carrying device 1 comprises a base body 5 that is substantially elongated in shape to which, on two opposite sides, the grip 2 and the flexible element 3 are connected. The base body 5 is provided with first closure means 7 and, thanks to its elongated shape, has two opposite ends 6 at the two extremities.

[0022] Conveniently, the first closure means 7 are arranged substantially in the center of the base body 5 and enable the carrying device 1 to pass from an inactive position in which the base body 5 is closed on itself with the opposite ends 6 drawn together, as shown in Figure 2 and Figure 8, to a position for use in which the base body 5 is extended with the two opposite ends 6 mutually spaced apart, as shown in Figure 1 and Figure 7.

[0023] Advantageously, the first closure means 7 comprise hinged means 9, which allow the rotation of a first portion of the base body 5 with respect to the successive portion of the base body 5 about a hinge axis 10, so as to allow the book-like closing of the carrying device 1.

[0024] Specifically, the rotation is limited to an angle that can vary substantially from 0° to 180°, since the two portions of the base body 5, which are mutually hinged, are provided with two shoulders 21 that interfere with each other at the instant when the two portions of the base body 5 form an extreme angle of 180°, thus preventing its further opening, as clearly shown in Figure 3.

[0025] In addition to the first closure means 7, the carrying device 1 comprises second closure means 8 that are arranged substantially at the center of the grip 2, which extends for the entire length of the base body 5. The first closure means 7 and the second closure means 8 comprise the same hinged means 9 described above , sharing the same hinge axis 10.

[0026] Advantageously, the grip 2 is connected to the base body 5 by means of extendable elements 11 which, in these specific embodiments, comprise a sliding stem 22 that is hidden inside corresponding seats defined in the base body 5. The sliding stems 22 can be associated with return springs, not shown in the accompanying figures, that enable the sliding stems 22 to slide into the corresponding seats when in the inactive position, as shown in Figure 2 and Figure 8, and to slide outward during use of the carrying device 1. The extendable elements 11 can be, in other embodiments, other mechanical elements with abutting or slot-in end of travel, such as for example telescopic stems, or elastic means, such as for example rubber drawstrings.

[0027] Conveniently, at the bottom of the sliding stems 22 at the base body 5, and more exactly toward the first closure means 7, first eyelets 30 are provided.

[0028] On the base body 5, at a position that is diametrically opposite from the grip 2, the flexible element 3 extends and is comprised of an elongated thin body, very like a strip, that has an initial portion that is firmly connected to the base body 5 by means of threaded elements, and an end portion 15 that is free.

[0029] Specifically, the end portion 15 has a plurality of slots 17 that can be inserted in corresponding pins 14 that are present on the fastening means 4. The pins 14, as well as fitting into the slots 17, are inserted in corresponding parking seats 16 that are present on the base body 5 when the fastening means 4 are closed on the base body 5.

[0030] In the first embodiment shown in Figures 1 to 6, the length of the fastening means 4 is substantially comparable to the length of the base body 5, having a first limb 12 that is hinged on a first end 18 of the opposite ends 6 and a second limb 13, opposite to the first limb 12, that can engage in a second end 19 of the two opposite ends 6. In particular the second end 19 of the opposite ends 6 and the second limb 13 have closing elements 20 that, in this first embodiment, comprise two second eyelets. Conveniently the two second eyelets, which are circular, are coaxial in the position for use of the carrying device 1, particularly when the fastening means 4 fit together for the entire length of the base body 5, as shown in Figure 6. Furthermore, in the center of the fastening means 4 hinged means that are similar to the hinged means 9 of the base body 5 are provided.

[0031] In a second embodiment shown in Figures 7 and 8, the fastening means 4 comprise a first arm 23 and a second arm 24 that are hinged respectively to the two opposite ends 6. Both the first arm 23 and the second arm 24 have, on the free end that is not hinged, closing elements 20 that, in the position for use, can be mutually removably engaged. Advantageously the closing elements 20 comprise two second eyelets, which are circular, as shown in Figure 7.

[0032] Operation of the carrying device 1, particularly for transporting sports equipment, is described below.

[0033] The base body 5 is opened out completely, that is by rotating the two mutually hinged portions of the body to an extreme angle of 180° where contact occurs between the two shoulders 21. Subsequently at least one item of sports equipment 100 is placed in the flexible element 3 which, closed on itself, provides a seat in the shape of a drop of water or the letter U. The end portion 15 of the flexible element 3 is then laid onto the fastening means 4 by inserting the pins 14 in the slots 17 and is subsequently clamped between the fastening elements 4 and the base body 5 for the transportation of the item of sports equipment 100. Once the item of sports equipment 100 is secured to the carrying device 1 by locking the closing elements 20 using the ring of an ordinary padlock 110, the device is lifted by the grip 2 which, advantageously, becomes spaced from the base body 5 so as to allow the easy passage of a hand wearing a snow glove, as shown schematically in Figure 6.

[0034] Once the transport step in which the carrying device is in the position for use is over, the flexible element 3 is unfastened from the fastening elements 4 in order to be able to use the item of sports equipment 100

transported.

[0035] By means of the hinged means 9 the portions of the base body 5 and the portions of the grip 2 are rotated so as to close the carrying device 1 on itself, making the opposite ends 6 fit together.

[0036] The carrying device 1 compacts better by means of the extendable elements 11 which automatically retract. In the inactive position, shown in Figure 2, the carrying device 1 is of minimal encumbrance and pocketable in size, so that it can be brought along during the performance of the sporting activity.

[0037] In the first embodiment, the fastening means 4 rotate about their hinge axis until the two second eyelets of the closing elements 20 are made to fit together, thus securing the flexible element 3 to the base body 5.

[0038] The closing elements 20 are mutually engaged by means of the ring of an ordinary padlock 110. The flexible element 3, retained in the carrying device 1 in the position for use, cannot be removed by malicious persons, because the hinged means 9 present in the center of the base body 5 and in the center of the fastening means 4 allow a rotation exclusively outward and not inward, due to the presence of the shoulders 21.

[0039] Once the padlock 110 is unlocked and the item of sports equipment 100 is removed, the carrying device 1 is re-closed on itself by making a portion of the base body 5 and a portion of the fastening means 4 rotate outward.

[0040] In the second embodiment, the first arm 23 and the second arm 24 rotate about their hinge axes located at the two opposite ends 6 until the two second eyelets of the closing elements 20 are made to fit together substantially in the center of the base body 5, thus securing the flexible element 3 to the base body 5. The closing elements 20 are mutually engaged by means of a ring of an ordinary padlock 110.

[0041] The flexible element 3, retained in the carrying device 1 in the position for use, cannot be removed by malicious persons, because the hinged means 9 present in the center of the base body 5 allow a rotation exclusively outward and not inward, due to the presence of the shoulders 21.

[0042] Once the padlock 110 is unlocked and the item of sports equipment 100 is removed, the carrying device 1 is re-closed on itself by making the first arm 23 and the second arm 24 adhere to the base body 5 and by rotating a portion of the base body 5 outward.

[0043] In both of the embodiments shown, the flexible element 3 has a plurality of slots 17 arranged according to different distances, so as to be able to increase or decrease the space offered for accommodating the item of sports equipment 100. This allows the accommodation of different types of sports equipment 100, with different shapes and sizes, thus enabling the transport for example of snowboards or other equipment used in other sporting activities.

[0044] Furthermore, the first eyelets 30, which are located at the bottom of the sliding elements 22, provide an accommodation seat for the padlock 110 that is normally used in the closing elements 20 in the position for use, so as to enable the padlock 110 to remain within the outline of the folded carrying device 1, thus considerably reducing the encumbrances, as shown in Figure 8.

[0045] In addition to this, the padlock 110 accommodated in the first eyelets 30 prevents the opening of the carrying device 1, thus securing it in the inactive position.

[0046] Furthermore, the padlock 110, or other locking means that are adapted to engage the closing elements 20, in addition to securing the item of sports equipment 100 to the carrying device 1, can advantageously secure the carrying device 1, and therefore the item of sports equipment 100, to fixed elements, such as for example metal chains or eyelets attached to steel cords fixed firmly to fences, walls or the like, so as to be able to secure the item of sports equipment 100 thus acting as an anti-theft device against malicious persons.

[0047] In practice it has been found that the carrying device, particularly for transporting sports equipment, according to the present invention, achieves the intended aim and objects in that it makes it possible to bring the device along even when it is not being used, thus avoiding leaving the device temporarily in a parking place.

[0048] Another advantage of the carrying device according to the invention consists in that it can transport different types of sports equipment.

[0049] A further advantage of the carrying device according to the invention consists in that it is easily transportable, thanks to its reduced dimensions in the inactive configuration, so much so that it can easily be placed in a pocket of a garment without presenting any impediment to movements made during the practice of the sporting activity.

[0050] Another advantage of the carrying device according to the invention consists in that it facilitates the loading and unloading of the item of sports equipment 100 that is temporarily accommodated on the means of transport. In particular, the carrying device 1, thanks to its reduced size, can be easily used for loading and unloading skis from ski racks installed on motor vehicles, offering a solid grip and preventing the skis from slipping on each other, falling on the ground, or damaging the motor vehicle.

[0051] The carrying device, particularly for transporting sports equipment, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

[0052] Moreover, all the details may be substituted by other, technically equivalent elements.

[0053] In practice the materials employed, provided they are compatible with the specific use, and the contingent dimensions and shapes, may be any according to requirements and to the state of the art.

Claims

1. A carrying device (1), particularly for transporting sports equipment, comprising at least one grip (2), **characterized in that** it comprises at least one flexible element (3) that extends from said grip, said flexible element (3) being capable of being closed on itself so as to define a seat for accommodating at least one item of sports equipment (100).

2. The carrying device (1) according to the preceding claim, **characterized in that** it comprises fastening means (4) for the temporary locking of said flexible element (3).

3. The carrying device (1) according to claims 1 or 2, **characterized in that** it comprises a base body (5) that is substantially elongated in shape to which said at least one grip (2) and said at least one flexible element (3) are connected and that has two opposite ends (6), said base body (5) comprising first closure means (7) to pass from an inactive position in which said base body (5) is closed on itself and said two opposite ends (6) are mutually drawn together, to a position for use in which said base body (5) is extended and said two opposite ends (6) are mutually spaced apart with respect to the inactive position.

4. The carrying device (1) according to one or more of the preceding claims, **characterized in that** said at least one grip (2) extends for the entire length of said base body (5) and has second closure means (8).

5. The carrying device (1) according to one or more of the preceding claims, **characterized in that** said first closure means (7) and said second closure means (8) comprise hinged means (9) that are coaxial with a hinge axis (10).

6. The carrying device (1) according to one or more of the preceding claims, **characterized in that** said at least one grip (2) is connected to said base body (5) by means of extendable elements (11).

7. The carrying device (1) according to one or more of the preceding claims, **characterized in that** said fastening means (4) have a plurality of pins (14) that can engage in respective parking seats (16) in said base body (5), said plurality of pins (14) passing through a plurality of slots (17) arranged along an end portion (15) of said flexible element (3).

8. The carrying device (1) according to one or more of the preceding claims, **characterized in that** said fastening means (4) of substantially comparable length to said base body (5) have a first limb (12) which is hinged to a first end (18) of said two opposite ends (6) and a second limb (13), opposite to said first limb (12), that can engage with a second end (19) of said two opposite ends (6).

9. The carrying device (1) according to the preceding claim, **characterized in that** said second limb (13) and said second end (19) of said two opposite ends (6) each have a closing element (20) that can be mutually removably engaged to retain said base body (5) in the position for use.

10. The carrying device (1) according to one or more of the preceding claims, **characterized in that** said fastening means (4) comprise a first arm (23) and a second arm (24) which are respectively hinged to said opposite ends (6).

11. The carrying device (1) according to claim 10, **characterized in that** free ends of said first arm (23) and said second arm (24) have closing elements (20) that can be mutually removably engaged to retain said base body (5) in the position for use.

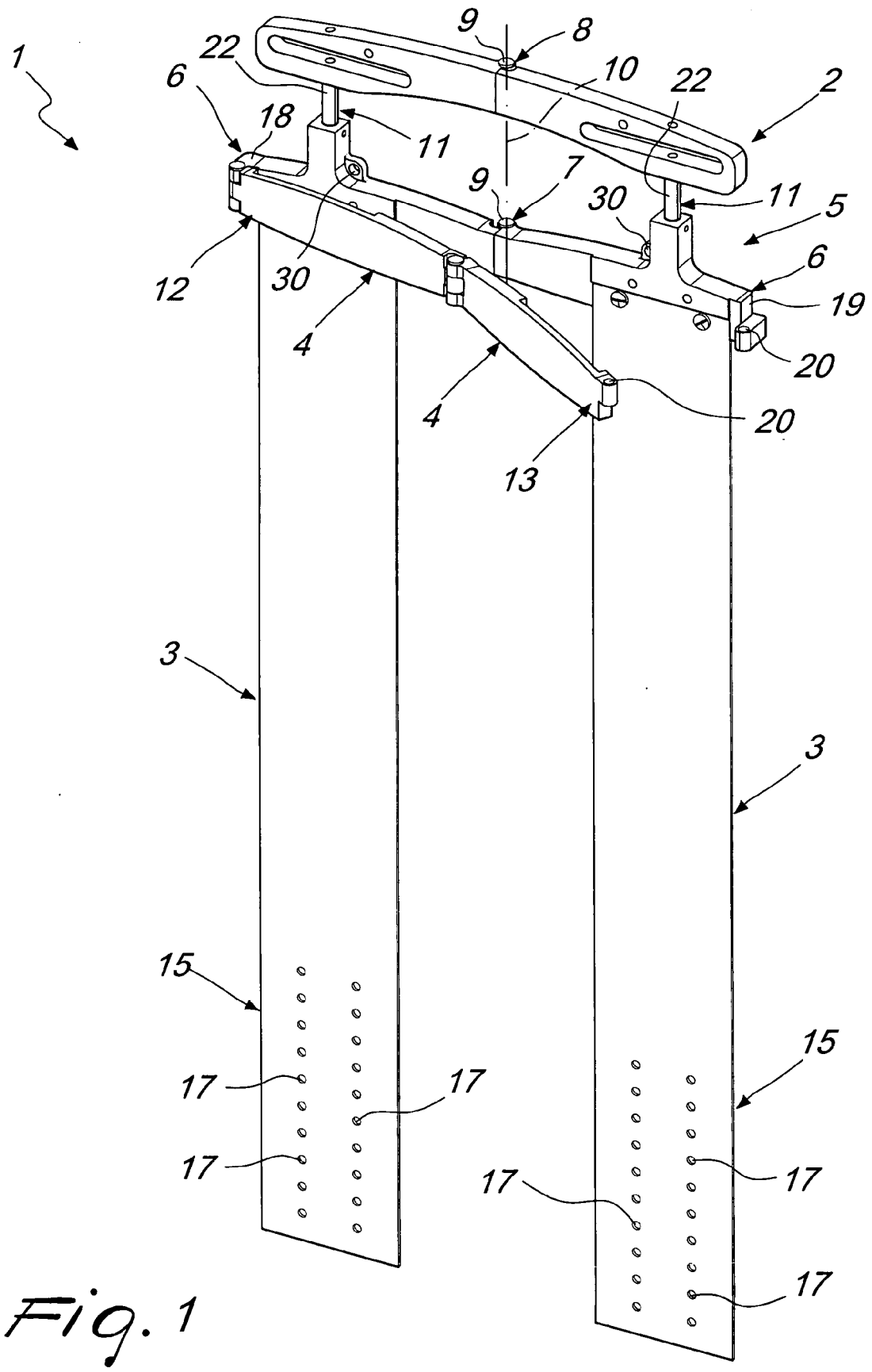

Fig. 1

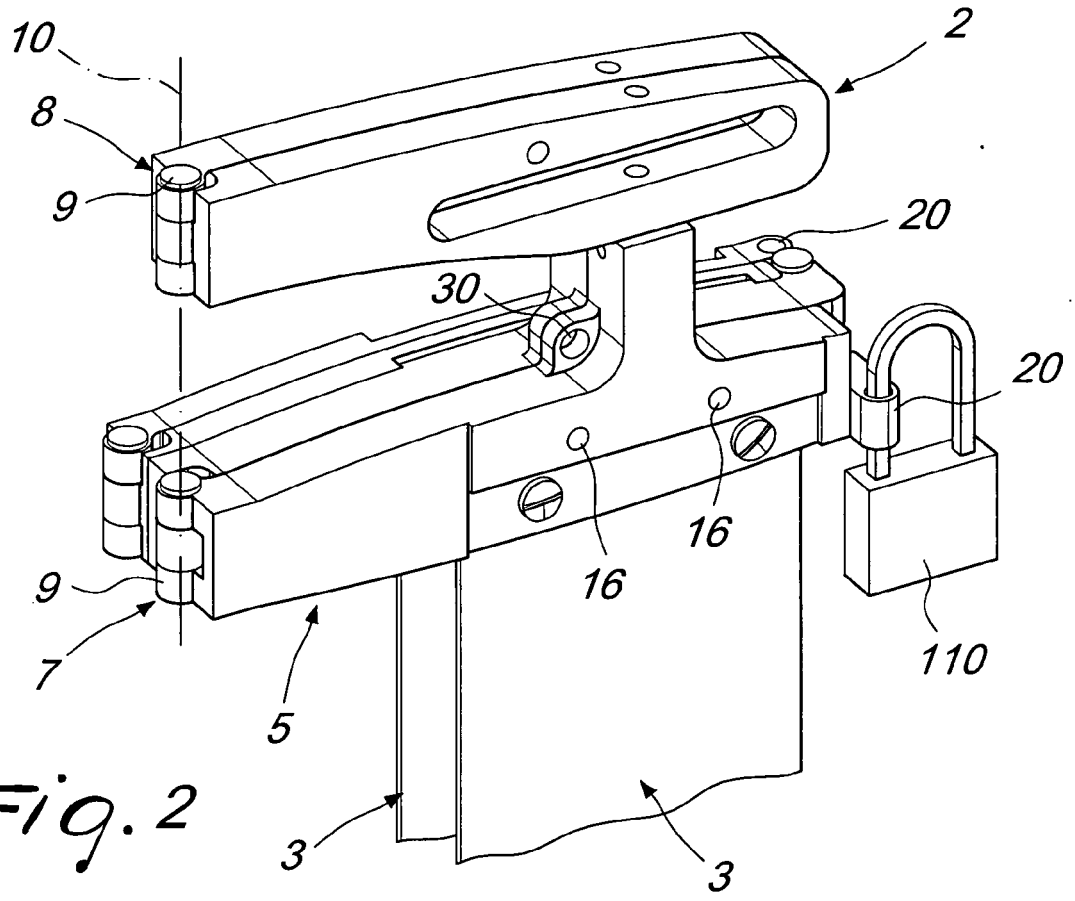

Fig. 2

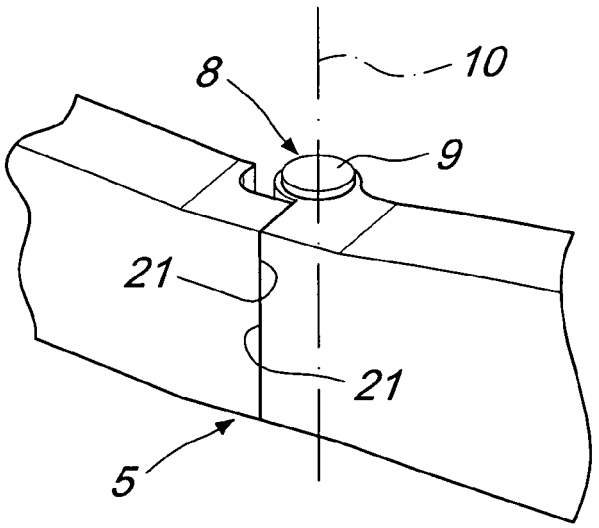

Fig. 3

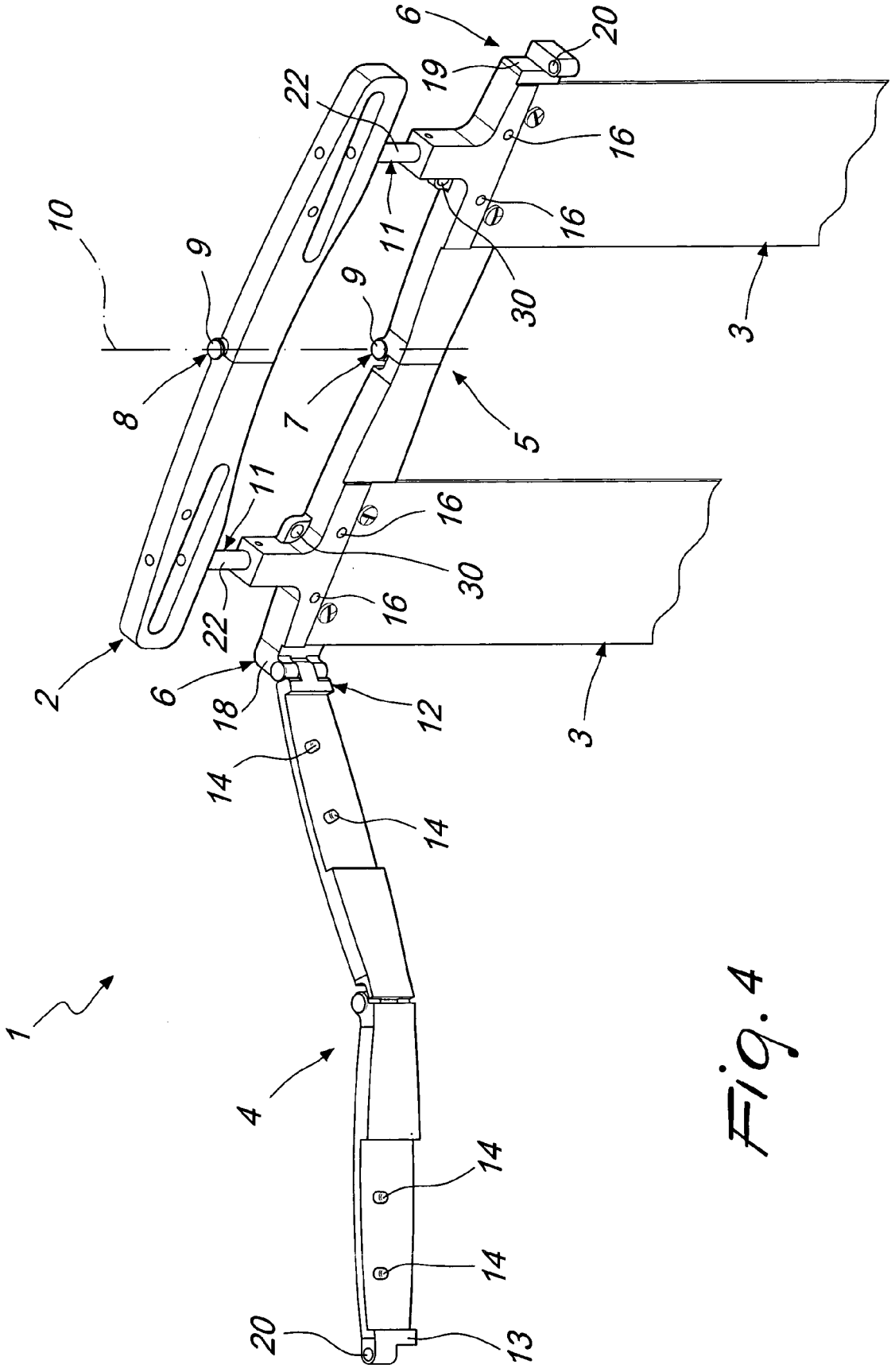
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Fig. 4

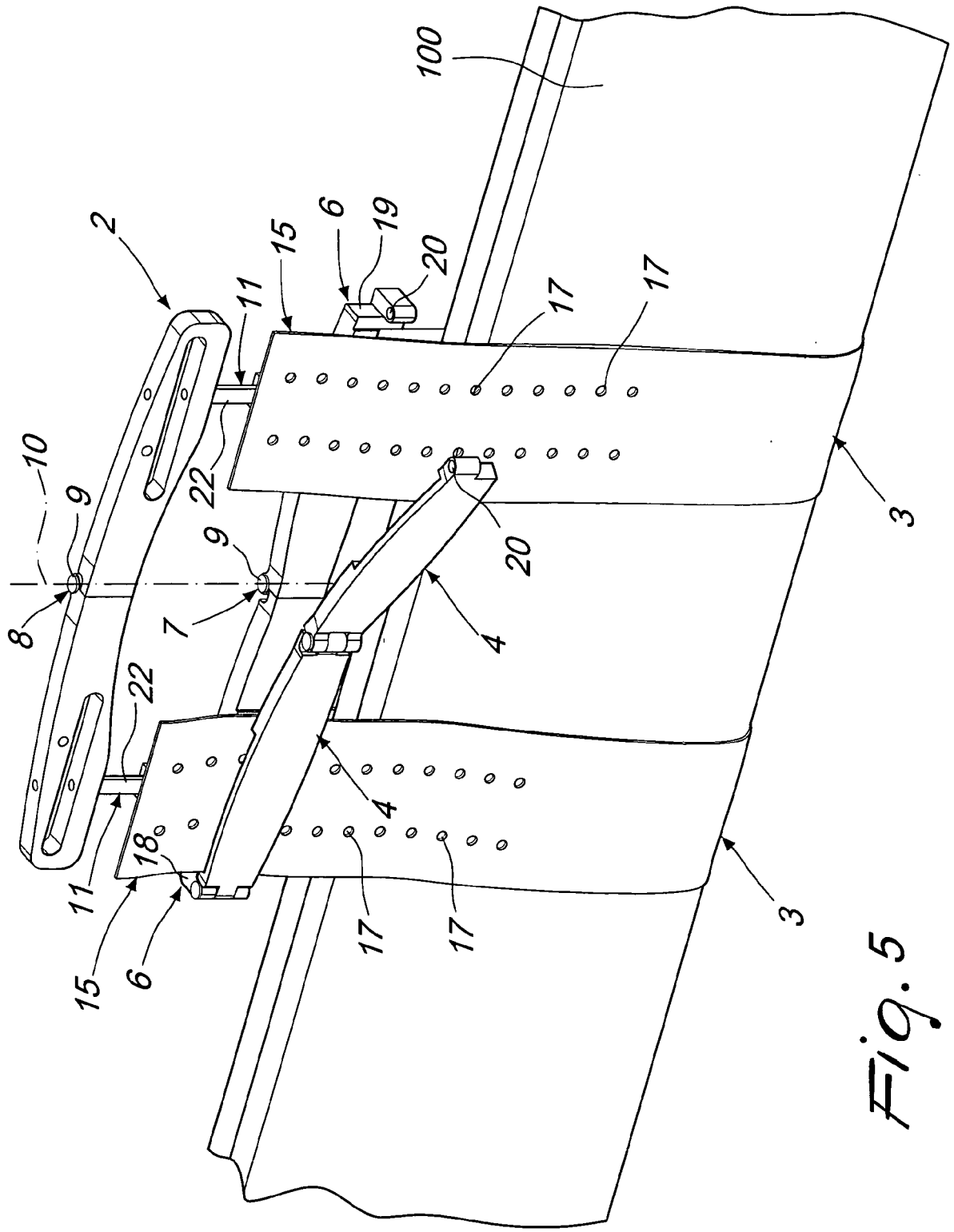

Fig. 5

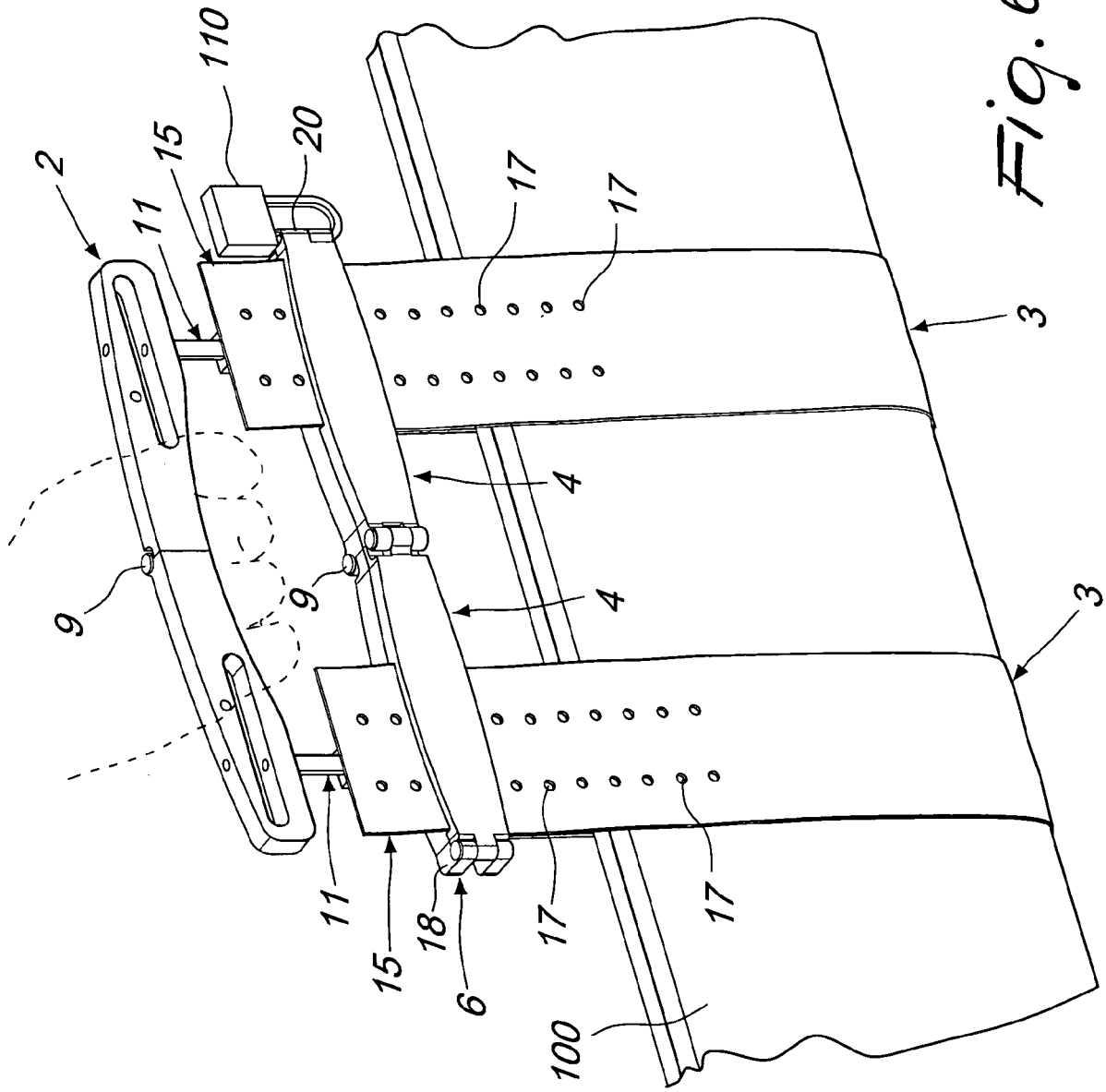

Fig. 6

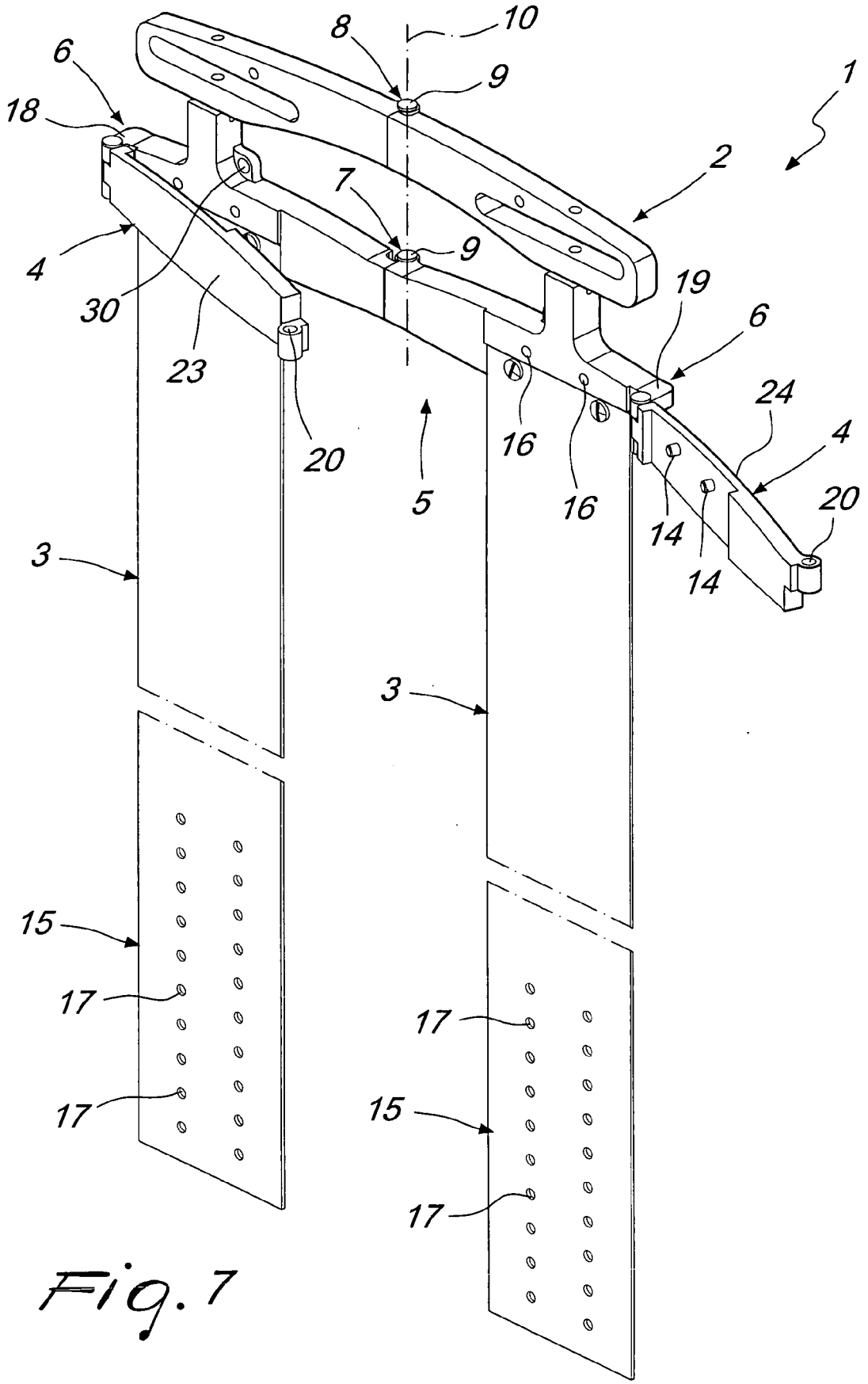

Fig. 7

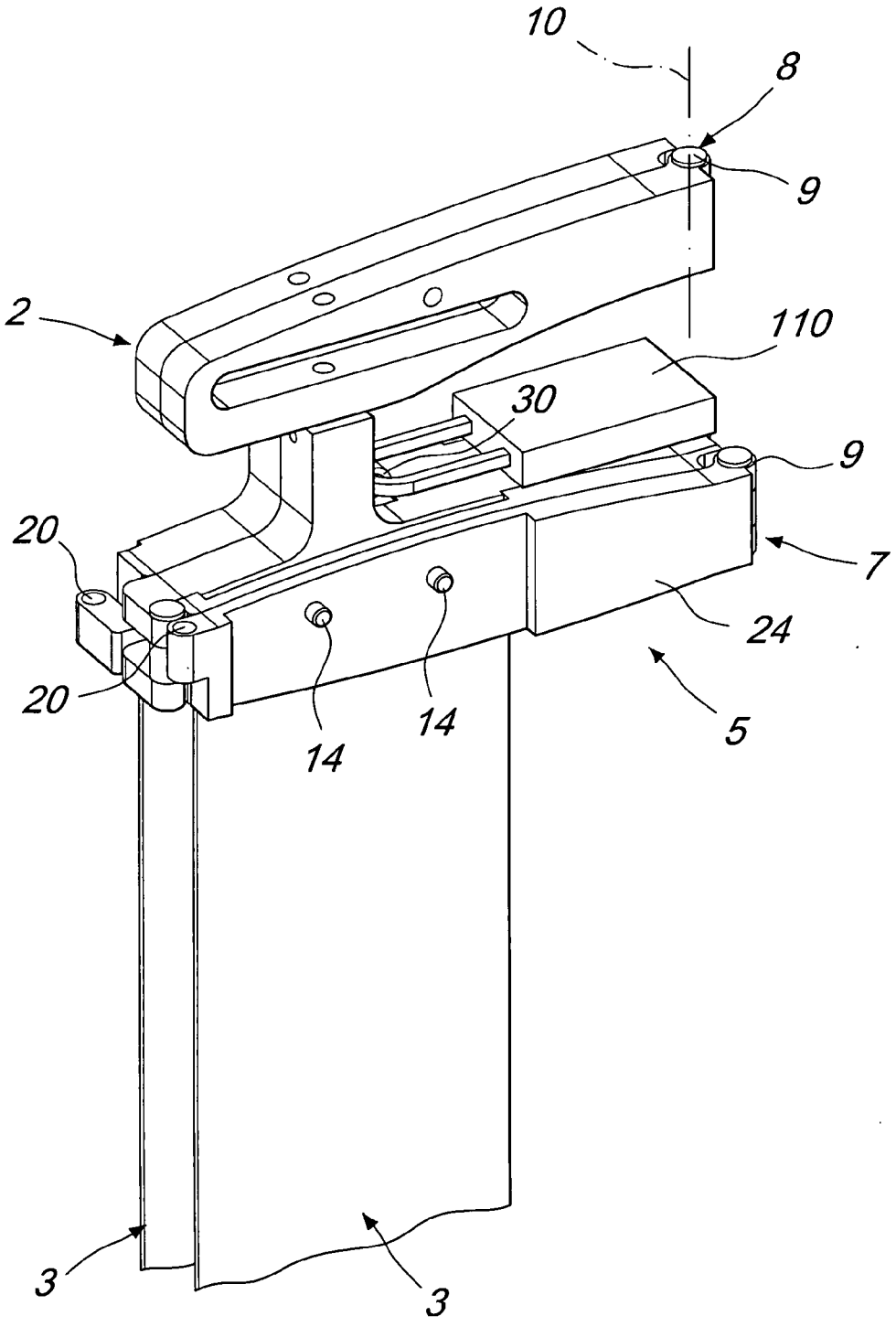

Fig. 8

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EUROPEAN SEARCH REPORT

Application Number
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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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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	9 November 2011	Haller, E

CATEGORY OF CITED DOCUMENTS

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