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(54) Trampoline

(57) The present invention relates to a trampoline device comprising a trampoline field with at least one panel that is connected to a frame of connected poles, wherein the poles are interconnected with connecting chains, wherein the panel is connected to the chains by way of resilient elements, and wherein the poles are further interconnected with connecting bars that are located below the chains.

The trampoline device of the invention shows excellent bouncing characteristics, does not require extensive maintenance and can be easily constructed. Further, the particular trampolines of the present invention allow for construction of a tumbling lane without compromising the integrity of the trampoline and providing safety measures in case the athlete lands on the side of the panel.

The invention further relates to a method of exercising and to a trampoline field pole

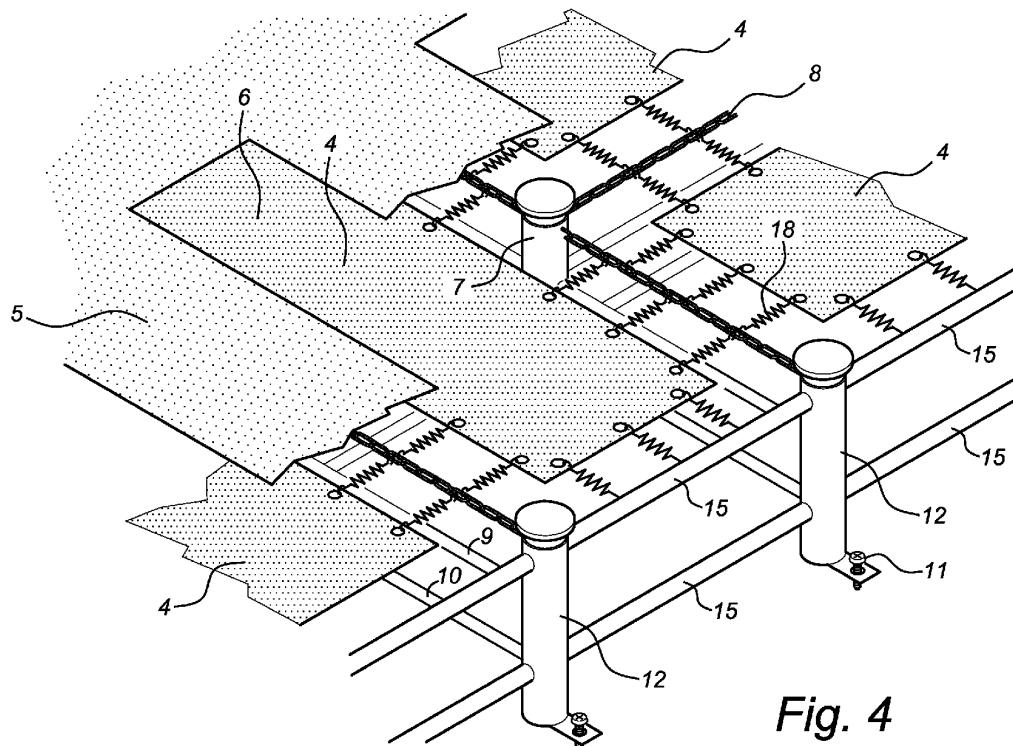


Fig. 4

Description**Field of invention**

[0001] The present invention relates to trampolines, a method of exercising and a trampoline pole.

Background to the invention

[0002] Trampolines have been described in the art and generally consist of a panel attached to a rigid frame using springs. US 5624122 (Winkelhorn) discloses a trampoline field with two sets of parallel cables that cross each other and run from one to the other side of the trampoline field. The cables are attached to poles on each of the corners of the trampoline field. Panels are constructed of heavy fabric sheets. The unstable trampoline requires padding around each panel to cover the cables and springs, confining the bouncing space.

[0003] US2005130772 (Levy) discloses hydraulic pistons to adjust the elasticity adjustment means. There remains a need in the art for improved trampolines.

Summary of the invention

[0004] Surprisingly, we have found a way to improve trampolines and overcome one or more of the above or other problems of the prior art.

[0005] Accordingly, the present invention relates to a trampoline device comprising a trampoline field with at least one panel that is connected to a frame of connected poles, wherein the poles are interconnected with connecting chains, wherein the panel is connected to the chains by way of resilient elements, and wherein the poles are further interconnected with connecting bars that are located below the chains. Preferably, the interconnected poles are connected with at least two interconnecting bars below the connecting chain.

[0006] Preferably, the trampoline device of the invention comprises a trampoline field with at least 4 panels.

[0007] Preferably, the frame comprises side and corner poles at the perimeter of the trampoline field, wherein the side and corner poles are interconnected with one or more field side connecting bars that are located in the plane of the panel and outside the perimeter of the panel and wherein the at least one panel is connect to the one or more field side connecting bars by way of resilient elements.

[0008] Preferably, the trampoline field is surrounded by an trampoline side that is at an angle to the trampoline field, the angled trampoline side comprising a frame and at least one panel that is continuous over at least a quarter of the perimeter of the trampoline field and that is only connected to the top and the bottom of the frame of the angled trampoline side by way of resilient elements.

[0009] Preferably, the trampoline field comprises at least 5 panels wherein the trampoline field comprises at least one tumbling lane that comprises a panel that ex-

tends from one side to the other side of the trampoline field.

[0010] Preferably, the resilient element is a spring.

[0011] Preferably, the padding covers the edge of the panel, the resilient elements, the chains and the connecting bars.

[0012] In another aspect, the invention relates to a method of exercising by bouncing on a trampoline device comprising a trampoline field with panels that are attached in a plane to a frame with poles and chains connecting the poles, wherein the panel is connected to the chain by way of resilient elements, and wherein the frame further comprises bars connecting the poles below the plane of the panels.

[0013] In a further aspect, the invention relates to a trampoline pole comprising:

- a pole top (19) with a button (20) and a switch (21);
- a moveable unit (23) connected to chain (8);
- a release block (22) for the moveable unit; and
- a suspending means (24) for suspending the moveable unit and pole top once released by the release block.

[0014] Preferably, the trampoline pole further comprises suspending means (25) for repositioning the switch. Preferably, the pole has a connection to at least one chain (8) and at least one bar (9, 10) and wherein the bars is horizontal and located below the chain.

[0015] Surprisingly, we have found that the trampoline of the invention shows excellent bouncing characteristics, does not require extensive maintenance and can be easily constructed. Further, the particular trampolines of the present invention allow for construction of a tumbling lane without compromising the integrity of the trampoline and providing safety measures in case the gymnast lands on the side of the panel. Furthermore, the particular trampoline pole provides lower impact for gymnasts when accidentally landing on a pole.

Brief description of the figures

[0016] Figure 1 is a schematic representation of a preferred embodiment of the trampoline field of the present invention. Figure 2 is a schematic representation of a preferred embodiment of the pole according to the present invention. Figure 3 is a schematic representation of a preferred trampoline field that may be used in the present invention. Figure 4 is a schematic representation of a preferred trampoline field that may be used in the present invention. Figure 5 is a schematic representation of a preferred pole that may be used in the present invention.

Detailed description of the invention

[0017] The trampoline device of the present invention comprises a trampoline field with at least one panel that

is attached to and stretched within the trampoline frame with resilient elements. The frame and the resilient elements allow the panels to sufficiently stretched so that the panel can be used for bouncing. Trampolines can be used for exercising, such as gymnastics, gaming and/or fitness.

[0018] The present invention is in particular directed to a trampoline device comprising a frame with poles that are connected with chains wherein the poles are further interconnected with connecting bars. Preferably, these bars are located below the chains.

[0019] While the chains may be used to attach and stretch the panel, we have surprisingly found that the additional use of the connecting bars of the invention leads to better controlled trampoline jumps, reduced noise and less wear. Placement of the bars under the chain and outside the perimeter has been found to be beneficial as to avoid hitting the connecting bars. Surprisingly, we have also found that the invention also allows for stable construction of a tumbling lane, a panel that stretches from one side to the other side of the trampoline field without interruption or intermediate support structures that would interfere with the bouncing of the gymnast. In addition, integrity of the trampoline device of the invention is maintained while the use of the chain provides for enhanced safety when the gymnast does not land on the panel.

[0020] The frame of the trampoline is rigid. Preferably, the frame is constructed of metal. Preferably, the frame comprises poles to provide a supporting structure for the trampoline with the panels. Preferably, the poles are rigidly interconnected with connecting bars. Preferably, the poles are interconnected with at least two connecting bars - an upper and a lower - to provide for further rigidity and thus forming a rigid rectangular open box frame with the poles extending upwards with the pole tops connected with a chain.

[0021] The poles of the frame are preferably vertical and placed in the line of the forces of gravity. Preferably, the poles are attached to the supporting floor with a bolt. Preferably, the frame comprises side poles and corner poles and internal field poles. Depending on the number of panels and the set-up of the trampoline field, internal field poles are present, for instance a trampoline field with four rectangular panels has one internal field poles, 4 side poles and 4 corner poles.

[0022] The bars of the frame of the invention are preferably rigidly connected to the poles of the frame, for instance fixed by welding or with bolts. Preferably, the bars are horizontal. Preferably, the bars are made of metal.

[0023] The internal field pole and the side poles (particularly on the side facing inwards of the frame) are preferably connected with a chain in the plane of the panel and outside the perimeter of the panel. Preferably, the chain is connected to the top of the pole. According to the invention, the poles are interconnected with connecting bars more preferably at least two connecting bars,

an upper and a lower bar. The connecting bars are preferably located below the chains and preferably outside the perimeter of the panel. Preferably, the lower connecting bar is located near the underlying surface, more preferably up to 20% of the distance of the pole from the ground. The upper connecting bar is preferably located between the chain and the lower connecting bar, more preferably between 30 to 70% of the distance between the two. The lower placement of the horizontal connecting bars below the chain provides a safer bouncing experience for the gymnast.

[0024] The side and corner poles of the frame are preferably connected with a bar along the perimeter of the frame at the plane of the panels. Preferably, the side and corner poles are connected along the perimeter of the frame with a field side connecting bar, more preferably two field side connecting bars, an upper and a lower bar. Preferably, the upper field side connecting bar is connected to the top of the poles. Preferably, the side and corner poles are connected with a field side connecting bar at the plane of the panel to allowing for attaching the resilient elements thereto. Preferably, the side and corner poles are connected with a second field side connecting bar below the plane of the panel. We have found that such a frame exterior provides excellent bouncing characteristics.

[0025] Preferably, the frame comprises internal field poles that are connected to at least three chains, more preferably 4 chains. Preferably, the internal field poles are connected to at least three connecting bars (preferably a set of 2 bars including an upper and a lower connecting bar), more preferably 4 connecting bars (preferably a set of 2 bars including an upper and a lower connecting bar). When next to a tumbling lane, the number of chains on the internal field poles is with one and the number of upper connecting bars on the internal field pole is also reduced with one. However, the lower connecting bar will still be present to provide rigidity to the tumbling lane construction. It will then be understood that, in case of two crossing tumbling lanes, the internal field poles on the corners will have two chains and two upper connecting bars but four lower connecting bars.

[0026] For the purpose of the invention, chain is defined as a flexible line selected from chains, cables, wires, ropes, and mixtures thereof. Preferably the invention relates to a chain. The chain preferably has ring that may have an external width of from 1 to 5 cm (for instance 2.5cm), an internal width of from 0.5 to 2 cm (for instance 1cm) and an external length of 1 to 7cm (for instance 5.5cm) and an internal length of 1 to 3 cm (for instance 2.5cm). Preferably, the chain provides a flexible tie with high tension strength.

[0027] The panel (or bounce mat) of the present invention is used by the gymnast for jumping and bouncing upon. The panel is preferably made of fabric. Preferably, the panel is preferably positioned in a flat plane in the frame. The panel may have any shape, but is preferably selected from round and rectangular panels, more pref-

erably rectangular panels. Preferably, the panels of the trampoline field are horizontal.

[0028] Preferably, the panels of the trampoline side are at an angle to the trampoline field. Preferably, the panel is attached with resilient elements to the frame and more preferably to the chains internally in the trampoline field and to the field side connecting bar on the outside of the trampoline field.

[0029] The trampoline field preferably comprises at least 1 panel, more preferably at least 2 panels, most preferably at least 4 panels, and in particular at least 5 panels. A preferred trampoline field comprises from 1 to 6 by 1 to 10 panels, optionally extended with a tumbling lane. As an example, for instance 33 panels, of which 32 panels are placed in 4 lines of 8 panels with 1 extended panel, a tumbling lane being placed in the middle.

[0030] In a preferred embodiment, the trampoline of the invention comprises a trampoline field with at least one tumbling lane. Preferably, the trampoline field with a tumbling lane comprises at least 5 panels wherein one panel extends from one side of the trampoline field to the other side of the trampoline field. This tumbling lane is one continuous panel that extends beyond the size of the other panels. Preferably, the panel of the tumbling lane is connected with resilient elements to the chains that interconnect the poles that are located on the side of the tumbling lane. Preferably, these poles are also interconnected with bars below the plane of the panel, more preferably with 2 bars that run horizontal and parallel to the panel. Preferably, the lower of the two bars also runs below the tumbling lane at a level that is sufficiently low that it cannot be touched when bouncing on the tumbling lane.

[0031] A tumbling lane preferably covers the space of at least two consecutive panels and preferably extends in a continuous stretch from one side of the trampoline to the other side of the trampoline. Preferably, the poles along the side of the tumbling lane are connected by chains and the poles on either side of the tumbling lane are connected through a bar below the plane of the panel. The tumbling lane can be used by gymnasts for instance for performing gymnastics exercises over a longer distance on the trampoline.

[0032] The resilient elements of the invention provide the resilience of the panel when bouncing. The resilient element of the invention is preferably selected from springs and strings, more preferably springs. The resilient elements connect the panels to the frame. Preferably, resilient elements connect the panels to the chains inside the trampoline field. Preferably, the resilient elements connect the panels to the field side connecting bars on the external side of the trampoline field. Preferably, the resilient elements are in a flat plane which is preferably horizontal.

[0033] Preferably, the trampoline of the invention comprises padding. The padding of the invention provides protection against impact with the less resilient parts of the trampoline and lessens the impact of gymnasts hitting

these parts. Preferably, the padding is provided to cover one or more of the following trampoline elements: the edge of the panel, the resilient elements, the chains, the bars and the poles. Preferably, the padding is made of resilient material, such as rubber or foam, optionally covered with a rubber or plastic material. Preferably, the padding is connected to the underlying material, such as the cable, for instance with valcro, tape or tie-wrap (also called zip tie or cable tie).

[0034] In a preferred aspect of the invention, the trampoline device comprises a trampoline side. The trampoline of the invention preferably comprises a trampoline field of one or more panels that are surrounded by a trampoline side. Preferably, the trampoline side is at an angle to the trampoline field, more preferably at an angle of from 30 to 80 degrees raising from the trampoline field. The trampoline side preferably comprises at least one frame, at least one panel and resilient elements for attaching the panel to the frame. Preferably, the panel and the frame are also at an angle of from 30 to 80 degrees.

[0035] Preferably, the frame of the trampoline side comprises vertical external poles that are placed outside the perimeter of the trampoline field and extend above the trampoline field. The external poles are preferably interconnected at the top with an angled side top bar.

[0036] Preferably, the external poles of the trampoline side are attached to the frame of the trampoline field, more preferably to the field side connecting bar between two side and/or corner poles and in the alternative to the side and/or corner poles. Preferably, the external poles are attached to the trampoline field with bars. Preferably, these bars are angled away from the panel covered, as compared to the vertical pole and the horizontal trampoline field. Preferably, the bars are attached to the poles by welding or with bolts.

[0037] Preferably, the panel of the trampoline side is continuous over the length of at least a quarter (1/4) of the perimeter of the trampoline field, more preferably at least half, most preferably at least three quarters (3/4), and in particularly preferred substantially the entire perimeter of the trampoline field in which case the ends of the panel can be made continuous, can be connected (for instance by way of valcro or a zipper) or can be left open serving as an entrance to the trampoline field.

[0038] Preferably, the top of the panel is attached to the frame of the trampoline side, more preferably to the trampoline side top bar, and the bottom of the panel is attached to the frame of the trampoline field, more preferably the upper field side connecting bar. Preferably, the panel of the trampoline side is connected only at the top and at the bottom of the panel to the frame of the trampoline by way of resilient elements.

[0039] The trampoline device of the invention preferably provides one or more panels that are attached to the frame of the trampoline field with resilient elements. Preferably, the frame comprises poles that are placed outside the perimeter of the panel, more preferably at the corners. Preferably, the poles are interconnected with a chains

that remains outside the perimeter of the panel and preferably is at the plane of the panel. According to the invention, the poles are preferably interconnected with connecting bars that are preferably located below the chain and preferably outside the perimeter of the panel when viewed from above. The panel is attached with resilient elements to the chain that connects two pools on the inside of the trampoline field. The panel is attached with resilient elements to the field size connecting bar on the outside of the trampoline field.

[0040] In another aspect, the invention relates to a method of exercising by bouncing on a trampoline device comprising a trampoline field with panels that are attached in a plane to a frame with poles and chains connecting the poles, wherein the panel is connected to the chain by way of resilient elements, and wherein the frame further comprises bars connecting the poles below the plane of the panels. Preferably, the panel is attached with resilient elements to the chains internally in the trampoline field and is attached to the field side connecting bar on the outside of the trampoline field.

[0041] In another aspect, the present invention relates to a trampoline pole comprising:

- a pole top (19) with a button (20) and a switch (21);
- a moveable unit (23) with connection to chain (8);
- a release block (22) for the moveable unit; and
- a suspending means (24) for suspending the moveable unit and pole top once released.

[0042] Preferably, the trampoline pole further comprises a suspending means (25) for repositioning the switch. Preferably, suspension means (24) is selected from a spring and a hydraulic suspension system. Preferably, suspension means (25) is selected from a spring and a hydraulic suspension system.

[0043] Preferably, the pole has a connection to at least one chain (8), more preferably at least 2, most preferably at least 3 and in particular 4. Preferably, the pole has a connection to at least one bar (9, 10), more preferably at least 2, most preferably at least 3 and in particular 4. Preferably, the connecting bars are horizontal and located below a chain, as pointed out above.

[0044] Surprisingly, the trampoline pole of this aspect of the invention will lower the impact a gymnast experiences when jumping on the pole by accident. A further benefit of the trampoline pole of this aspect of the invention is that the suspension mechanism will not be activated unless the gymnast hits the pole top directly. For instance, when hitting the chain, the pole will stay upright.

[0045] Preferably, the trampoline pole functions as follows: The pole comprises a pole top (19) with a button (20) and a switch (21), a moveable unit (23) with the connection to the chain (8), a release block (22) for the moveable unit, a suspension means (24) for suspending the moveable unit once released, and a suspension means (25) for suspending the switch. Upon pushing down button (20) of pole top (19), switch (21) is activated

and moves downwards pushing release blocks (22) sideways such that the other end of release blocks (22) moves upwards, allowing moveable unit (23) with pole top (19) to move downwards onto suspension means (24) which subsequently suspends moveable unit (23) and pole top (19). Upon removing the pressure from button (20) of pole top (19), suspension means (24) pushes up moveable unit (23) and pole top (19) and suspension means (25) pushes up bar (21), allowing release blocks (22) - by way of springs that are not shown or the forces of gravity - to take their original position and support moveable unit (23).

Detailed description of the figures

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[0046]

Figure 1 schematically shows a three dimensional illustration of a trampoline according to the invention. Trampoline 1 has a trampoline field 2 with angled side 3, panels 4, padding 5 and tumbling lane 6. Angled side trampoline 3 provides a resilient surface that extends over the entire perimeter (length, width, length and width) of trampoline 1 and is not interrupted by any padding 5, thus providing an extensive uninterrupted bouncing surface. Panel 4 provides a horizontal bouncing surface. Padding 5 provides protection for the athlete from hitting the pole, the chain, the springs and possibly any bars. Tumbling lane 6 provides a space that allows a person to perform exercises over the entire length (and/or width) of the trampoline field and that is not interrupted by padding 5 or crossing bars or chains.

Figure 2 schematically shows a three dimensional illustration of a pole according to the invention. Pole (7) is attached to the underlying surface with bolt (11). Four chains (8) are connected to the top of pole (7). Upper connecting bar (9) and lower connecting bar (10) are connected to the pole below the chain and connect pole (7) to another pole that is part of the trampoline field of the present invention.

Figure 3 schematically shows a three dimensional illustration of a part of the trampoline field (2) with part of the side trampoline (3). The side trampoline (3) is placed at an angle of around 60 degree compared to the horizontal plane of trampoline field.

Poles (7, 12, 14) are interconnected with chain (8), upper connecting bars (9), lower connecting bars (10), and upper and lower field size bars (15). Angled side poles (13) are connected with angled side connecting bars (16) to the trampoline field (2). Poles (7, 12, 14) and angled side poles (13) are connected to the underlying surface with bolts (11).

Panel (4) of the trampoline field is connected with resilient elements (18) to chain (8) and to the - upper - field side connecting bar (15). Panel (4) of the an-

gled trampoline side is connected with resilient elements (18) to angled side top bar (17) and to the - upper - field side connecting bar (15). Padding (5) covers the edges of panel (4), the resilient elements (18), chain (8), poles (7, 12, 14), angled size top bar (17), the field side connecting bar (15),

Figure 4 schematically shows a three dimensional illustration of a part of the trampoline field with a tumbling lane. Poles (7,12) are interconnected with chain (8), upper connecting bars (9), lower connecting bars (10), and upper and lower field size bars (15). Poles (7,12) are connected to the underlying surface with bolts (11).

Panel (4) of the trampoline field is connected with resilient elements (18) to chain (8) and to the - upper - field side connecting bar (15).

Middle panel (4) is tumbling lane (6) and extends beyond pole (7) in the middle of the figure to the other end of the trampoline field. Note that no chain (8) is crossing the tumbling lane (6). Also, no connecting bar (9) is placed underneath tumbling lane (6). However, connecting bar (10) is located under the tumbling lane and is placed close to the underlying surface.

Padding (5) covers the edges of panel (4), the resilient elements (18), chain (8), the - upper - field side connecting bars (15), and poles (7, 12).

Figure 5 schematically shows a three dimensional illustration of a trampoline pole (7) comprising a connection to at least one chain (8) and a connection to at least one bar (9, 10), wherein the pole comprises a pole top (19) with a button (20) and a switch (21), a moveable unit (23) with the connection to the chain (8), a release block (22) for the moveable unit, a spring (24) for suspending the moveable unit once released, and a spring (25) for suspending the switch. Upon pushing down button (20) of pole top (19), switch (21) is activated and moves downwards pushing release blocks (22) sideways and upwards, allowing moveable unit (23) with pole top (19) to move downwards onto spring (24) which suspends moveable unit (23) and pole top (19). Upon removing the pressure from button (20) of pole top (19), spring (24) pushes up moveable unit (23) and pole top (19) and spring (25) pushes up bar (21), allowing release blocks (22) - by way of springs that are not shown or the forces of gravity - to take their original position and support moveable unit (23).

Claims

1. Trampoline device comprising a trampoline field with at least one panel that is connected to a frame of connected poles, wherein the poles are interconnected with connecting chains, wherein the panel is

connected to the chains by way of resilient elements, and wherein the poles are further interconnected with connecting bars that are located below the chains.

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2. Device according to claim 1, wherein the interconnected poles are connected with at least two interconnecting bars below the connecting chain.

10 3. Device according to claims 1-2, wherein the trampoline device comprises a trampoline field with at least 4 panels.

4. Device according to claims 1-3, wherein the frame comprises side and corner poles at the perimeter of the trampoline field, wherein the side and corner poles are interconnected with one or more field side connecting bars that are located in the plane of the panel and outside the perimeter of the panel and wherein the at least one panel is connected to the one or more field side connecting bars by way of resilient elements.

20 5. Device according to claims 1-4, wherein the trampoline field is surrounded by an angled trampoline side that is at an angle to the trampoline field, the angled trampoline side comprising a frame and at least one panel that is continuous over at least a quarter of the perimeter of the trampoline field and that is only connected to the top and the bottom of the frame of the angled trampoline side by way of resilient elements.

25 6. Device according to claims 1-5, wherein the trampoline field comprises at least 5 panels wherein the trampoline field comprises at least one tumbling lane that comprises a panel that extends from one side to the other side of the trampoline field.

30 7. Device according to claims 1-6, wherein the resilient element is a spring.

35 8. Device according to claims 1-7, wherein padding covers the edge of the panel, the resilient elements, the chains and the connecting bars.

40 9. Method of exercising by bouncing on a trampoline device comprising a trampoline field with panels that are attached in a plane to a frame with poles and chains connecting the poles, wherein the panel is connected to the chain by way of resilient elements, and wherein the frame further comprises bars connecting the poles below the plane of the panels.

45 55 10. Trampoline pole comprising:

- a pole top (19) with a button (20) and a switch (21);

- a moveable unit (23) connected to chain (8);

- a release block (22) for the moveable unit; and
- a suspending means (24) for suspending the moveable unit and pole top once released by the release block.

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11. Trampoline pole according to claim 10, wherein the trampoline pole further comprises suspending means (25) for repositioning the switch.
12. Trampoline pole according to claims 10-12, wherein the pole has a connection to at least one chain (8) and at least one bar (9, 10) and wherein the bars is horizontal and located below the chain.

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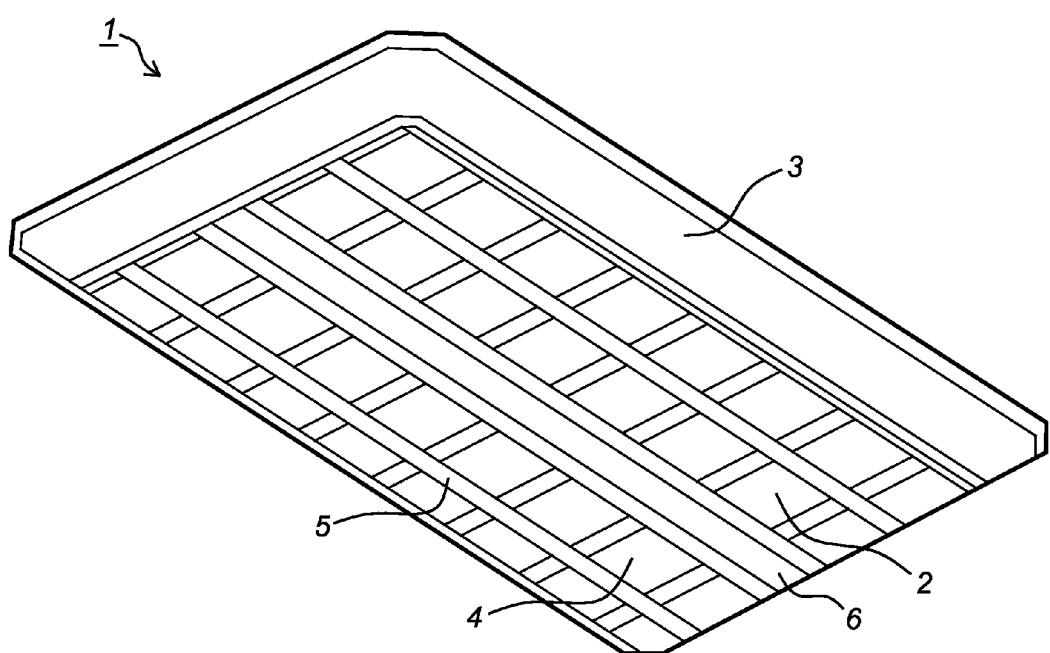


Fig. 1

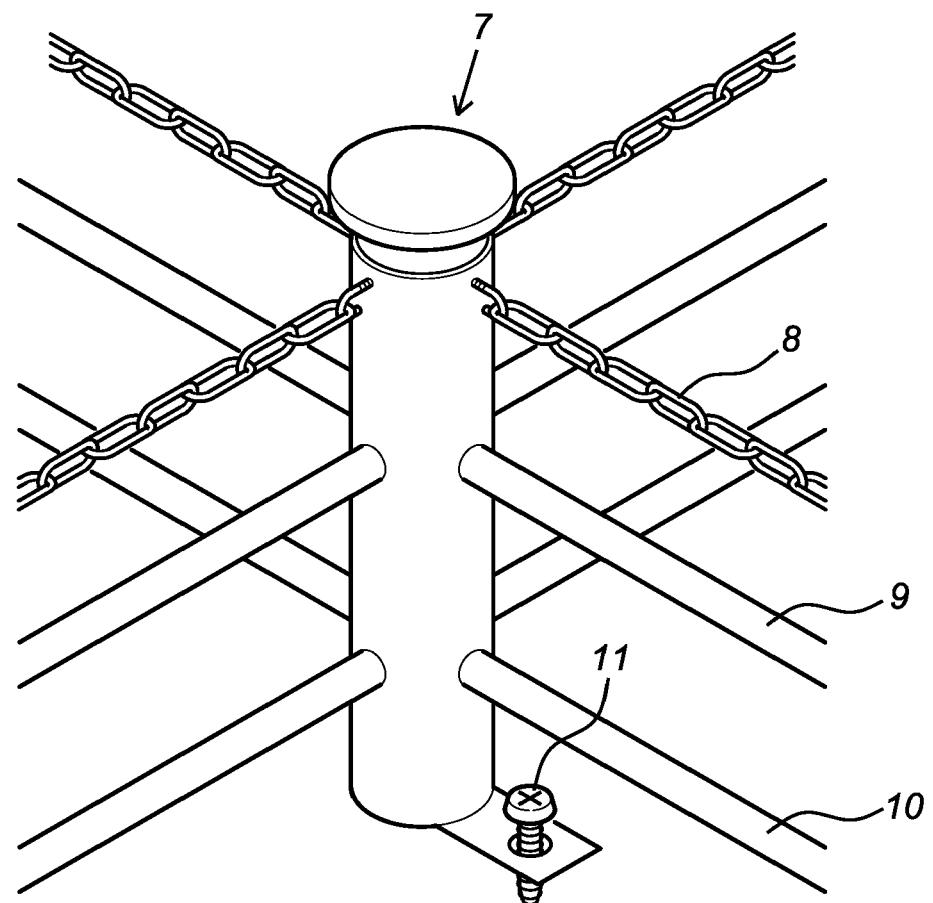


Fig. 2

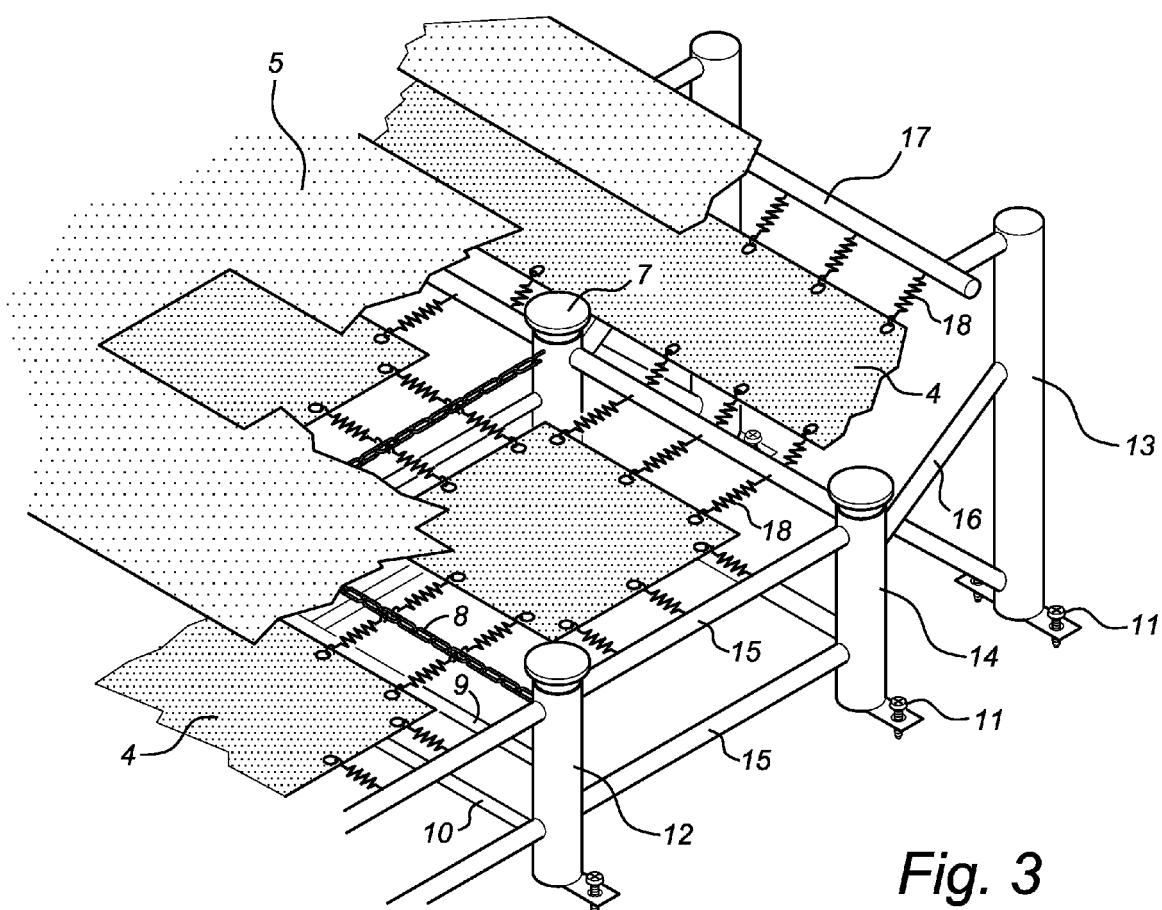


Fig. 3

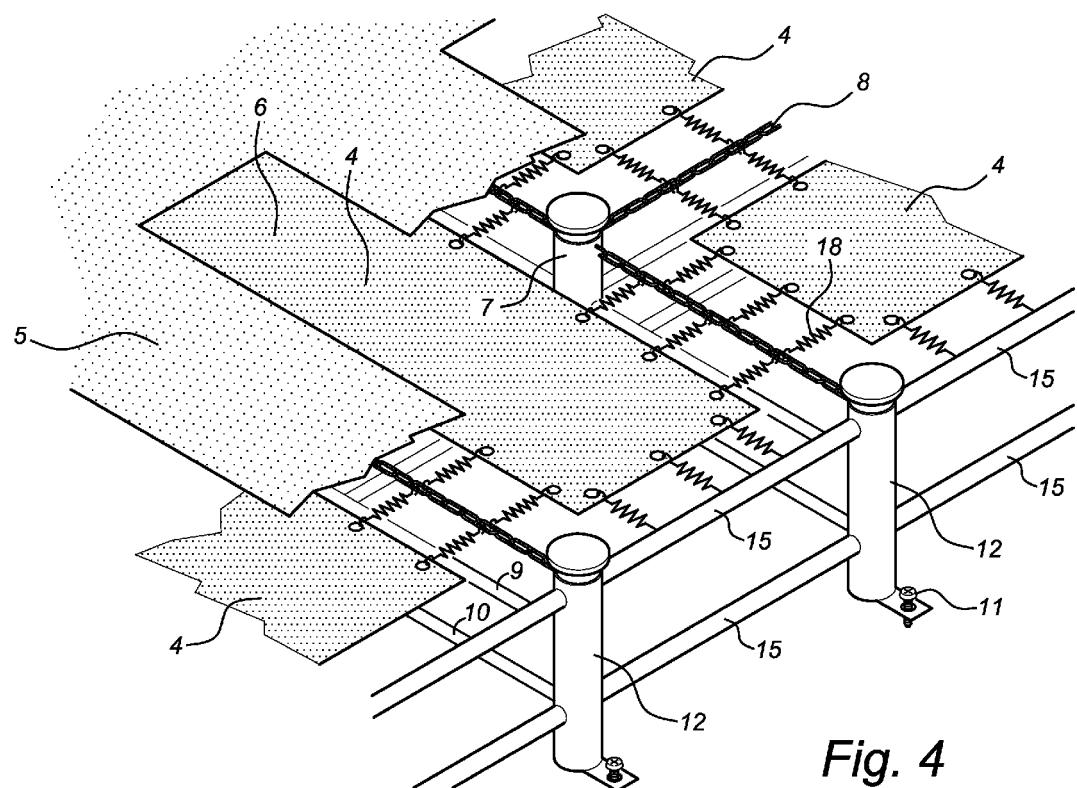


Fig. 4

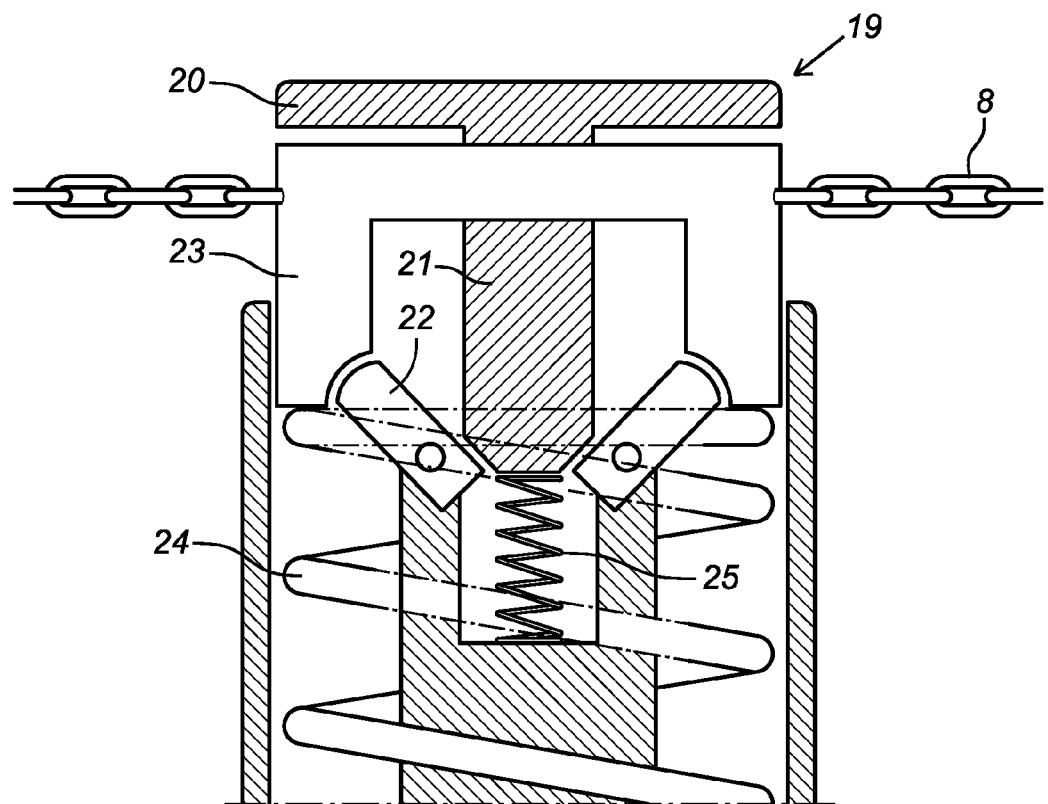


Fig. 5



EUROPEAN SEARCH REPORT

Application Number
EP 11 16 9904

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Y	GB 1 056 195 A (JOHANN BARTHEL) 25 January 1967 (1967-01-25) * the whole document * -----	1,3,7-9	INV. A63B5/11 A63B71/00
Y	DE 195 35 693 A1 (EUROTRAMP TRAMPOLINE KURT HACK [DE]) 27 March 1997 (1997-03-27) * the whole document * -----	1,7-9	ADD. A63B21/02 A63B71/02
Y	EP 1 038 556 A1 (EUROTRAMP TRAMPOLINE KURT HACK [DE]) 27 September 2000 (2000-09-27) * the whole document * -----	3	
A	FR 2 684 882 A1 (GYMNOVA [FR]) 18 June 1993 (1993-06-18) * the whole document * -----	1,9	
A	US 5 593 368 A (CHECKETTS STANLEY J [US]) 14 January 1997 (1997-01-14) * the whole document * -----	1	
X	FR 2 844 206 A1 (GYMNOVA [FR]) 12 March 2004 (2004-03-12) * the whole document * -----	10-12	TECHNICAL FIELDS SEARCHED (IPC)
X	FR 2 811 901 A1 (GYMNOVA [FR]) 25 January 2002 (2002-01-25) * page 3, line 8 - line 31; figures * -----	10-12	A63B
The present search report has been drawn up for all claims			
3	Place of search Munich	Date of completion of the search 4 May 2012	Examiner Squeri, Michele
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			



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 11 16 9904

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-9

Claims 1-9

The subject-matter of claim 1 differs from the known trampolin in that the moveable means are resilient means and below the chains interconnecting bars are provided, in order to increase the stability of the trampolin.

2. claims: 10-12

Claims 10-12

The subject-matter of claim 10 differs from the known trampolin in that the poles have some safety arrangement, in order to improve the safety of the trampoline. No interconnecting bars or resilient means are described in claim 10.

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

EP 11 16 9904

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.

04-05-2012

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