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(54) SCAFFOLD STRUCTURE

(57) Scaffold structure of the type with vertically extending scaffold poles (1), scaffold tubes (2) extending horizontally between opposite sides of the scaffold structure and planks (4) supported by the scaffold tubes and defining a working platform, wherein between the scaffold poles, scaffold tubes and working platform a working space is defined, and a conveyor assembly. The conveyor assembly at least comprises a conveyor rail (5) attached to a part of the scaffold structure and extending substantially horizontally within the working space and a conveyor cart (7) which is embodied to move along the conveyor rail, and which is positioned within the working space, for its major part below the conveyor rail and at a distance above the working platform.

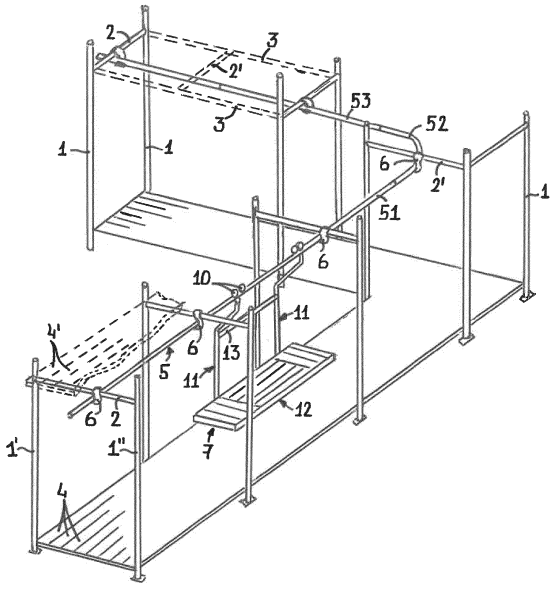


Fig.1

EP 4 368 793 A1

Description

[0001] In a first aspect the invention relates to a scaffold structure, at least comprising (i) vertically extending scaffold poles which are arranged in pairs, wherein scaffold poles of a same pair are arranged at opposite sides of the scaffold structure, (ii) scaffold tubes extending horizontally between the opposite sides of the scaffold structure and arranged in groups, wherein the scaffold tubes of different groups are positioned at different levels, (iii) planks supported by scaffold tubes of a same group defining a working platform, wherein between the scaffold poles, scaffold tubes and working platform a working space is defined, and (iv) a conveyor assembly.

[0002] A scaffold, also called scaffolding or staging, is a temporary structure used to support a work crew and materials to aid in the construction, maintenance, and repair of, among others, buildings. Another field of use of such a scaffold is at factories of the petrochemical industry. Scaffolds are widely used on site to get access to heights and areas that would be otherwise hard to reach.

[0003] Generally, a scaffold comprises the scaffold poles (also referred to as 'standards'), the scaffold tubes (also referred to as 'transoms') and the planks (also referred to as 'battens') which together define the working space, as well as a number of additional members, such as for example diagonal braces and connecting or coupling elements (for example for temporarily joining the scaffold poles and scaffold tubes).

[0004] The planks define a working platform for the work crew, and construction materials (for example bricks and mortar) to be used by the work crew often have to be provided at different locations on such a working platform. Most commonly, the construction materials are loaded onto the working platform using a crane or other type of elevator and then are moved to a desired location on the working platform, for example by using a wheel-barrow or by carrying the construction materials by hand.

[0005] It will be evident that moving the materials from one location to another on the working platform is time-consuming and physically demanding. Thus, it has been proposed to lay a track (for example a rail track) on the working platform on which a wheeled cart is movable for transporting materials between different locations. However, in many cases the working platform, as defined by the planks, does not have a perfectly even top surface (for example due to the use of irregular, damaged or older planks or due to overlaps between planks, especially at corner regions of a scaffold), and as a result such a (rail) track will not extend perfectly flat, making the movement of a cart along such a track difficult. Moreover, such a track defines an obstacle for the work crew with the risk of tripping, and it limits the available space for storing materials.

[0006] It is an object of the present invention to provide an improved scaffold.

[0007] Thus, in accordance with the present invention, a scaffold is provided which is characterized in that the conveyor assembly at least comprises (v) a conveyor rail attached to a part of the scaffold structure and extending substantially horizontally within the working space and (vi) a conveyor cart which is embodied to move along the conveyor rail and which is positioned within the working space, for its major part below the conveyor rail and at a distance above the working platform.

[0008] The conveyor assembly thus is capable of moving materials from one position to another within the working space while maintaining an unobstructed working platform. Any irregularities of the working platform will not have a negative influence on the capability of the conveyor cart to move between different positions.

[0009] In one embodiment the conveyor rail is attached to a part of the scaffold structure by being suspended directly from the scaffold tubes or by being suspended indirectly from the scaffold tubes through an elongate intermediate member, such as for example a reinforced beam.

[0010] Generally, when constructing a scaffold, the horizontally extending scaffold tubes all will be positioned in a common horizontal plane, such that the conveyor rail also automatically will extend level. Moreover, because the scaffold tubes extend in a transverse direction with respect to a longitudinal extension of the working platform (wherein such a longitudinal extension being along a facade of a building, for example), the position of the conveyor rail, and thus of the conveyor cart, within the working space (and, for example, the distance to a facade of a building) can easily be adjusted by amending the location where the conveyor rail is suspended from the scaffold tubes.

[0011] In most cases the conveyor rail is directly suspended from the scaffold tubes. However, in some cases the use of an elongate intermediate member (which, for example, will extend as a reinforced beam below the scaffold tubes and generally above and in parallel to the conveyor rail) is advantageous, as will be discussed in more detail when referring to the drawings.

[0012] In one embodiment the scaffold structure comprises suspension brackets with a first hooked end for engaging a scaffold tube or the elongate intermediate member, and a second opposite hooked end for engaging and supporting the conveyor rail. Using such brackets, the conveyor rail can be mounted in an easy and quick manner without the use of tools. It is conceivable that the hooked ends engage the scaffold tubes/elongate intermediate member and conveyor rail, respectively, with a loose fit or with a tight fit, or that locking (or snapping) members are used for securing the brackets to the scaffold tubes and/or conveyor rail.

[0013] In a preferred embodiment the hooked ends are embodied for releasably engaging the scaffold tube or elongate intermediate member and/or conveyor rail, respectively. This ensures that the conveyor rail (and thus the entire conveyor assembly) may be removed (for ex-

ample for subsequent use at a different location, such as at a different level of the scaffold or at a different scaffold).

[0014] In one embodiment of the invention the first hooked end and second hooked end can rotate with respect to each other around a substantially vertical axis, as considered in a position of use of a suspension bracket and/or the suspension brackets have a variable length such that the distance between the first hooked end and second hooked end can be changed.

[0015] In particular at parts of the conveyor rail where it extends along a curve, the angle between the conveyor rail and a scaffold tube can differ from the usual angle (which generally is 90 degrees), and to cope with such a different angle the two hooked ends should be rotated with respect to each other.

[0016] Variable length suspension brackets may be used to cope with different distances between the conveyor rail and the level where a suspension bracket engages a scaffold tube (or elongate intermediate member). Although, as mentioned above, the horizontally extending scaffold tubes generally all will be positioned in a common horizontal plane, this not always is the case and then a variable length of the suspension bracket may be advantageous.

[0017] In another embodiment the conveyor cart is provided with wheels running along the conveyor rail and the wheels and conveyor rail are profiled in a corresponding manner such as to avoid the wheels from running off the conveyor rail. For example, it is conceivable that the conveyor rail is embodied as a tube, preferably with a circular cross section. In such a case the wheels have a circumferential tread with similar shape (for example partly circular). It should be noted, however, that other cross sections of the tube are possible as well, such as square, polygonal, or other. It even can be considered to embody the conveyor rail as a toothed track, whereas the wheels are gears.

[0018] In one embodiment the conveyor rail comprises a number of separate conveyor rail sections which are releasably interconnected by connecting means, such as, but not limited to, cooperating threads, and a bayonet coupling. Such an embodiment of the conveyor rail is very versatile and allows to match the shape and dimension of the conveyor rail with the shape and dimension of the scaffold (and the working space thereof). Cooperating threads allow an easy connection between adjoining conveyor rail section by rotation around a longitudinal axis (which works very well with straight sections). When curved sections are involved, such a rotation may be difficult and other manners for interconnecting adjacent sections may be used which do not require such a rotation. Connection means for such purpose are well known in the art and are not further elucidated here.

[0019] In one embodiment the conveyor cart, as considered in its direction of movement along the conveyor rail, has two opposite frontal ends which each are provided with a vertical support having an upper end carrying at least one wheel and a lower end attached to a load support member. Such an embodiment with at least one wheel at each of the frontal ends of the conveyor cart ensures a stable position and movement of the conveyor cart (in addition to its stable position due to its location substantially below the conveyor rail).

[0020] In such an embodiment it further is possible that the vertical support at its upper end carries an assembly of at least two, and preferably exactly two, consecutive wheels, which assembly is rotatable relative to the vertical support around a substantially vertical axis, as considered in a position of use of the conveyor cart. Such an assembly assures that the wheels can closely follow the shape of the conveyor rail (especially at curves), whereas the use of at least two wheels at the upper end of each vertical support distributes the total load over such wheels, thus reducing wear of the wheels and of the conveyor rail.

[0021] In another embodiment the vertical dimension of the vertical supports can be changed, for example by providing a telescoping arrangement. For example, such a telescoping arrangement may comprise concentric tubes with different diameters. It allows to adjust the height of the load support member of the conveyor cart (for example to the most comfortable height for the work crew).

[0022] In yet another embodiment of the scaffold structure the dimensions of the load support member can be changed. As an example, the load support member may comprise at least two parts which engage each other in a telescoping manner. Thus, the loading capacity of the load support member may be adapted to changing circumstances. It is conceivable that such parts that engage each other in a telescoping manner, can be separated completely from each other.

[0023] Although in most cases the conveyor cart will be moved manually along the conveyor track, in one embodiment at least one of the wheels is a driven wheel, preferably a wheel driven by an electric motor.

[0024] The invention, in a second aspect, relates to a conveyor assembly for use in a scaffold structure according to the present invention, comprising at least a conveyor rail which is intended to be attached to the scaffold structure, and preferably to the scaffold tubes, and a conveyor cart which is embodied to move along the conveyor rail.

[0025] Hereinafter the invention will be elucidated while referring to the drawings, in which:

Figure 1, in a schematic manner, illustrates an embodiment of a scaffold structure according to the invention;

Figure 2, on a larger scale, shows an embodiment of a suspension bracket;

Figure 3 shows part of an alternative embodiment of a suspension bracket;

Figure 4 illustrates the cooperation between a conveyor rail and wheels of a conveyor cart in a first view;

Figure 5 illustrates the cooperation between a con-

veyor rail and wheels of a conveyor cart in a second view;

Figure 6, in a schematic manner and partially, illustrates an embodiment of a conveyor cart;

Figure 7, in a schematic frontal view, illustrates an alternative embodiment of a scaffold structure according to the invention, and

Figure 8, on a larger scale, shows an embodiment of a suspension bracket capable of being used in the scaffold structure of figure 7.

[0026] Referring firstly to figure 1, an embodiment of a scaffold structure according to the present invention is shown in aschematic manner and in perspective view. It is noted that fig-ure 1 only shows one story of a scaffold structure and that most times such a scaffold structure will comprise a number of stories one on top of the other.

[0027] As one of its main components said scaffold structure comprises vertically extending scaffold poles 1 which are arranged in pairs, wherein the scaffold poles 1 of a same pair are located at opposite sides of the scaffold structure (for example, in the left front part of figure 1 a left scaffold pole 1' and a right scaffold pole 1" together define such a pair).

[0028] Further, the scaffold structure is provided with scaffold tubes 2 which generally extend horizontally between the opposite sides of the scaffold structure, in the illustrated embodiment between scaffold poles 1 of a same pair. These scaffold tubes 2 are arranged in groups, wherein the scaffold tubes of a same group are positioned at a same level and scaffold tubes 2 of different groups are positioned at different levels (thus, as is known, defining a scaffold structure with a number of stacked levels or stories).

[0029] The scaffold tubes 2 likewise may extend at other positions, for example between reinforcing members 3, as illustrated in dotted lines by scaffold tube 2'.

[0030] The scaffold structure also is provided with planks 4 supported by scaffold tubes 2 of a same group (which in figure 1 will extend below the planks 4 in a manner similar to, but at a lower level than, the scaffold tubes 2 illustrated). Together these planks 4 define a working platform. It is noted that, although figure 1 shows a number of planks 4 alongside each other, it also is possible to use planks spanning the entire width of the scaffold structure.

[0031] In addition to the above-mentioned components, a scaffold structure generally will have additional components not shown here but known per se, such as, for example, additional reinforcing members (for example extending diagonally between adjacent scaffold poles 1, not illustrated) and connecting or coupling elements (for example for connecting the scaffold poles 1 and scaffold tubes 2, not illustrated).

[0032] Together, the scaffold poles 1, scaffold tubes 2 and working platform (planks 4) define a working space for a working crew, and in accordance with the present invention a conveyor assembly is provided within this working space.

[0033] The conveyor assembly mainly comprises a conveyor rail 5 which is attached to a part of the scaffold structure (specifically, in the illustrated embodiment, the conveyor rail 5 is suspended from the scaffold tubes 2 by means of suspension brackets 6, which will be discussed in more detail below) and which extends substantially horizontally within the working space. The conveyor rail 5 may comprise a number of separate conveyor rail sections (of which some have been indicated as 51,52 and 53) which are releasably interconnected by connecting means, such as, but not limited to, cooperating threads (for example indicated at 8 in figure 2 for connecting conveyor rail sections 54 and 55) or a bayonet coupling. The conveyor assembly further comprises a conveyor cart 7 which is embodied to move along the conveyor rail 5 and which is positioned within the working space, for its major part below the conveyor rail 5 and at a distance above the working platform (planks 4).

[0034] Figure 2 illustrates an embodiment of a suspension bracket 6 with a first hooked end 61 for engaging a scaffold tube 2, and a second opposite hooked end 62 for engaging and supporting the conveyor rail 5. It is conceivable that the hooked ends 61 and 62 are embodied for releasably engaging the scaffold tube 2 and/or conveyor rail 5, respectively. However, when required, members may be provided for (temporarily) securing the hooked ends to the scaffold tube and/or conveyor rail.

[0035] In figure 3 part of an alternative embodiment of a suspension bracket 6 is illustrated, in which the first hooked part 61 and second hooked part 62 can rotate with respect to each other around a substantially vertical axis 9 (as considered in a position of use of the suspension bracket 6). Whereas normally the conveyor rail 5 and scaffold tubes 2 intersect at right angles, thus allowing the use of a suspension bracket as illustrated in figure 2, there can be places where such angle of intersection is not a right angle (for example, see figure 1, where the conveyor rail section 52 intersects scaffold tube 2') and this requires the use of an amended suspension bracket 6, e.g. according to figure 3, of which the relative orientation between the hooked ends can be changed to match the respective angle of intersection.

[0036] Referring to figures 1, 4 and 5, the conveyor cart 7 is provided with wheels 10 running along the conveyor rail 5. As shown best in figure 5 (which shows a view in the lengthwise direction of the conveyor rail 5), the wheels 10 and conveyor rail 5 are profiled in a corresponding manner such as to avoid the wheels from running off the conveyor rail. In the illustrated embodiment the conveyor rail 5 is embodied as a tube with a circular cross section.

[0037] Again referring to figure 1, the conveyor cart 7, as considered in its direction of movement along the conveyor rail 5, has two opposite frontal ends in the vicinity of which vertical supports 11 are provided having each an upper end carrying the wheels 10 and a lower end attached to a load support member 12. For reinforcing

purposes, a brace 13 may be provided extending between the supports 11.

[0038] In one embodiment illustrated (figure 4) each vertical support 11 at its upper end carries an assembly of two consecutive wheels 10 in a tandem configuration mounted in a wheel bracket 14 which is rotatable relative to the vertical support 11 around a substantially vertical axis 15, as considered in a position of use of the conveyor cart 7.

[0039] In one embodiment of the conveyor cart 7 the vertical dimensions of the vertical supports 11 can be changed (for raising or lowering the load support member 12), for example by providing a telescoping arrangement of support tubes 111 and 112 as illustrated in figure 6 which can be set using, for example, a securing member 16 and coinciding holes 17 in the support tubes.

[0040] The dimensions of the load support member 12 also could be changed, for example because it comprises a main member 121 and at least one auxiliary member 122 that in a telescoping member engages the main member 121.

[0041] Generally, the conveyor cart 7 will be moved along the conveyor rail 5 by hand, but when needed a drive may be provided (for example an electric motor indicated schematically at 18 in figure 4 for driving at least one wheel 10).

[0042] Figure 7 shows a scaffold structure which is used at a building that is provided with a balcony 24 (or other protruding structure). Evidently, at the location of the balcony the use of the scaffold tubes 2 is not possible (such tubes which cannot be provided are indicated schematically in broken lines at 21).

[0043] This means that the conveyor rail 5 only would be supported by scaffold tubes 2 lying far apart, with the risk of a large deformation of the conveyor rail when loaded by a heavy conveyor cart. Thus, a reinforced elongate beam 19 is provided which, in the illustrated embodiment, rests on, or is otherwise attached to, additional scaffold tubes 22. Suspension brackets 23 engage the beam 19 with an upper hooked end and support the conveyor rail 5 with a lower hooked end. The beam 19 extends below the balcony 24 and as such it is possible to use suspension brackets even below the balcony, thus supporting the conveyor rail more regularly and at shorter distances. Beyond the outer boundaries of the balcony 24 the conveyor rail 5 again may be suspended directly from the scaffold tubes 2, using longer suspension brackets at such locations (but it also is possible to prolong the beam 19).

[0044] Finally figure 8 in a schematic perspective view illustrates an embodiment of a suspension bracket 23 extending between a reinforced elongate beam 19 and a conveyor rail 5. Of course, such a suspension bracket 23 can have many different shapes and also can have features previously described with respect to the suspension bracket 6.

[0045] The conveyor assembly described above allows to convey materials along a scaffold, starting from a location on said scaffold that can be reached by a crane, elevator, or other supply apparatus (for example at a frontal end of the scaffold, such as defined by the scaffold poles 1' and 1" in figure 1). Because of its modular character, the conveyor assembly can be adjusted to the shape and dimensions of the scaffold by simply adding (or removing) additional conveyor rail sections.

[0046] Moreover, erecting (and dismounting) the conveyor assembly can be carried out in a quick and simple manner with little or no special tools and without the requirement for specialized personnel. During erection of the conveyor assembly in the working space above the planks 4 of a specific level of the scaffold, the planks 4' of a next level (resting on top of the scaffold tubes 2, see figure 1) only should be slightly lifted temporarily for allowing a suspension bracket 6 to be positioned- with its first hooked end 61 over the scaffold tube 2. After placement of the desired number of suspension brackets, the conveyor rail 7 can be placed into the second hooked ends 62 of the suspension brackets 6. Such placement can occur with the conveyor rail sections 51-55 already assembled, or by adding one rail section after the other until the conveyor rail has reached the desired length and shape.

[0047] Once in place, the conveyor assembly does not occupy floor space on the working platform (planks 4), and as such the working platform remains available for storing materials. Also, there are no parts of the conveyor assembly on the working platform that could cause tripping of members of a working crew, and as a result the conveyor assembly does not compromise the safety on the scaffold. Finally, but not less importantly, the conveyor assembly frees the working crew from the task of lifting heavy materials, thus contributing to a healthier working environment.

[0048] The invention is not limited to the embodiments described which may be varied widely within the scope of the invention as defined by the appending claims.

Claims

1. Scaffold structure, at least comprising (i) vertically extending scaffold poles (1) which are arranged in pairs, wherein scaffold poles of a same pair are arranged at opposite sides of the scaffold structure, (ii) scaffold tubes (2) extending horizontally between the opposite sides of the scaffold structure and arranged in groups, wherein the scaffold tubes of different groups are positioned at different levels, (iii) planks (4) supported by scaffold tubes (2) of a same group defining a working platform, wherein between the scaffold poles (1), scaffold tubes (2) and working platform a working space is defined, and (iv) a conveyor assembly, **characterized in that** the conveyor assembly at least comprises (v) a conveyor rail (5) attached to a part of the scaffold structure and extending substantially horizontally within the working

space and (vi) a conveyor cart (7) which is embodied to move along the conveyor rail and which is positioned within the working space, for its major part below the conveyor rail and at a distance above the working platform.

2. Scaffold structure according to claim 1, wherein the conveyor rail (5) is attached to a part of the scaffold structure by being suspended directly from the scaffold tubes (2) or by being suspended indirectly from the scaffold tubes (20 through an elongate intermediate member (19), such as for example a reinforced beam.

3. Scaffold structure according to claim 2, comprising suspension brackets (6) with a first hooked end (61) for engaging a scaffold tube (2) or the elongate intermediate member (19), and a second opposite hooked end (62) for engaging and supporting the conveyor rail (5).

4. Scaffold structure according to claim 3, wherein the hooked ends (61,62) are embodied for releasably engaging the scaffold tube (2) or the elongate intermediate member (19) and/or conveyor rail (5), respectively.

5. Scaffold structure according to claim 3 or 4, wherein the first hooked end (61) and second hooked end (62) can rotate with respect to each other around a substantially vertical axis (9), as considered in a position of use of a suspension bracket (6) and/or wherein the suspension brackets have a variable length such that the distance between the first hooked end (61) and second hooked end (62) can be changed.

6. Scaffold structure according to any of the previous claims, wherein the conveyor cart (7) is provided with wheels (10) running along the conveyor rail (5) and wherein the wheels and conveyor rail are profiled in a corresponding manner such as to avoid the wheels from running off the conveyor rail.

7. Scaffold structure according to claim 6, wherein the conveyor rail (5) is embodied as a tube, preferably with a circular cross section.

8. Scaffold structure according to any of the previous claims, wherein the conveyor rail (5) comprises a number of separate conveyor rail sections (51-55) which are releasably interconnected by connecting means, such as, but not limited to, cooperating threads (8), and a bayonet coupling.

9. Scaffold structure according to any of the previous claims, wherein the conveyor cart (7), as considered in its direction of movement along the conveyor rail (5), has two opposite frontal ends which each are provided with a vertical support (11) having an upper end carrying at least one wheel (10) and a lower end attached to a load support member (12).

10. Scaffold structure according to claim 9, wherein the vertical support (11) at its upper end carries an assembly of at least two, and preferably exactly two, consecutive wheels (10), which assembly is rotatable relative to the vertical support (11) around a substantially vertical axis (15), as considered in a position of use of the conveyor cart.

11. Scaffold structure according to claim 9 or 10, wherein the vertical dimension of the vertical supports (11) can be changed, for example by providing a telescoping arrangement (111,112).

12. Scaffold structure according to any of the claims 9-11, wherein the dimensions of the load support member (12) can be changed.

13. Scaffold structure according to claim 12, wherein the load support member (12) comprises at least two parts (121,122) which engage each other in a telescoping manner.

14. Scaffold structure according to claim 6 and any of the claims 7-13, wherein at least one of the wheels (10) is a driven wheel, preferably a wheel driven by an electric motor (18).

15. Conveyor assembly for use in a scaffold structure according to any of the previous claims, comprising at least a conveyor rail (5) which is intended to be attached to the scaffold structure, and preferably to the scaffold tubes (2), and a conveyor cart (7) which is embodied to move along the conveyor rail.

Amended claims in accordance with Rule 137(2) EPC.

1. Scaffold structure, at least comprising (i) vertically extending scaffold poles (1) which are arranged in pairs, wherein scaffold poles of a same pair are arranged at opposite sides of the scaffold structure, (ii) scaffold tubes (2) extending horizontally between the opposite sides of the scaffold structure and arranged in groups, wherein the scaffold tubes of a same group are positioned at a same level and scaffold tubes of different groups are positioned at different levels, (iii) planks (4) supported by scaffold tubes (2) of a same group defining a working platform, wherein between the scaffold poles (1), scaffold tubes (2) and working platform a working space is defined, (iv) a conveyor assembly with (v) a conveyor rail (5) attached to a part of the scaffold structure and extending substan-

tially horizontally within the working space and (vi) a conveyor cart (7) which is embodied to move along the conveyor rail and which is positioned within the working space, for its major part below the conveyor rail and at a distance above the working platform;

wherein the conveyor rail (5) is attached to a part of the scaffold structure by being suspended from the scaffold tubes (2),
characterized by suspension brackets (6) with a first hooked end (61) for engaging a scaffold tube (2), and a second opposite hooked end (62) for engaging and supporting the conveyor rail (5),
wherein the hooked ends (61,62) are embodied for releasably engaging the scaffold tube (2) and/or conveyor rail (5).

2. Scaffold structure according to claim 1, wherein the first hooked end (61) and second hooked end (62) can rotate with respect to each other around a substantially vertical axis (9), as considered in a position of use of a suspension bracket (6) and/or wherein the suspension brackets have a variable length such that the distance between the first hooked end (61) and second hooked end (62) can be changed.

3. Scaffold structure according to any of the previous claims, wherein the conveyor cart (7) is provided with wheels (10) running along the conveyor rail (5) and wherein the wheels and conveyor rail are profiled in a corresponding manner such as to avoid the wheels from running off the conveyor rail.

4. Scaffold structure according to claim 3, wherein the conveyor rail (5) is embodied as a tube, preferably with a circular cross section.

5. Scaffold structure according to any of the previous claims, wherein the conveyor rail (5) comprises a number of separate conveyor rail sections (51-55) which are releasably interconnected by connecting means, such as, but not limited to, cooperating threads (8), or a bayonet coupling.

6. Scaffold structure according to any of the previous claims, wherein the conveyor cart (7), as considered in its direction of movement along the conveyor rail (5), has two opposite frontal ends which each are provided with a vertical support (11) having an upper end carrying at least one wheel (10) and a lower end attached to a load support member (12).

7. Scaffold structure according to claim 6, wherein the vertical support (11) at its upper end carries an assembly of at least two, and preferably exactly two, consecutive wheels (10), which assembly is rotatable relative to the vertical support (11) around a substantially vertical axis (15), as considered in a position of use of the conveyor cart.

8. Scaffold structure according to claim 6 or 7, wherein the vertical dimension of the vertical supports (11) can be changed, for example by providing a telescoping arrangement (111,112).

9. Scaffold structure according to any of the claims 6-8, wherein the dimensions of the load support member (12) can be changed.

10. Scaffold structure according to claim 9, wherein the load support member (12) comprises at least two parts (121,122) which engage each other in a telescoping manner.

11. Scaffold structure according to claim 3 and any of the claims 4-10, wherein at least one of the wheels (10) is a driven wheel, preferably a wheel driven by an electric motor (18).

12. Scaffold structure according to any of the previous claims, wherein the conveyor rail (5) is attached to a part of the scaffold structure by being suspended directly from the scaffold tubes (2) or by being suspended indirectly from the scaffold tubes (20 through an elongate intermediate member (19), such as for example a reinforced beam.

13. Conveyor assembly for use as the conveyor assembly in a scaffold structure according to any of the previous claims, comprising at least a conveyor rail (5) which is intended to be attached to the scaffold structure, and preferably to the scaffold tubes (2), and a conveyor cart (7) which is embodied to move along the conveyor rail.

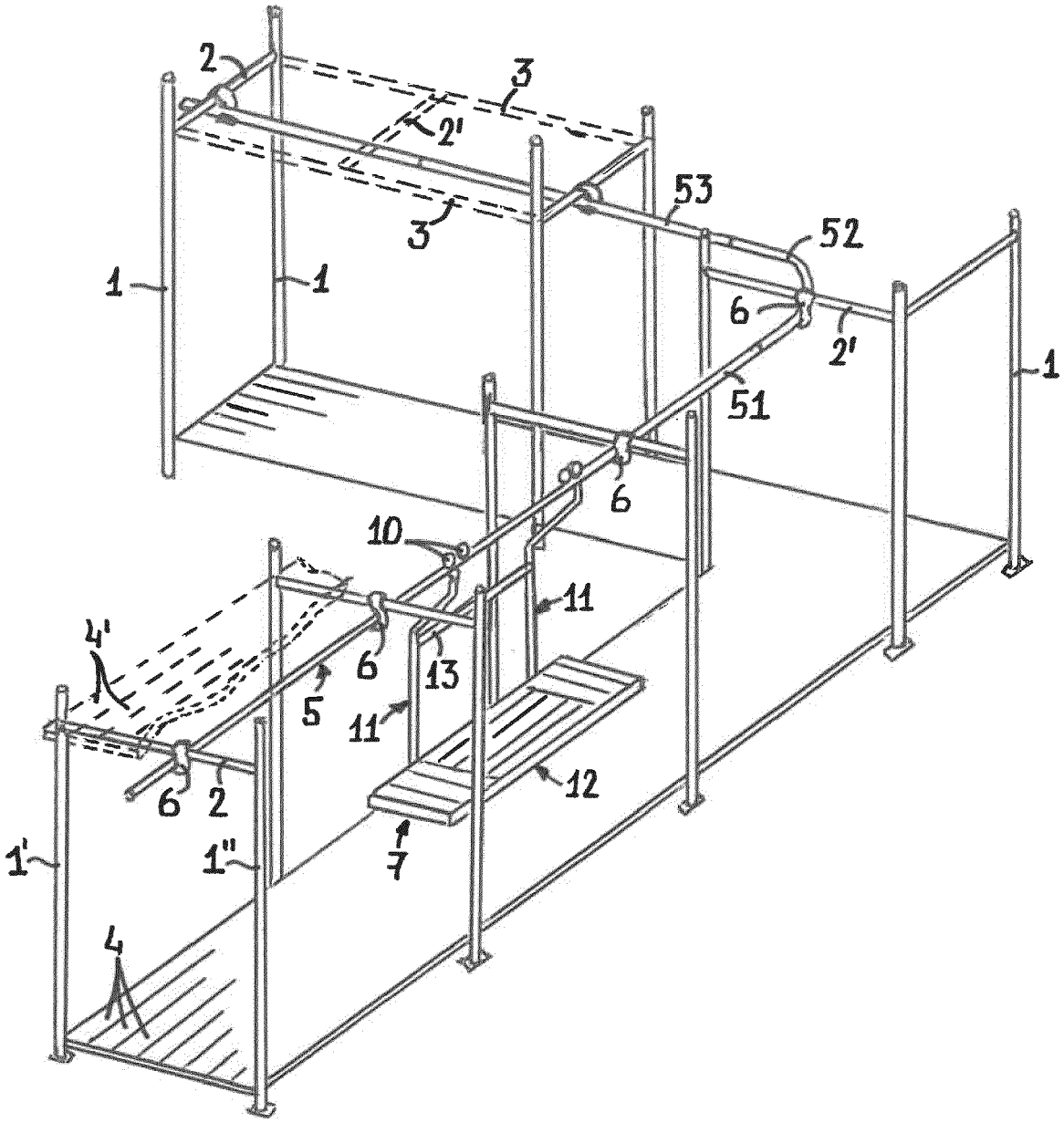


Fig.1

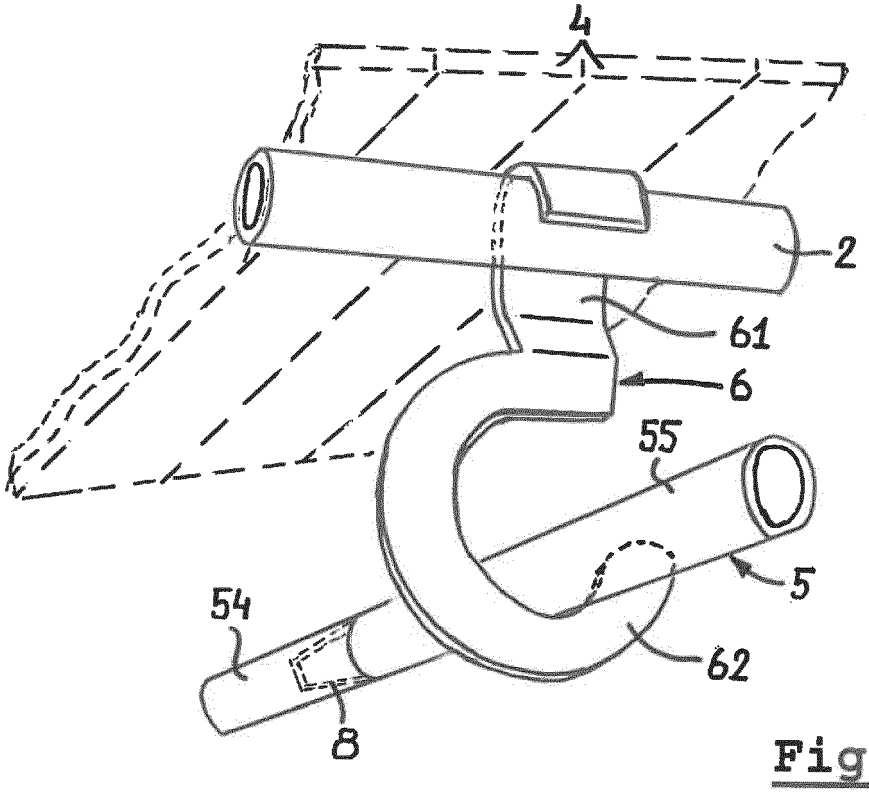


Fig.2

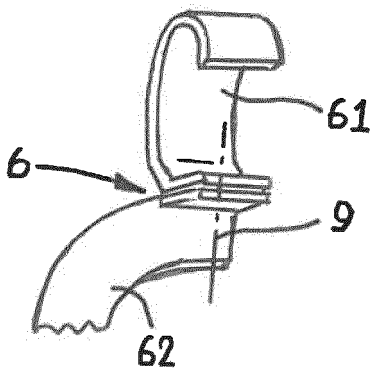


Fig.3

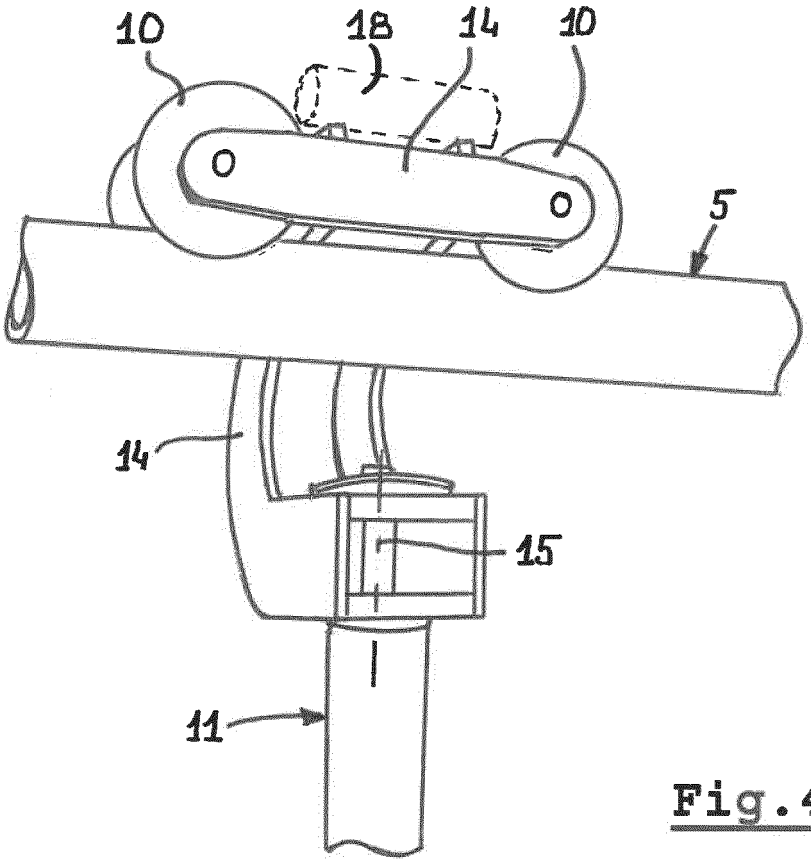


Fig.4

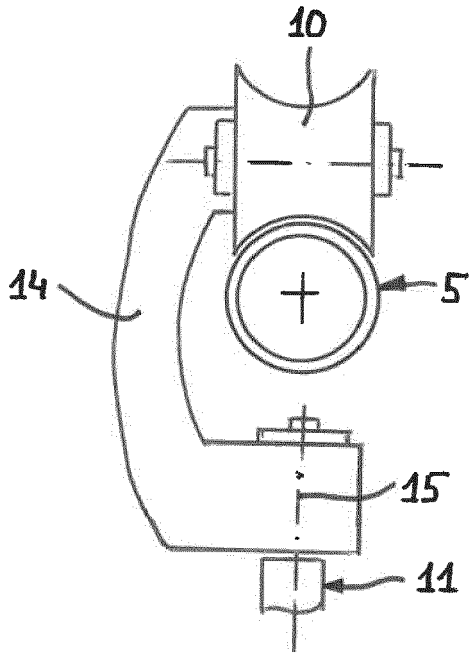


Fig.5

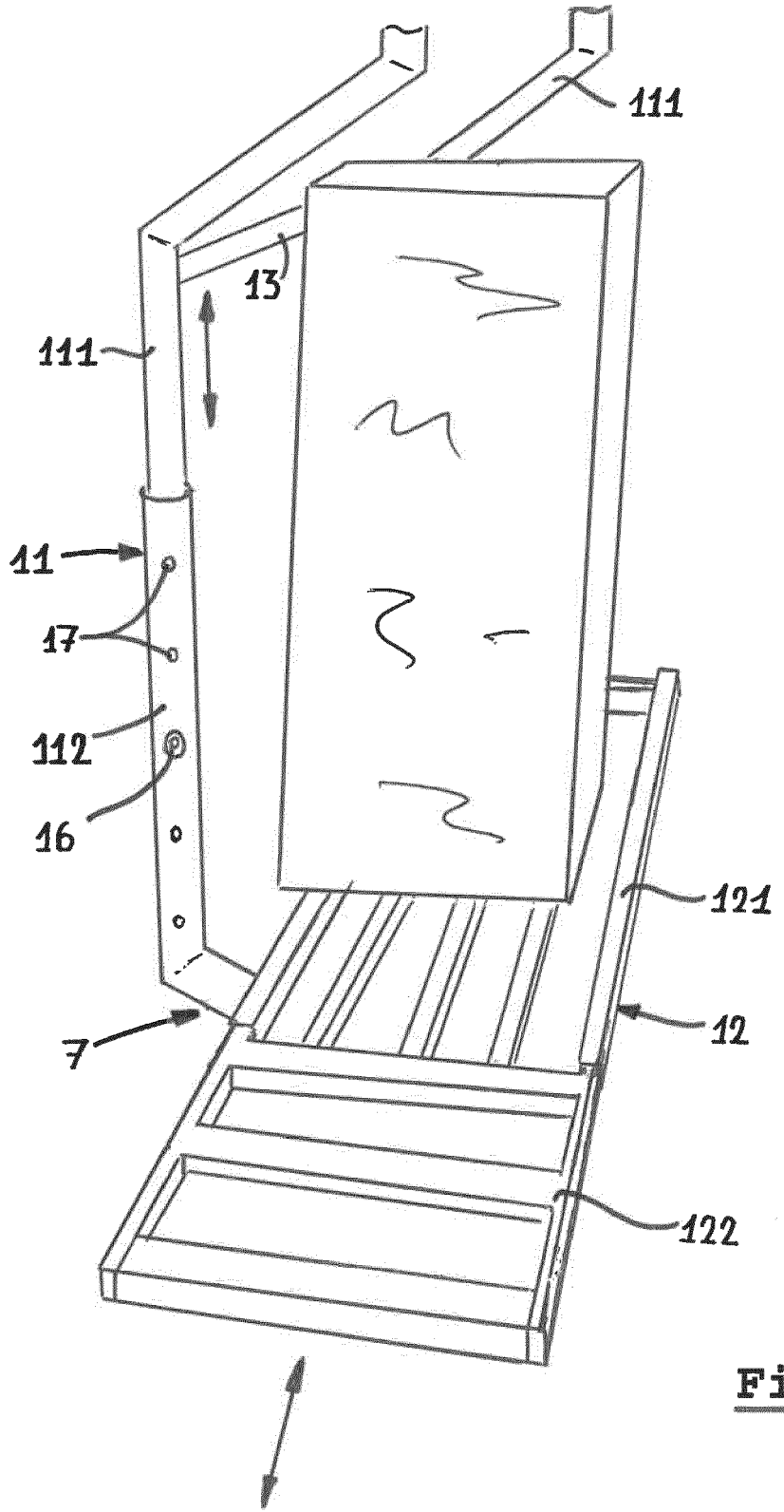


Fig.6

Fig.7

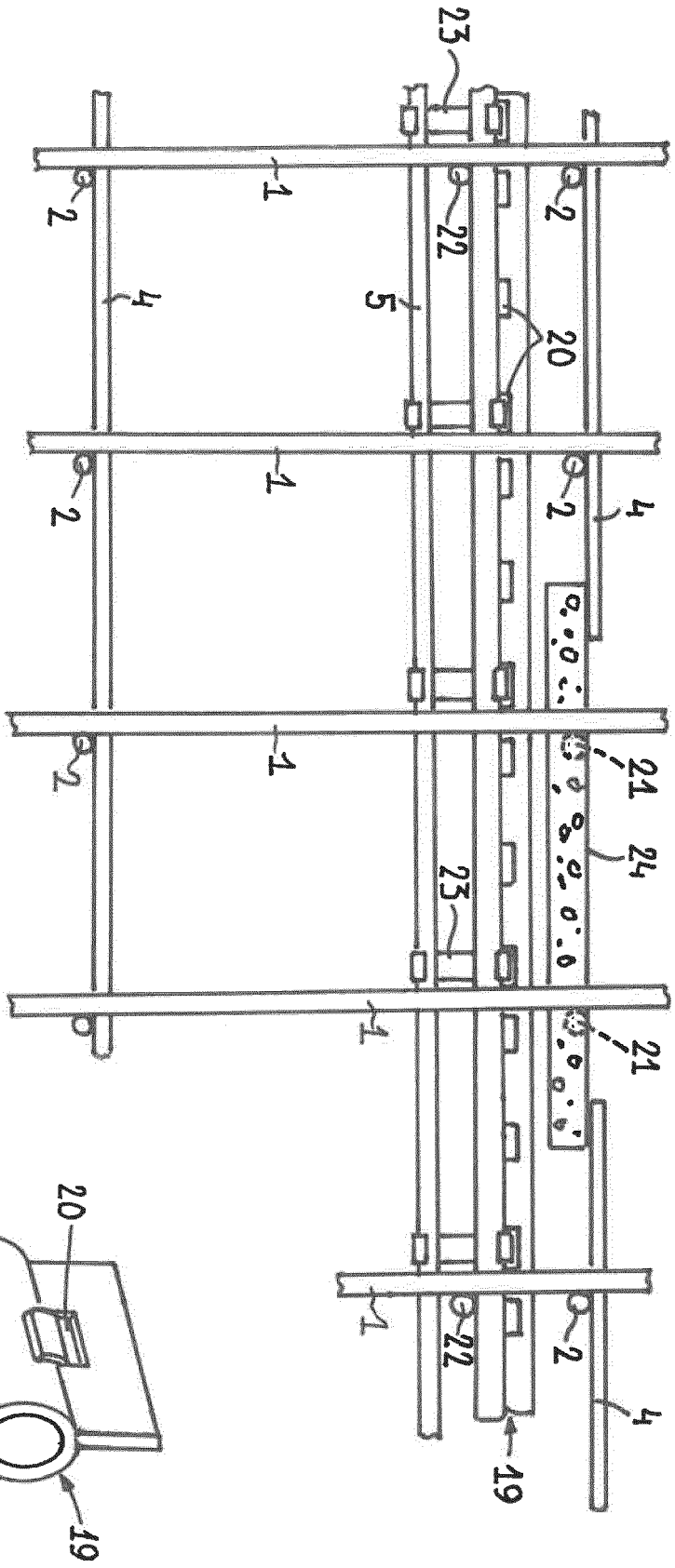
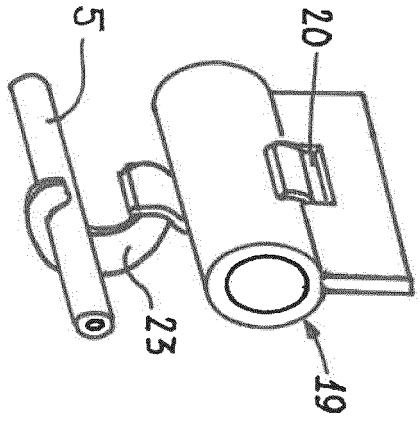


Fig.8



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EUROPEAN SEARCH REPORT

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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
The Hague	20 March 2023	Baumgärtel, Tim

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