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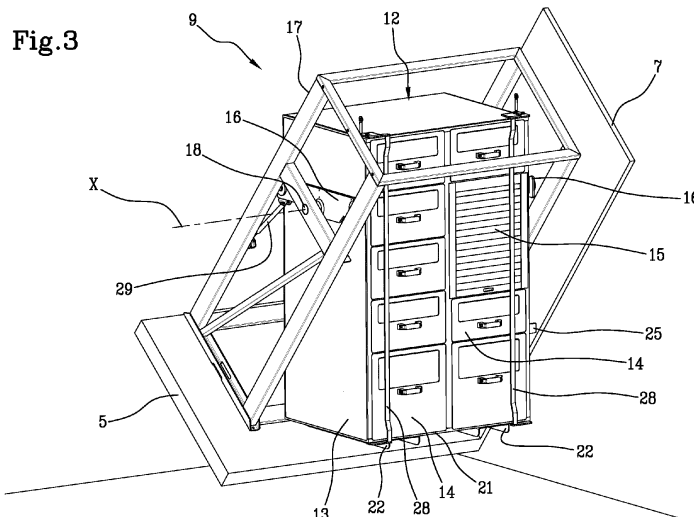
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ROLL-OFF CONTAINER FOR STORING SORTED WASTE

(57) A roll-off container for storing sorted waste is described, comprising a substantially parallelepiped-shaped containment case (2), having a front wall (3) arranged transversal to a direction of longitudinal extension (L) thereof and bearing a lifting hook (11) integral therewith, configured to engage to a piece of equipment for loading the containment case (2) on a vehicle bed. The container (1) is provided with at least one hazardous waste collection unit (9) with a plurality of pull-out receptacles (14) engaged to an oscillating structure (12). The

oscillating structure is in turn engaged within the containment case (2), rotating about a horizontal oscillation axis (X) perpendicular to the direction of longitudinal extension (L) and positioned above relative to the centre of gravity (G) of the oscillating structure itself bearing the pull-out receptacles. It is therefore possible to load and unload the container on and from the vehicle, while maintaining a substantially horizontal orientation of the pull-out receptacles.



Description

[0001] The present invention relates to a roll-off container for storing sorted waste. For example, in the embodiment described herein, the invention is particularly adapted to be used in setting up temporary municipal sorted waste collection stations. However, the invention is also suitable to be used for other waste collection methods, for example for the temporary storage of industrial, hospital or other hazardous waste.

[0002] For the purpose of waste collection, e.g., in urban areas, it is well known the use of mobile stations suitable for being temporarily installed in a designated area of the territory, to be then easily removed for the transfer of the collected waste to treatment and/or disposal sites, and subsequently repositioned in the same area or in a new collection site.

[0003] These temporary stations are normally made by means of the use of specially equipped roll-off containers, typically provided with a parallelepiped-shaped containment case with at least one lifting hook fixed on a front wall thereof. The lifting hook lends itself to being engaged by a lifting arm which is part of a piece of loading equipment normally installed on an articulated truck, by means of which the container can be hoisted onto a loading platform of the vehicle itself, or unloaded therefrom to be placed on the ground.

[0004] There is a type of waste classified as 'hazardous', e.g., waste from oil refining, industrial chemical processes, the metal industry, electrical and electronic equipment, solvents, waste oil, batteries and accumulators, etc., whose management and treatment requires special care.

[0005] For example, it is required that during the loading and transport steps, such waste is stored in containers held in a horizontal orientation or regardless such that risks of uncontrolled spillage are avoided. However, due to their design and use, the roll-off containers must necessarily undergo a considerable inclination, even more than 40°, along the longitudinal extension thereof when they are hooked by the lifting equipment to be hoisted aboard the vehicle used to transport them, as well as during the storage operations on the ground. This circumstance makes it difficult to manage these types of waste on roll-off containers, making it necessary to resort to other safety measures, such as the use of double-walled hermetic containers equipped with special accidental spillage recovery systems. These solutions, as well as having high implementation and management costs, have a significant footprint, implying a consequent limitation of the amount of waste which can be received by the system.

[0006] The object of the present invention is therefore to overcome the limitations of the prior art, so as to simplify the management of hazardous waste even on roll-off containers, under safer conditions and in compliance with current regulations.

[0007] This object and still others, which will become

more evident in the course of the following description, are substantially achieved by a roll-off container for storing sorted waste, comprising: a substantially parallelepiped-shaped containment case, having a front wall arranged transversal to a direction of longitudinal extension of the containment case, a lifting hook integral with the front wall, and configured to engage to a piece of equipment for loading the containment case on a vehicle bed; at least one hazardous waste collection unit having an oscillating structure engaged within the containment case, rotating about a horizontal oscillation axis perpendicular to the direction of longitudinal extension, a plurality of pull-out receptacles engaged to the oscillating structure; wherein the oscillation axis is positioned above relative to a centre of gravity of the oscillating structure bearing the pull-out receptacles.

[0008] The oscillating structure lends itself to adapting the orientation thereof in response to changes in the inclination of the container, so that the containers are protected from unwanted spillage of the contents thereof even when the container is significantly inclined during loading/unloading. In at least one convenient embodiment, the invention can further comprise one or more of the following preferred features.

[0009] Preferably, the oscillating structure retains an orientation thereof substantially unchanged when the containment case is inclined following a lifting action exerted on the hook.

[0010] It is therefore possible to carry out the loading and unloading operations of the container while maintaining a substantially horizontal orientation of the pull-out receptacles, so as to avoid the danger of uncontrolled spillage of the waste contained therein.

[0011] Preferably, the oscillating structure has a prevalent extension in a substantially vertical direction.

[0012] Preferably, a support frame will also be fixed inside the containment case. Preferably, the oscillating structure is rotatably engaged to the support frame.

[0013] Preferably, the oscillating structure comprises:

- a box-shaped frame engaging the pull-out receptacles;
- a pair of oscillating brackets rotatably hinged relative to the containment case and engaging the box-shaped frame at respective mutually spaced sides along the oscillation axis.

[0014] Preferably, the oscillating brackets are rotatably carried by the support frame.

[0015] Preferably, the box-shaped frame is removably engaged relative to the oscillating brackets.

[0016] The pull-out receptacles together with the box-shaped frame therefore lend themselves to being easily removed simultaneously from any support frame which remains fixed relative to the containment case, e.g., for replacement, maintenance, emptying and/or cleaning operations. Preferably, the box-shaped frame is engaged to the oscillating brackets by means of hooking projec-

tions which can be engaged in respective engagement recesses by sliding from above, said engagement recesses and hooking projections being carried by the side walls and oscillating brackets, respectively, or vice versa.

[0017] Preferably, the box-shaped frame has a base wall configured to be engaged by a forklift or pallet truck.

[0018] This further simplifies the removal and engagement of the box-shaped frame together with the pull-out receptacles.

[0019] Preferably, the pull-out receptacles are made in the form of drawers slidably engaged in the box-shaped frame.

[0020] Preferably, the pull-out receptacles are movable relative to the box-shaped frame parallel to the direction of longitudinal extension of the containment case

[0021] This facilitates the storage of waste within individual containers, possibly divided by type of waste and neatly distributed in a small space. Preferably, at least one shock absorber is provided, operating between the oscillating structure and a fixed part relative to the containment case to counteract rotations of the oscillating structure about the oscillation axis. Preferably, at least one mechanical stop is also provided to limit oscillations of the oscillating structure in at least one first rotational direction.

[0022] Preferably, said at least one mechanical stop comprises abutment brackets configured to mechanically interfere with end portions of the oscillating brackets.

[0023] Preferably, the first rotational direction involves moving a lower part of the oscillating structure towards the lifting hook.

[0024] Preferably, the oscillating structure is located adjacent to a rear wall of the containment case, opposite the front wall bearing the lifting hook.

[0025] Preferably, the rear wall has at least one foldable portion hinged according to a horizontal rotation axis near a bottom wall of the containment case and movable between a closed condition wherein it has a substantially vertical orientation and an open condition wherein it has a substantially horizontal orientation to clear the access to the oscillating structure. Preferably, locking devices, selectively actuatable to lock the oscillating structure relative to the containment case, are also provided.

[0026] Preferably, the locking devices comprise at least one latch actuatable between a locking condition wherein it engages the oscillating structure and an unlocking condition wherein it disengages the oscillating structure.

[0027] Preferably, the latch comprises a plate which is hinged to a fixed part relative to the containment case, and operably engageable with a stop seat arranged on the oscillating structure.

[0028] Preferably, the latch is manually actuatable.

[0029] Preferably, the latch is switchable between the locking and unlocking condition with 90° angular rotations.

[0030] Preferably, devices for signalling the status of locking devices are also provided.

[0031] Preferably, the signalling devices comprise at least one latch surface bearing indications on the locked or unlocked status, configured to face towards the wall of the containment case at a pass-through opening obtained through the latter and possibly provided with a transparent screen.

[0032] Preferably, the locking devices are operatively connected to said foldable portion to lock the oscillating structure when the foldable portion is in the open condition.

[0033] Preferably, the locking devices comprise a control bar hinged to the foldable portion and to the latch to move the latter between the locking and unlocking condition, concurrently with the movement of the foldable portion between the open condition and the closed condition.

[0034] Preferably, stop devices, selectively actuatable to lock the pull-out receptacles relative to the box-shaped frame, are also provided.

[0035] Preferably, the stop devices comprise at least one bar hinged relative to the box-shaped frame and movable between a rest position wherein it is laterally spaced from the frame to clear the extraction of the pull-out receptacles and a working position wherein it mechanically interferes with the pull-out receptacles to hold them in a closed condition.

[0036] Preferably, a plurality of said at least one hazardous waste collection unit is provided within said containment case.

[0037] Preferably, the individual hazardous waste collection units are simultaneously actuatable by the same control bar, or other locking devices.

[0038] Preferably, each of said hazardous waste collection units is operably engageable by a respective latch.

[0039] Preferably, said control bar operates simultaneously on the latches of several hazardous waste collection units.

[0040] Further features and advantages will become apparent from the detailed description of a preferred, but not exclusive, embodiment of a roll-off container for storing sorted waste in accordance with the present invention. Such description will be set forth herein below with reference to the accompanying drawings, provided for merely indicative and therefore non-limiting purposes, wherein:

- figures 1a and 1b schematically show in perspective view from respectively opposite angles a roll-off container according to the present invention, in closed configuration;
- figure 2 laterally shows the roll-off container in an open configuration for setting up a temporary sorted waste collection station;
- figure 3 shows in perspective view a hazardous waste collection unit installed on board the roll-off container in a first use condition, typically adopted when the container is in a closed configuration during

- loading/unloading and/or transport operations;
- figure 4 shows the hazardous waste collection unit in a second use condition, which can be used when the container is in an open configuration;
- figure 5 shows a detail of the hazardous waste collection unit of figure 4;
- figure 6 shows locking devices in an unlocking condition, typically used when the container is in the first use condition of figure 3;
- figure 7 shows locking devices in a locking condition, typically used when the container is in the second use condition of figure 4;
- figure 8 shows a preferred embodiment variant of the locking devices in the locking condition;
- figure 9 shows a detail of the locking devices of figure 8 at a different angle;
- figure 10 schematically shows a container set up with a plurality of hazardous waste collection units.

[0041] With reference to the accompanying drawings, 1 denotes a roll-off container for storing sorted waste in accordance with the present invention.

[0042] The container 1 comprises a containment case 2 which, at least in a closed configuration suitable for loading/unloading the same container onto a motor vehicle (not illustrated) used for the transport thereof has a substantially parallelepiped-shaped conformation, with a prevalent direction of longitudinal extension L indicatively parallel to the direction of travel of the motor vehicle itself.

[0043] At the opposite ends of the longitudinal extension L of the containment case 2, respective end portions delimited by a front wall 3 and a rear wall 4 can be identified, which are arranged transversal to the direction of longitudinal extension L. Between the front wall 3 and the rear wall 4, a bottom wall 5, a top wall 6 opposite the bottom wall 5, and two side walls 7 extend parallel to the direction of longitudinal extension L, respectively opposite.

[0044] In the illustrated example, the container 1 is configured for setting up temporary sorted waste collection points. In this respect, one or more of said front wall 3, rear wall 4 and/or side walls 7 are at least partially foldable and/or liftable, so that the user can easily access the interior of the containment case 2 when the container 1, previously deposited on the ground, is switched from the closed configuration previously described to an open configuration better illustrated in figure 2. More in particular, in the illustrated example, the rear wall 4 has at least one foldable portion 4a and one liftable portion 4b, each hinged according to a horizontal rotation axis near the rear wall 5 and the top wall 6 of the containment case 2, respectively, and movable between a closing condition in which it has a substantially vertical orientation (figures 1a and 1b) and an open condition in which it has a substantially horizontal orientation (figure 2). It is also preferably provided that one of the side walls 7 has at least one respective foldable portion 7a around a horizontal axis and one or more liftable portions 7b, similarly to what

has been said for the rear wall 4. The other side wall 7 can in turn be monolithic and/or fixed.

[0045] When the container 1 is in the open configuration, the user has easy access to a series of waste collection units 8, suitably located within the containment case 2 and/or in the immediate vicinity thereof, and each arranged for the delivery of a specific type of waste, e.g., paper, glass, plastic, metal, etc., as well as to at least one hazardous waste collection unit, collectively indicated with 9.

[0046] At least one computerised workstation 10 can also be provided, through which each individual user can identify him/herself, for example by means of an identification code entered via keyboard or touchscreen, or stored on a special badge or personal smartphone, in order to enable the waste delivery operation and/or to register the types and/or quantities of waste delivered.

[0047] As is well known, at least one lifting hook 11 (figure 1a) integral with the front wall 3 and/or the rear wall 4, having a standardised shape and dimensions, allows to engage the containment case 2 by a lifting arm or loading equipment to facilitate loading and unloading from the vehicle bed. In the example illustrated, the hazardous waste collection unit 9 is placed at one of the end portions of the containment case 2, preferably the one close to the rear wall 4, i.e., opposite the front wall 3 bearing the lifting hook 11, so as to be easily accessible to the user when the container 1 is in the open configuration.

[0048] The hazardous waste collection unit 9 essentially comprises an oscillating structure 12 engaged within the containment case 2, rotatably about a horizontal oscillation axis X perpendicular relative to the direction of longitudinal extension L.

[0049] The oscillating structure 12 preferably has a prevalent extension in a substantially vertical direction. It comprises a box-shaped frame 13 engaging a plurality of pull-out receptacles 14, preferably in the form of drawers, e.g., arranged in one or more vertical rows mutually side by side and slidably engaged in the box-shaped frame 13. The pull-out receptacles 14 are thus movable relative to the box-shaped frame 13, preferably parallel to the direction of longitudinal extension L of the containment case 2, towards the rear wall 4 of the containment case 2.

[0050] At least one of the rows of pull-out receptacles 14 can incorporate a sliding shutter 15 for concealing access to one or more large-capacity enclosures (not shown) located in the underlying pull-out receptacle 14 and protruding thereabove.

[0051] The oscillating structure 12 is further provided with a pair of oscillating brackets 16, rotatably hinged relative to the containment case 2 and engaging the box-shaped frame 13 at respective mutually spaced sides along the oscillation axis X.

[0052] The oscillating structure 12, arranged for example against one of the side walls 7, preferably the fixed side wall, can be conveniently engaged to a support

frame 17 made for example of metal profiles, fixed inside the containment case 2. Preferably, such a support frame 17 carries the oscillating brackets 16, rotatably engaged thereto by means of respective constraining pins 18.

[0053] The box-shaped frame 13 can in turn be removably engaged relative to the oscillating brackets 16, preferably by sliding from above. For this purpose, as can best be seen from figure 5, hooking projections 19 engageable in respective engagement recesses 20 can be conveniently provided. In the example illustrated, said hooking projections 19 and engagement recesses 20 are respectively carried by the box-shaped frame 13 and oscillating brackets 16, however, their respective positions can be reversed. The engagement recesses 20 are suitable to receive the respective hooking projections 19 by means of vertical sliding. After insertion, the hooking projections 19 find a stable support in the engagement recesses 20, securing the box-shaped frame 13 to the oscillating brackets 16.

[0054] The box-shaped frame 13 conveniently lends itself to removal together with the pull-out receptacles 14 by means of a single lifting action from the oscillating brackets 16 which remain engaged to the support frame 17. To facilitate lifting and removal, as well as engagement, a base wall 21 of the box-shaped frame 13 can be conveniently configured for engagement by a forklift or pallet truck. In this respect, a pair of inverted U-shaped profiles 22 fixed below the base wall 21 of the box-shaped frame 13 can for example be provided.

[0055] The oscillation axis X is conveniently positioned at the top of the oscillating structure 12, and in any case above relative to a centre of gravity G (figure 10) of the same oscillating structure 12 including the pull-out receptacles 14. Consequently, due to the gravitational force, the oscillating structure 12 hanging from the oscillating brackets 16 tends to align the centre of gravity G thereof with the oscillation axis X, so that it spontaneously maintains a substantially vertical orientation.

[0056] This orientation tends to remain the same both when the containment case 2 is placed on the ground with the container 1 in the open configuration and when the container 1 in the closed configuration is inclined following a lifting action exerted on the hook 11 to be hoisted onto or unloaded from the vehicle. The pull-out receptacles 14 can therefore maintain a substantially horizontal orientation during the loading and unloading operations of container 1. The loading and unloading operations can therefore be carried out safely, without the risk of controlled spillage of the hazardous waste present in the pull-out receptacles 14.

[0057] Locking devices 23 selectively actuatable to lock the oscillating structure 12 relative to the containment case 2 are preferably provided, to increase the safety of use during delivery operations by the user.

[0058] In a possible preferred embodiment best illustrated in figures 6 and 7, the locking devices 23 comprise a latch 24 which can be manually actuated between a locking condition wherein it engages the oscillating struc-

ture 12 and an unlocking condition wherein it disengages the oscillating structure 12. The latch 24 can consist of a plate hinged to the support frame 17 or other fixed part relative to the containment case 2, and operably engageable with a stop seat 25 arranged on the oscillating structure 12, e.g., on one side of the box-shaped frame 13. The latch 24 can be switched between the locking condition and the unlocking condition with 90° angular rotations.

[0059] Devices for signalling 26 the status of the locking devices 23 can also be provided. In this respect, it can be envisaged, for example, that in the locking condition (figures 4 and 7), the latch 24 exposes towards the adjacent side wall 7 of the containment case 2 a first surface 24a bearing indications of the locked status, e.g., a red colour. In the unlocking condition (figures 3 and 6), the latch 24 can instead expose towards the wall of the containment case 2 a second surface 24b, bearing indications of the unlocked status, e.g., a green colour. A pass-through opening 26a, possibly provided with a transparent screen, makes the first or second surface exposed by the latch 24 visible from outside the containment case 2, so as to allow an easy identification of the status of the locking devices 23 from the outside, even when the container 1 is in a closed configuration.

[0060] When the container 1 unloaded from a vehicle is placed on the ground and arranged in the open configuration for service, the latch 24 is switched to the locking condition to promote the stability of the oscillating structure 12 during use by the user. In fact, once locked, the pull-out receptacles 14 lend themselves to being easily opened without causing undesirable oscillations of the oscillating structure 12 due to any unbalancing.

[0061] Accidental unbalancing can also be inhibited by means of a mechanical stop arranged between the oscillating structure 12 and the support structure or other fixed part relative to the containment case 2, to limit oscillations of the oscillating structure 12 in at least a first rotational direction. For example, such a mechanical stop can be obtained by means of interference of end portions of the oscillating brackets 16 with respective abutment brackets 27 (figure 5) carried by the support frame 17. The abutment brackets 27 stop the rotation of the oscillating brackets 16 when the oscillating structure 12, starting from an equilibrium condition in which a direction of alignment between the centre of gravity G thereof and the oscillation axis X is substantially normal to the rear wall 5 of the containment case 2, tends to rotate towards the lifting hook 11, i.e., away from the rear wall 4.

[0062] Stop devices 28 can also be provided, selectively actuatable to lock the pull-out receptacles 14 relative to the box-shaped frame 13. Such stop devices 28 can comprise, for example, one or more bars hinged relative to the box-shaped frame 13, and each movable between a rest position wherein it is laterally spaced from the frame to clear the extraction of the pull-out receptacles 14, and a working position wherein the bar itself mechanically interferes with the pull-out receptacles 14 to

hold them in the closed condition.

[0063] At the end of the service period, before the container 1 is returned to the closed configuration, it is envisaged that the pull-out receptacles 14 will be locked in the closed position inside the box-shaped frame 13 by means of the stop devices 28, so as to prevent uncontrolled movements of the containers themselves during the subsequent loading/unloading and transport of the container 1. Also for the purposes of the subsequent loading/unloading and transport of the container 1, the locking devices 23 are also switched to the unlocking condition to clear the mobility of the oscillating structure 12 around the oscillation axis X.

[0064] The container 1 can then be returned to the closed configuration and hooked at the lifting hook 11 to be hoisted onto the vehicle's loading platform, which can be done safely as described above.

[0065] Excessive movements of the oscillating structure 12, for example due to sudden accelerations, decelerations or jerks during the travel of the vehicle during transport, can be effectively inhibited by means of at least one shock absorber 29 operating between the oscillating structure 12 and the support frame 17 or other fixed part relative to the containment case 2. In the example illustrated, two shock absorbers 29 of hydraulic or pneumatic type, located on the respective opposite sides of the oscillating structure 12 and each operating between the support frame 17 and one of the oscillating brackets 16, are provided to counteract sudden rotations of the oscillating structure 12 about the oscillation axis X.

[0066] Figure 8 shows a diagram of a possible embodiment variant wherein the locking devices 23 are operatively connected to the foldable portion 4a of the rear wall 4, to lock the oscillating structure 12 when the foldable portion 4a is in the open condition. More in particular, it may be envisaged that the latch 24 and the engagement seat 25 are respectively shaped in the manner of a hook and in the manner of a pin. At least one control bar 30 is hinged, by means of respectively opposite ends, to the foldable portion 4a and to the latch 24, to move the latter between the locking condition and the unlocking condition, concurrently with the movement of the foldable portion 4a from the open condition to the closed condition. It is thereby possible to lock and release the oscillating facility of the oscillating structure 12 automatically at the same time as switching the container 1 from the closed configuration to the open configuration, and vice versa.

[0067] Also in this case, one or more surfaces can be arranged on latch 24 to indicate the locking and/or unlocking status of the latch 24, visible through an opening arranged in the fixed side wall.

[0068] Figure 9 laterally diagrams a further embodiment variant, in which the roll-off container 1, specifically designed for the sorted collection of different types of hazardous waste, is set up with a plurality of hazardous waste collection units 9 within the containment case 2 thereof. The individual hazardous waste collection units 9 are preferably actuatable by the same control bar 30,

or other locking devices 23. For this purpose, the hazardous waste collection units 9 can each be equipped with an engagement seat 25 operably engageable by a respective latch 24, and the latches 24 belonging to each of the same collection units are simultaneously actuatable by the same control bar 30.

Claims

1. Roll-off container for storing sorted waste, comprising:
 - a substantially parallelepiped-shaped containment case (2), having a front wall (3) arranged transversal to a direction of longitudinal extension (L) of the containment case (2);
 - a lifting hook (11) integral with the front wall (3), and configured to engage to a piece of equipment for loading the containment case (2) on a vehicle bed;
 - at least a hazardous waste collection unit (9) having an oscillating structure (12) engaged within the containment case (2), rotating about a horizontal oscillation axis (X) perpendicular to the direction of longitudinal extension (L);
 - a plurality of pull-out receptacles (14) engaged to the oscillating structure (12);
 - wherein the oscillation axis (X) is positioned above relative to a centre of gravity (G) of the oscillating structure (12) bearing the pull-out receptacles (14).
2. Container according to claim 1, wherein the oscillating structure (12), preferably having a prevalent extension in a substantially vertical direction, comprises:
 - a box-shaped frame (13) engaging the pull-out receptacles (14)
 - a pair of oscillating brackets (16) rotatably hinged relative to the containment case (2) and engaging the box-shaped frame (13) at mutually spaced sides along the oscillation axis (X).
3. Container according to claim 2, wherein the oscillating brackets (16) are rotatably carried by a support frame (17) fixed within the containment case (2).
4. Container according to claim 2 or 3, wherein the box-shaped frame (13) is removably engaged relative to the oscillating brackets (16) and preferably has a base wall (21) configured to be engaged by a forklift or pallet truck.
5. Container according to one or more of claims 2 to 4, wherein the pull-out receptacles (14), preferably made in the form of drawers slidably engaged in the

box-shaped frame (13), are movable relative to the box-shaped frame (13) parallel to the direction of longitudinal extension (L) of the containment case (2).

6. Container according to one or more of the preceding claims, further comprising at least a shock absorber (29) operating between the oscillating structure (12) and a fixed part relative to the containment case (2) to counteract rotations of the oscillating structure (12) about the oscillation axis (X). 5
7. Container according to one or more of the preceding claims, further comprising at least one mechanical stop (27) to limit oscillations of the oscillating structure (12) in at least one first rotational direction, preferably involving moving a lower part of the oscillating structure (12) towards the lifting hook (11). 10
8. Container according to one or more of the preceding claims, wherein the oscillating structure (12) is located adjacent to a rear wall (4) of the containment case (2), opposite the front wall (3) bearing the lifting hook (11) and preferably having at least one foldable portion (4a) hinged according to a horizontal rotation axis near a bottom wall (5) of the containment case (2) and movable between a closed condition wherein it has a substantially vertical orientation and an open condition wherein it has a substantially horizontal orientation to clear the access to the oscillating structure (12). 15
9. Container according to one or more of the preceding claims, further comprising locking devices (23) selectively actuatable to lock the oscillating structure (12) relative to the containment case (2), and preferably comprising at least one latch (24) actuatable between a locking condition wherein it engages the oscillating structure (12) and an unlocking condition wherein it disengages the oscillating structure (12). 20
10. Container according to claim 9, further comprising devices for signalling (26) the status of the locking devices (23), comprising at least one surface of the latch (24) bearing indications on the locked or unlocked status, configured to face towards the wall of the containment case (2) at a pass-through opening (26a) obtained through the latter and possibly provided with a transparent screen. 25
11. Container according to claim 8 and one or more of claims 9 and 10, wherein the locking devices (23) are operatively connected to said foldable portion (4a) to lock the oscillating structure (12) when the foldable portion (4a) is in the open condition, and preferably comprising a control bar (30) hinged to said foldable portion (4a) and to the latch (24) to move the latter between the locked condition and the unlocked condition, concurrently with the move- 30

ment of the foldable portion (4a) between the open condition and the closed condition.

12. Container according to one or more of claims 2 to 11, further comprising stop devices (28) selectively actuatable to lock the pull-out receptacles (14) relative to the box-shaped frame (13), preferably comprising at least one bar hinged relative to the box-shaped frame (13) and movable between a rest position wherein it is laterally spaced from the frame to clear the extraction of the pull-out receptacles (14) and a working position wherein it mechanically interferes with the pull-out receptacles (14) to hold them in a closed condition. 35
13. Container according to one or more of the preceding claims, comprising a plurality of said at least a hazardous waste collection unit (9) within said containment case (2), wherein preferably each of said hazardous waste collection units (9) is operably engageable by a respective latch (24) and said control bar (30) operates simultaneously on the latches (24) of several hazardous waste collection units (9). 40

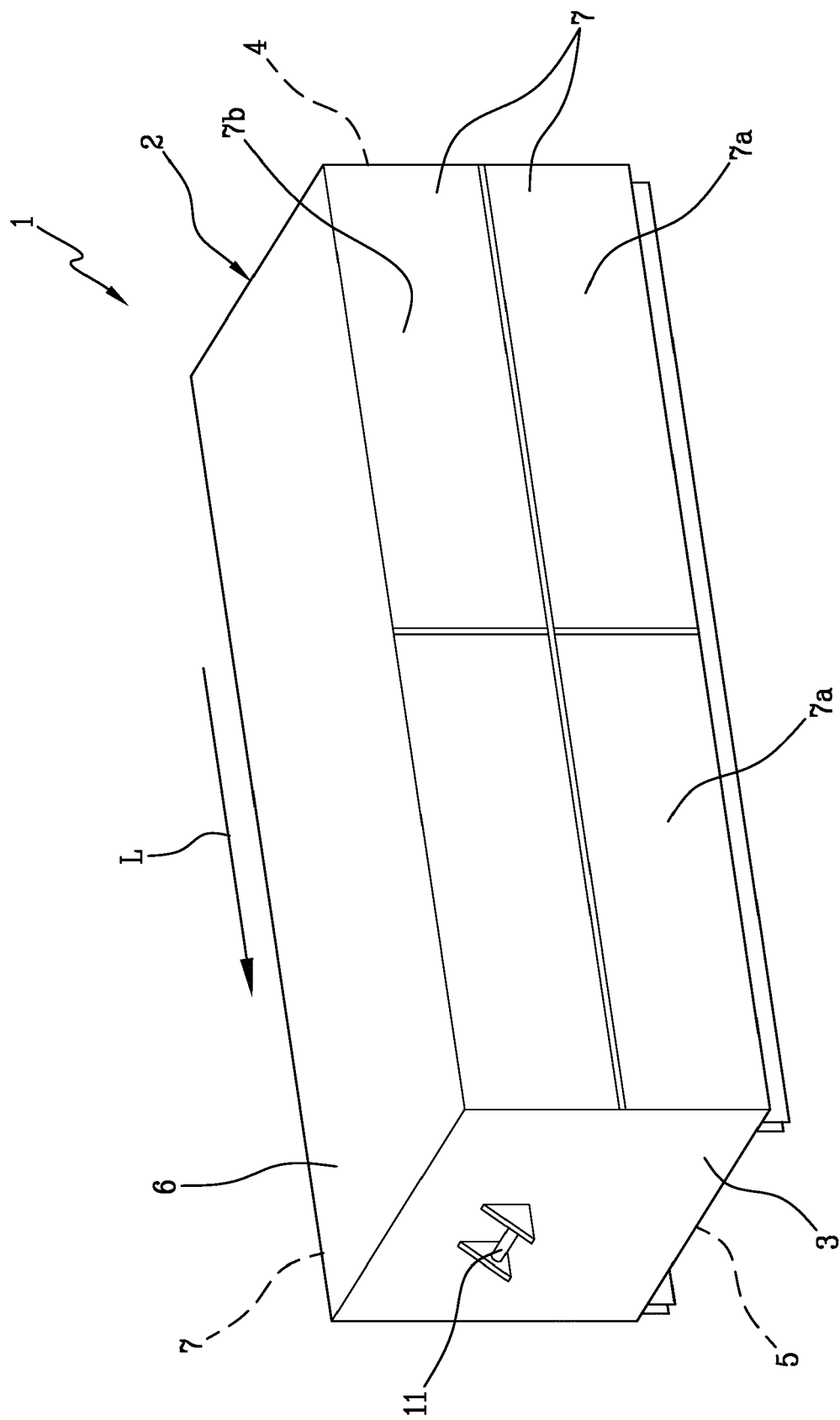


Fig.1a

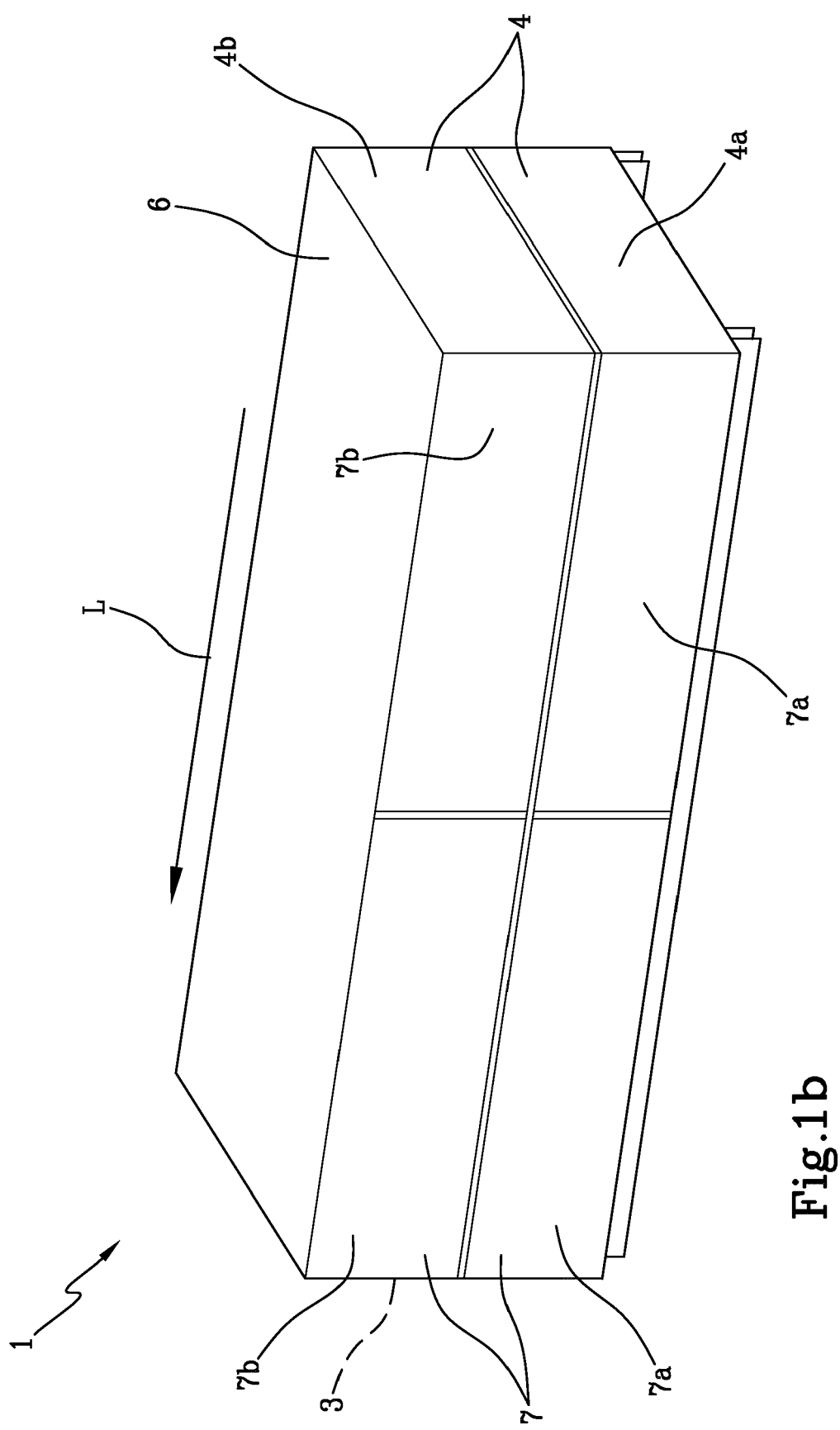


Fig.1b

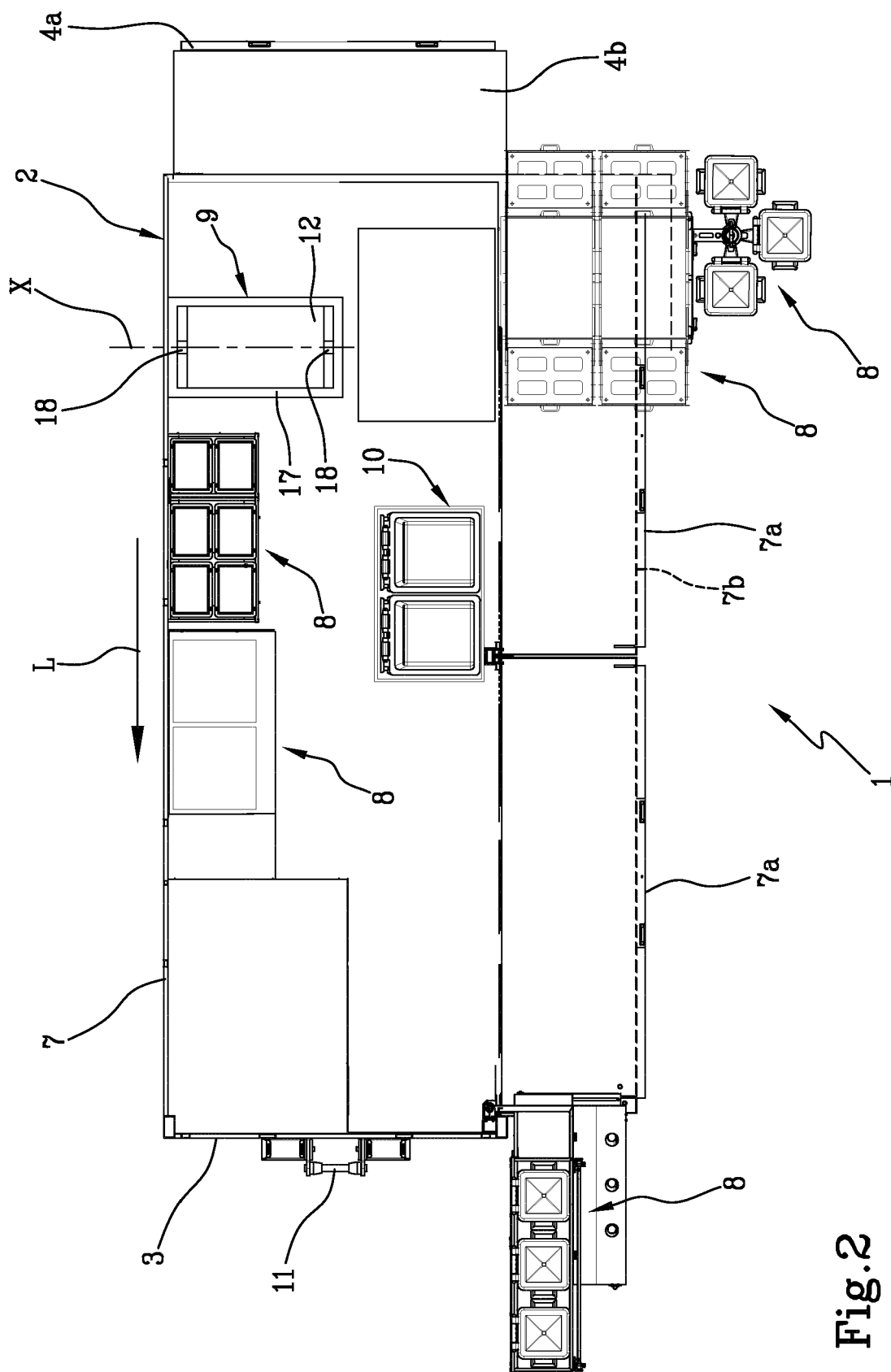
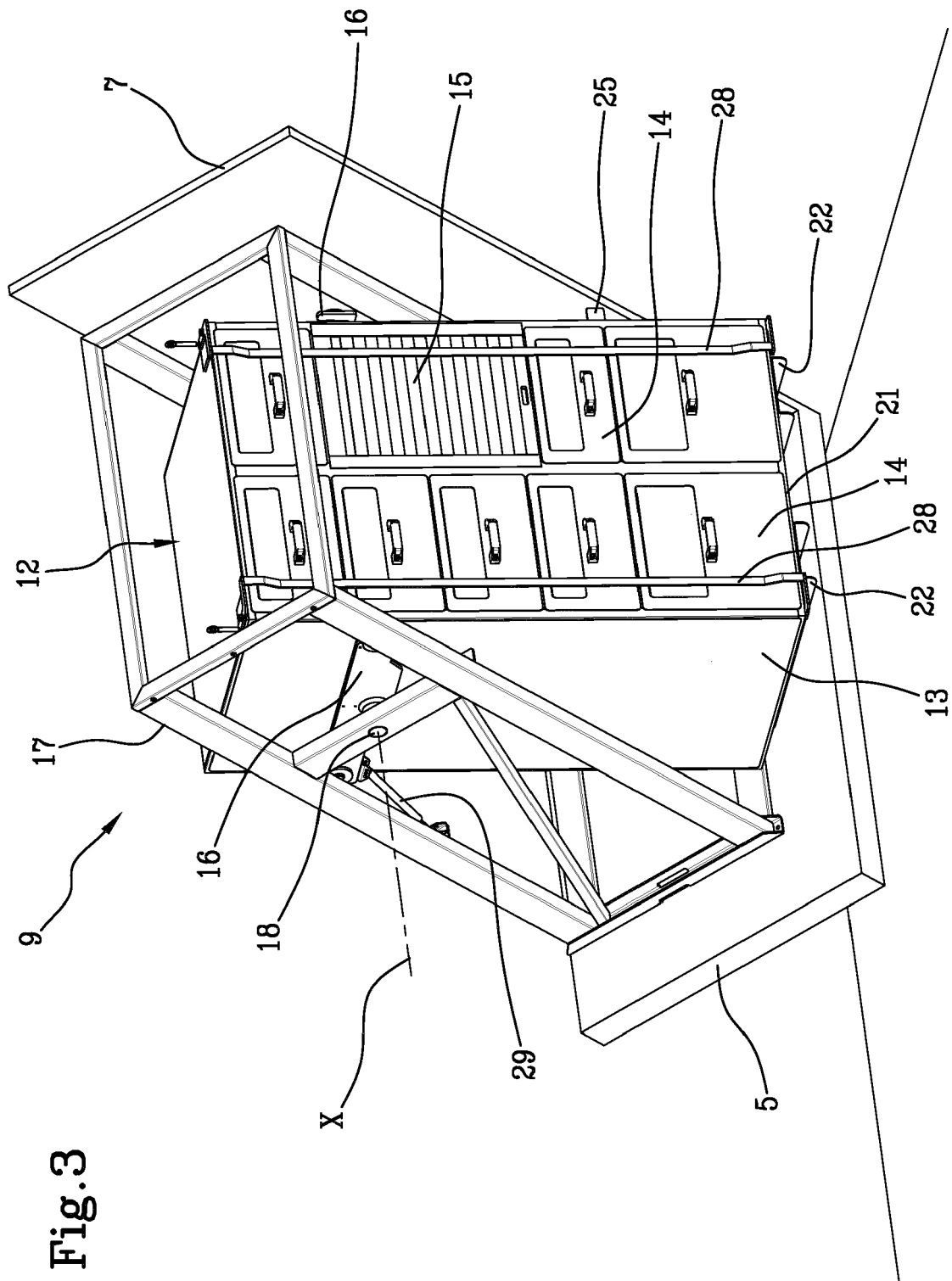


Fig. 2



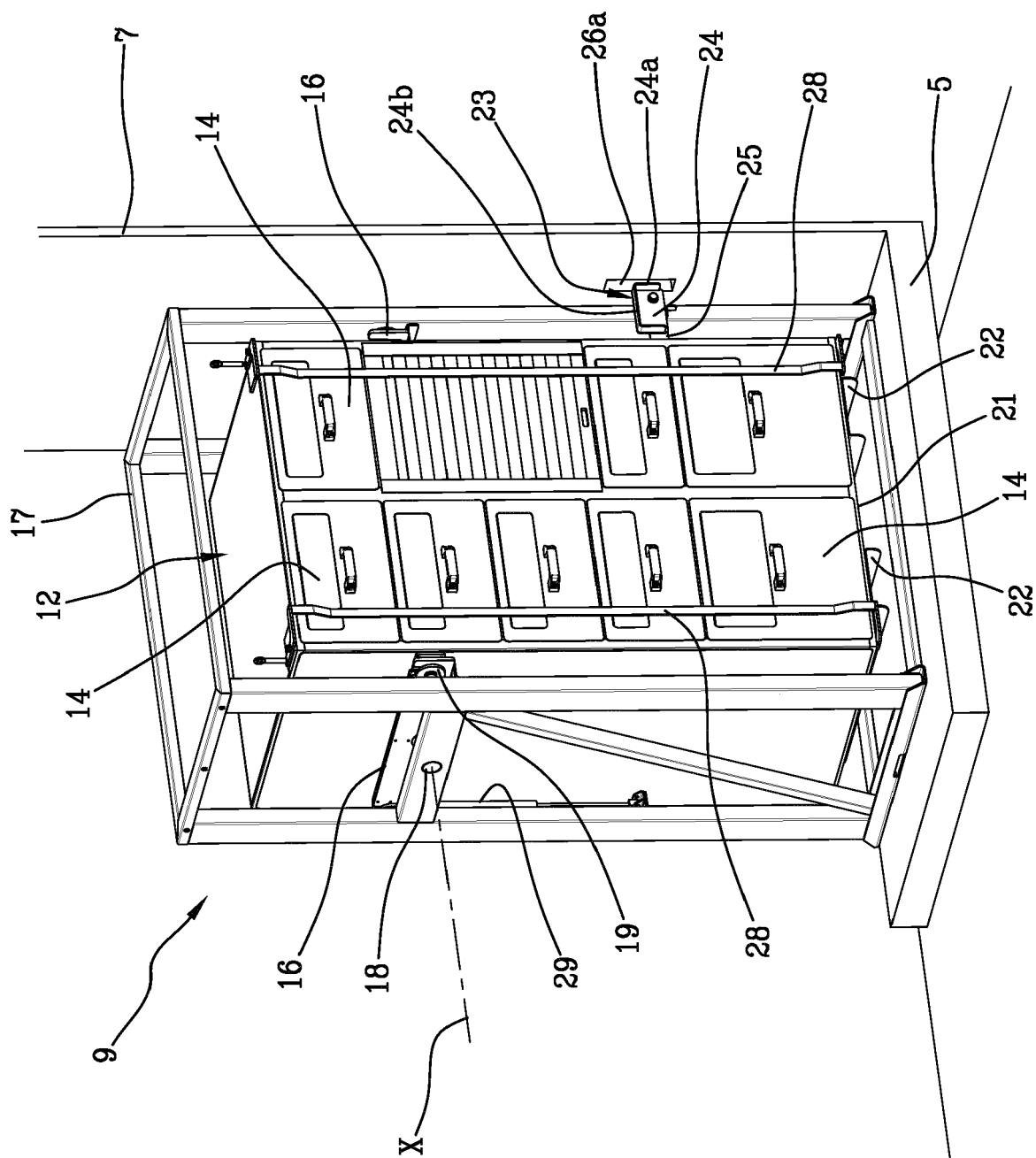
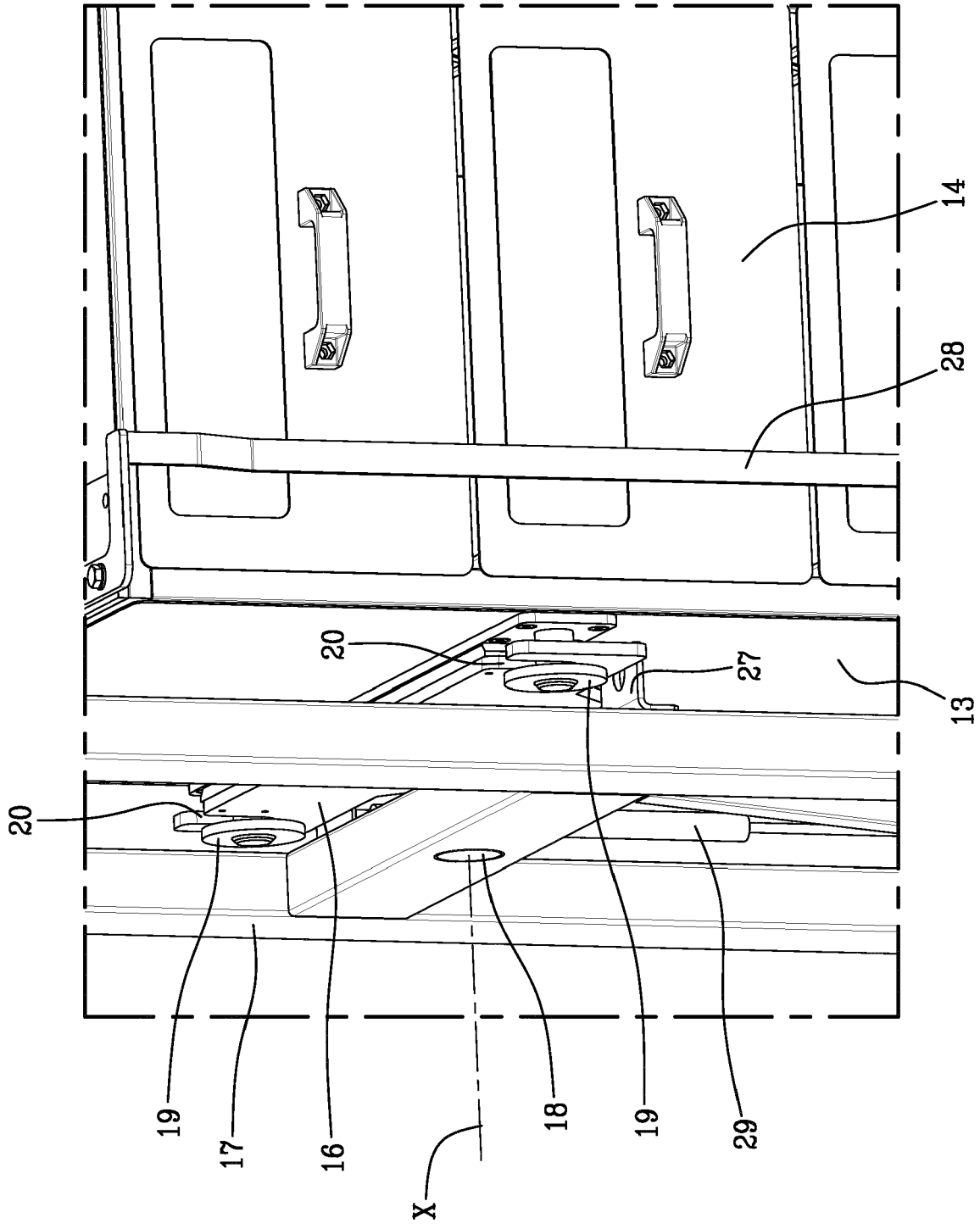


Fig. 4

Fig.5



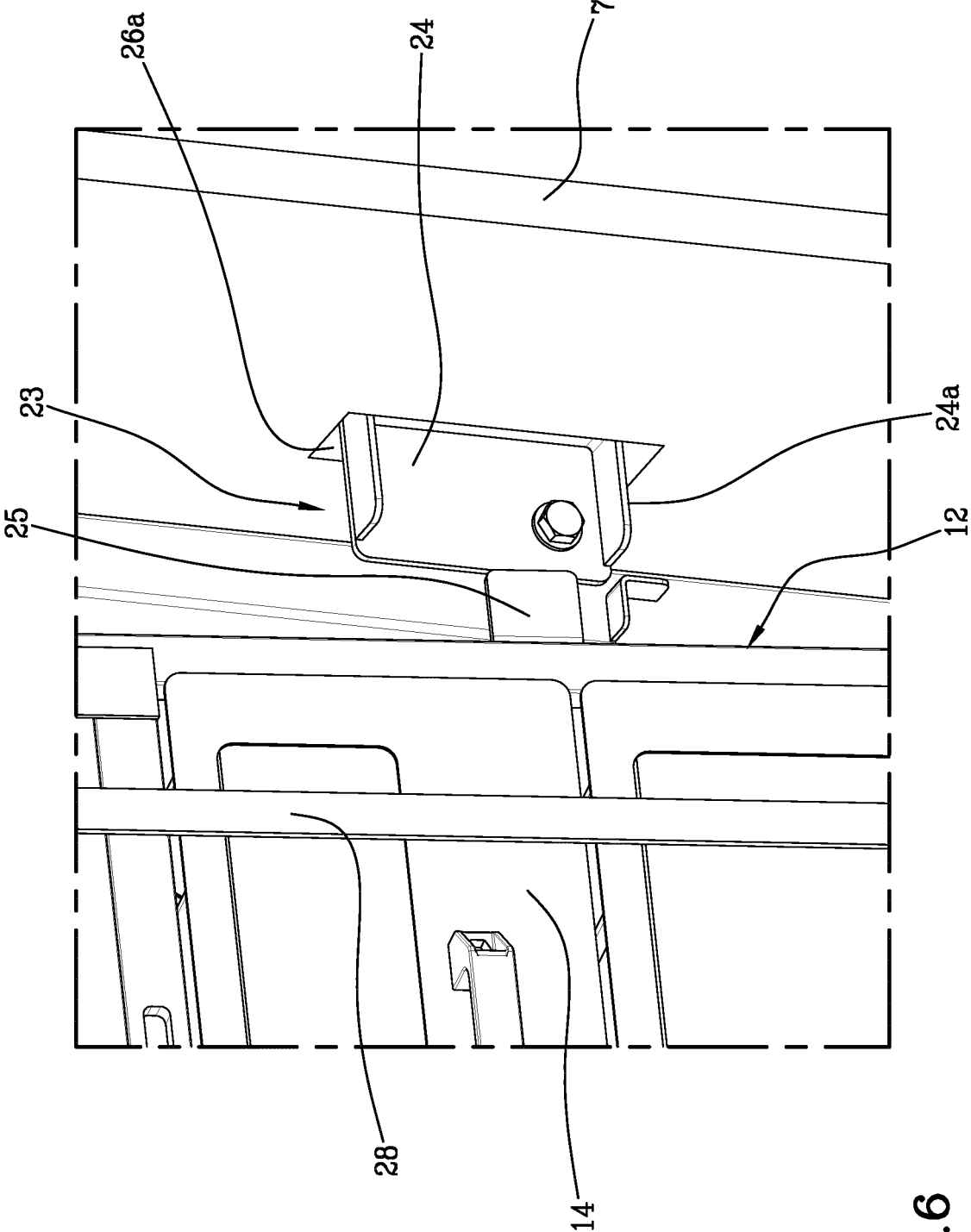


Fig. 6

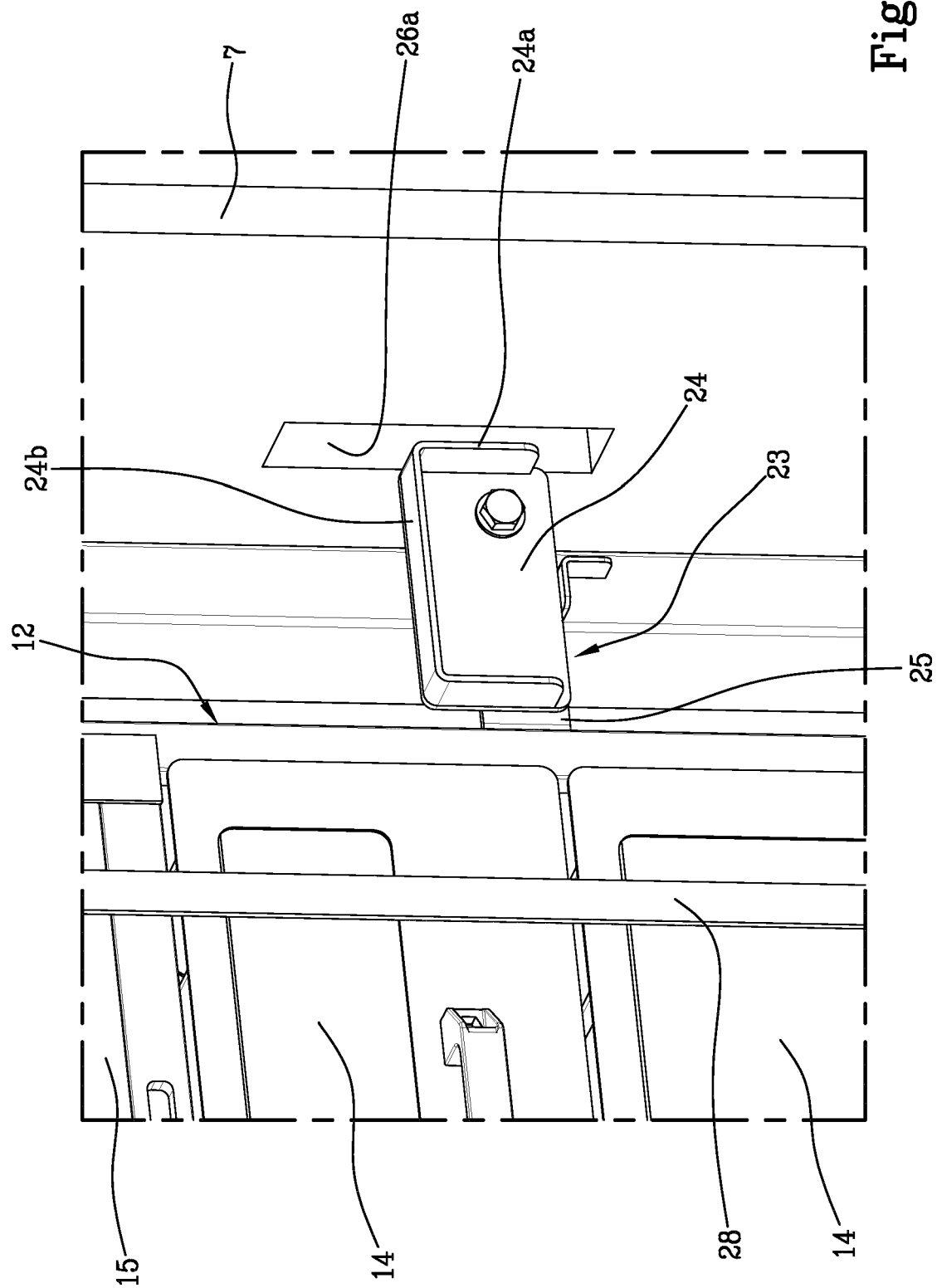


Fig. 7

Fig. 8

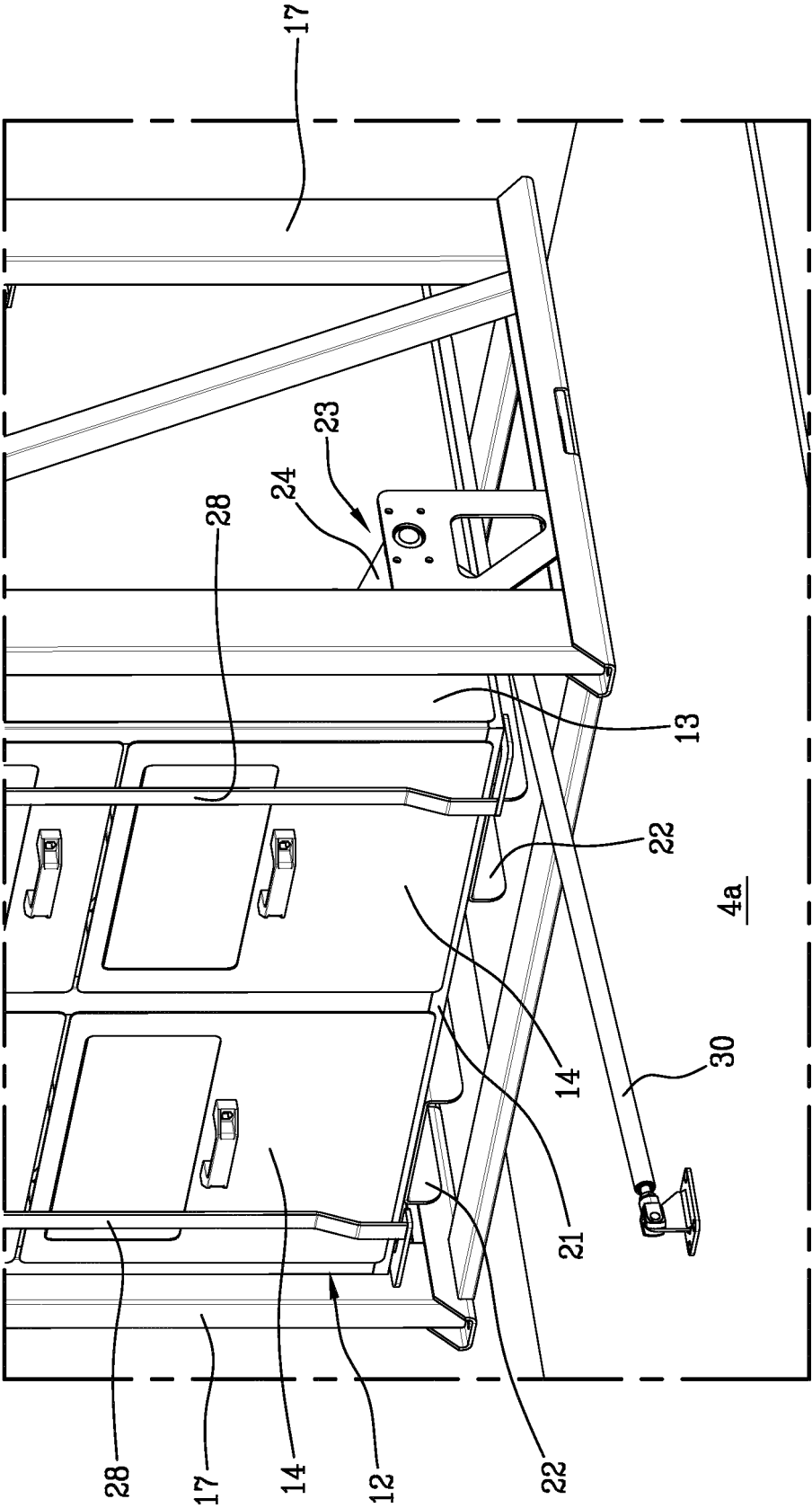
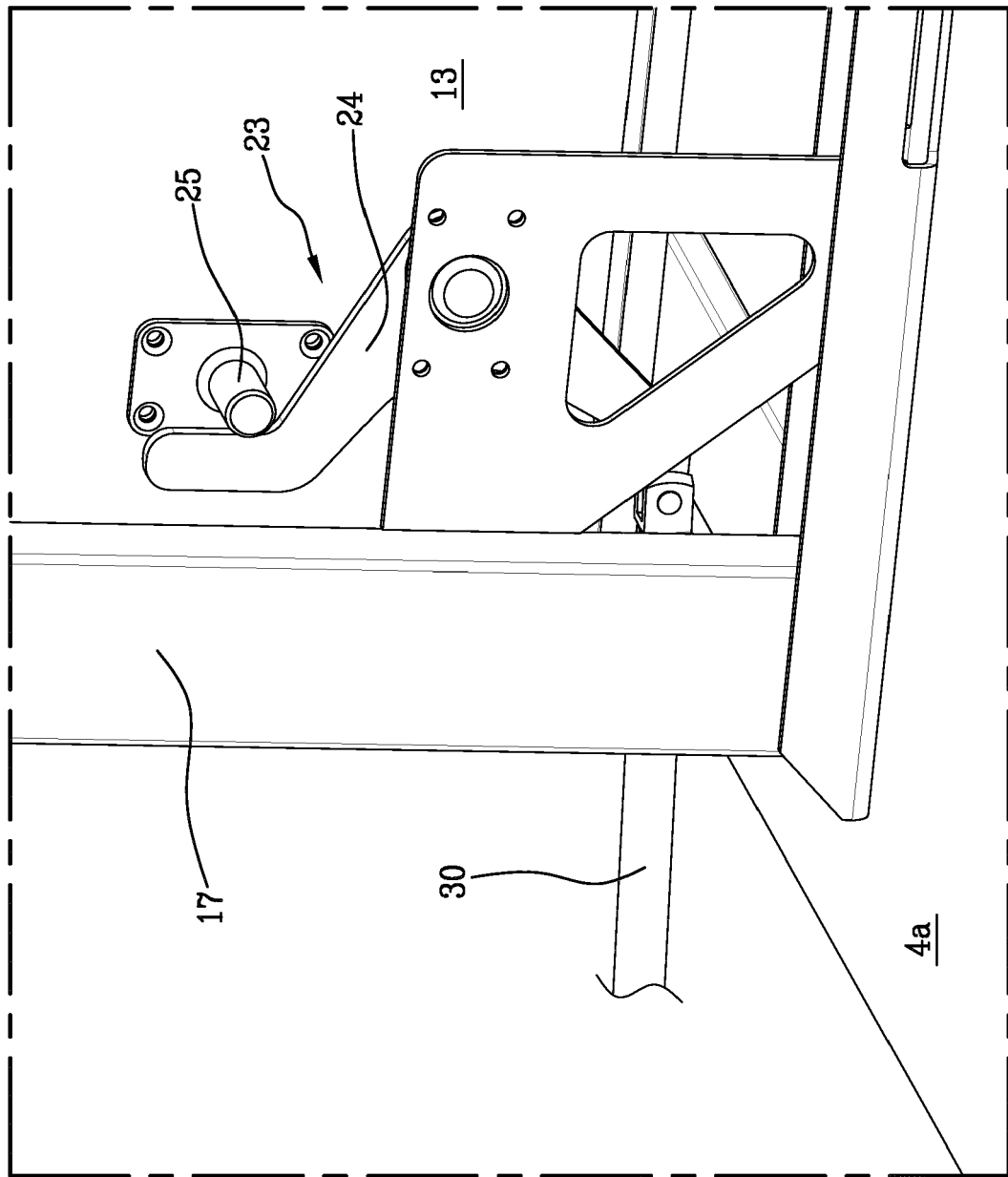


Fig.9



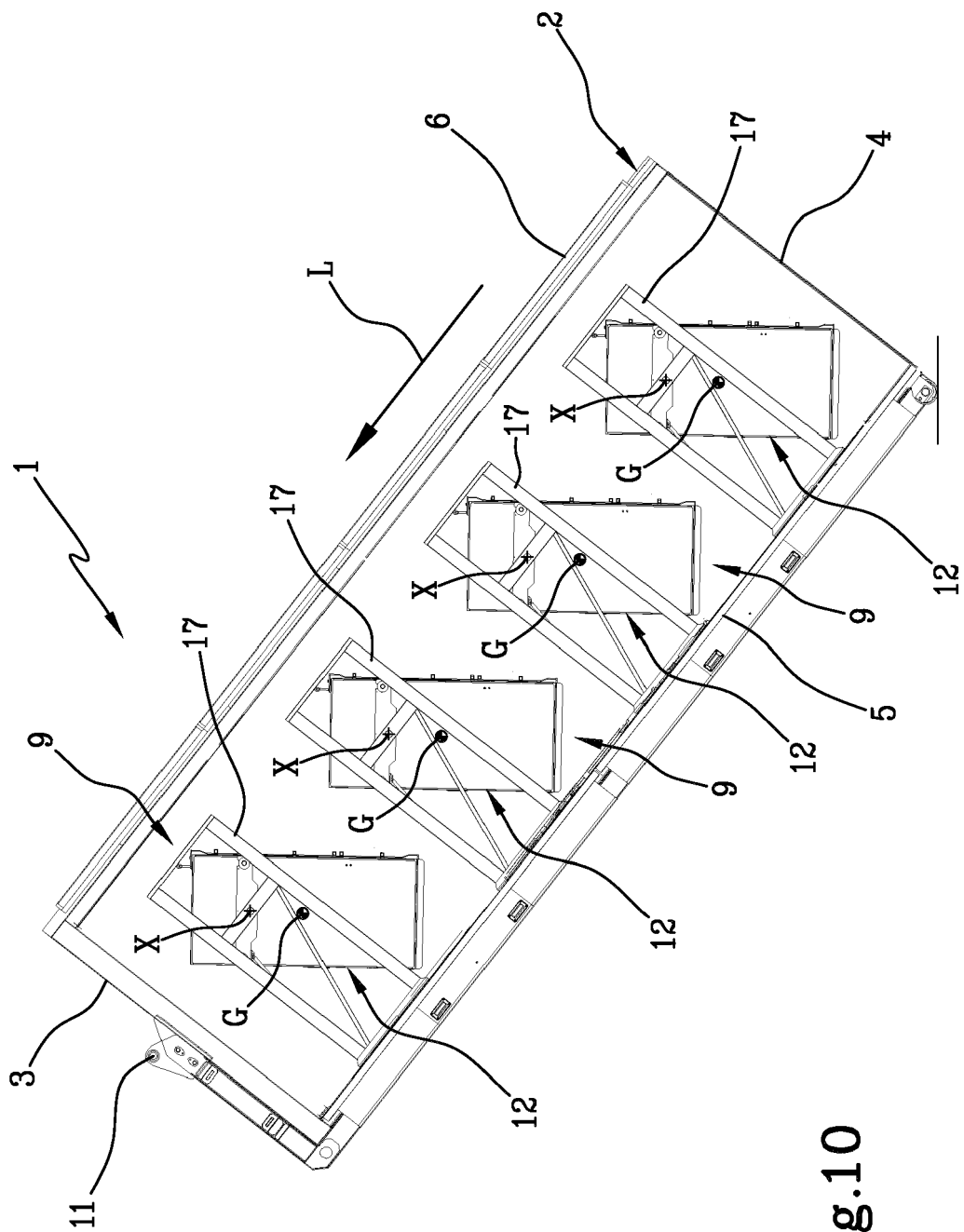


Fig.10



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