

(19) **DANMARK**



Patent- og
Varemærkestyrelsen

(10) **DK/EP 3456907 T3**

(12) Oversættelse af
europæisk patentskrift

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- (51) Int.Cl.: **E 05 D 15/58 (2006.01)**
- (45) Oversættelsen bekendtgjort den: **2020-08-17**
- (80) Dato for Den Europæiske Patentmyndigheds
bekendtgørelse om meddelelse af patentet: **2020-06-17**
- (86) Europæisk ansøgning nr.: **18203386.0**
- (86) Europæisk indleveringsdag: **2016-08-30**
- (87) Den europæiske ansøgnings publiceringsdag: **2019-03-20**
- (30) Prioritet: **2015-09-01 FI 20154156 U**
- (62) Stamansøgningsnr: **16397528.7**
- (84) Designerede stater: **AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV
MC MK MT NL NO PL PT RO RS SE SI SK SM TR**
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- (74) Fuldmægtig i Danmark: **Patrade A/S, Ceresbyen 75, 8000 Århus C, Danmark**
- (54) Benævnelse: **PANELSYSTEM MED ET STØTTEELEMENT**
- (56) Fremdragne publikationer:
**EP-A1- 1 149 222
WO-A1-2011/135131
US-A- 3 654 732**

DESCRIPTION

Field of the invention

[0001] The solution to be presented relates to a panel system comprising a supporting member for supporting a panel of the panel system and a mechanism connected to the supporting member.

Background of the invention

[0002] Various panel systems may be placed in connection with a building, for example in connection with a balcony or a terrace of the building. In many cases, the panel system comprises several panels made of glass or a similar material and placed preferably one after the other. Panel systems may also be installed inside a building, for example as walls.

[0003] The panel system typically comprises an upper profile and a lower profile which are used as guide tracks to receive one or more hinge members and/or guide members, to which the panel is mounted or attached. The hinge member or guide member is either stationary or movable with the panel along the upper or lower profile. The panel may be movable along the guide tracks by means of said hinge member or guide members. It is typically moved manually.

[0004] The upper and lower profiles are typically horizontal and fastened to e.g. the structures of the building. The lower profile may be placed on the floor level or higher than that, e.g. on top of a railing. The panel can be opened and closed by applying one or more hinge members, by which the panel is pivoted about a vertical rotation axis. Said openable panel may further comprise one or more guide members, which keep the panel closed and which are allowed to come out of the upper or lower profile to make it possible to open the panel. The upper or lower profile may comprise an opening, via which the guide member passes, or the guide member can be lifted off e.g. the lower profile.

[0005] The hinge members may comprise a locking element, by means of which the panel is locked to the hinge member of the adjacent panel, the upper profile or the lower profile, when the panels are in the open position and next to each other. Two or more panels may be opened and placed against each other in a bundle, whereby a free opening is formed in the panel system, for example for ventilation or passage.

[0006] The lower profile may also be embedded in a substantially horizontal surface, floor, support, plane, or the like in such a way that the hinge member and/or guide member placed in the lower profile is placed lower than the level of the surface. In this case, the guide member in the openable panel has to be lifted up, or there is no guide member in said panel. Thus, for opening the panel, it is also necessary to open the guide member, or in the latter case the

panel is unstable because of the missing guide member.

[0007] A panel system having a panel with a supporting member according to the preamble of claim 1 is disclosed in EP-1149222-A1.

[0008] Another panel system and a panel with supporting members and locking arrangements is disclosed in WO-2011/135131-A1. Yet another panel system, for example moveable partitions, with supporting members at an edge of a panel is disclosed in US-3654732-A.

Brief summary of the invention

[0009] The panel system according to the solution is presented in claim 1. Other claims present examples of the solution.

[0010] The presented solution can be applied in the panel systems presented above. The panel system is installable in a building, for example in connection with a balcony, a terrace, a shelter, or a roof. The panel system can also be placed in connection with a terrace, a shelter, or a roof separate from a building, for example as wall structures for a roof structure. In an example, the system comprises several panels made of glass or a similar material that is particularly transparent.

[0011] The panel system with the supporting member applied in the presented solution makes it possible to support one corner of the glass panel, particularly one lower corner of the same, without applying a guide member placed in the lower profile. In particular, it is the lower corner adjacent to the vertical edge which is moved laterally away from the lower profile when the panel is opened.

[0012] By means of the supporting member, the panel which is substantially rectangular can be supported at its fourth corner as well. Thus, the two upper corners of the panel may be supported to the upper profile, for example by means of a hinge member and a guide member, one lower corner is supported to the lower profile, for example by means of a hinge member, and the other lower corner is supported to another, adjacent panel by means of said supporting member.

[0013] It is an advantage of the supporting member that said supporting member can be used to support the panel to the adjacent panel.

[0014] The supporting member is fastened to the panel and configured to be placed at the lower profile, the supporting member being further configured, for supporting the panel, to engage the adjacent panel in a releasable way.

[0015] The supporting member is separate from the lower profile and is movably connected to the panel in such a way that the supporting member is shiftable inwards for disengaging it from

the adjacent panel, and outwards again. The mechanism applied in the solution is connected to the supporting member, which mechanism generates the inwards movement of the supporting member and is controllable by means of a pull wire, chain, cord, or the like.

[0016] The panel is equipped with a handle part, to which said wire, chain, cord, or the like, is connected and whose movement is configured to activate the mechanism and to shift the supporting member.

[0017] In an example, the supporting member is configured to shift outwards by itself in a reversible manner.

[0018] In an example, the supporting member comprises a frame and a supporting element as an extension to the frame, equipped with a recess for a part of the adjacent panel, for engaging the adjacent panel.

[0019] In an example, the supporting element is forked or comprises two substantially parallel protrusions, between which said recess is formed.

Brief description of the drawings

[0020] In the following, the presented solution will be described in more detail with reference to the appended figures.

Figure 1

shows a front view of a panel system according to the solution and in which panel system all the panels are closed, parallel, and placed one after the other.

Figure 2

shows the example of Fig. 1 seen from the end.

Figure 3

shows a panel system according to the solution, with one panel opened.

Figure 4

shows a cross-sectional view of a lower profile according to an example, applied in the panel system of Fig. 3.

Figure 5

shows the panel system according to Fig. 3, with all the panels closed.

Figure 6

shows a supporting member according to an example, applicable in the panel system of Fig. 3 and Fig. 5.

Figure 7

shows the supporting member of Fig. 6 placed in the panel system of Fig. 3 and Fig. 5.

Figure 8

shows a supporting member according to another example, applicable in the panel system of Fig. 3 and Fig. 5 and placed in the panel system of Fig. 3 and Fig. 5.

Detailed description of different embodiments of the invention

[0021] In Figs. 1 to 8, the same or corresponding elements are indicated with the same reference numerals.

[0022] Figures 1 and 2 show an example of a panel system and a panel for the same, in which panel a supporting member according to the presented solution can be applied.

[0023] The panel system comprises two or more panels 1 and 2. When closed, the panels are parallel and placed one after the other, whereby they constitute a wall or a window, or an openable passage.

[0024] The panel system comprises a lower profile 5 and an upper profile 4 which are parallel, spaced from each other and placed on top of each other in the vertical direction. The panels 1, 2 are placed between the lower profile 5 and the upper profile 4 so that the panels are in an upright position. The two opposite vertical edges of the panel 1, 2 are vertical, and the upper and lower edges of the panel are horizontal. The lower profile 5 is fastened to a railing or a suitable surface, or is embedded in it, for example in the floor. The upper profile 4 is mounted on e.g. the ceiling or another suitable structure.

[0025] In the example shown in Fig. 1, the panel 2 is stationary and not movable along the upper and lower profiles 4, 5. The panel system may comprise two or more stationary panels which can be opened. However, the panel 2 can be opened in such a way that it pivots about a vertical rotation axis X1. The rotation axis X1 is perpendicular to the longitudinal directions of the upper and lower profiles 4, 5. Further, said rotation axis X1 is placed close to one vertical edge of the panel 2.

[0026] A hinge member 22 is fastened to the upper edge of the panel 2 and placed inside the upper profile 4, allowing the panel 2 to be opened. The rotation axis X1 extends via the hinge member 22. The hinge member 22 may be locked to the upper profile 4.

[0027] A hinge member 23 is fastened to the lower edge of the panel 2 and placed inside the lower profile 5, allowing the panel 2 to be opened. Said rotation axis X1 passes through the hinge member 23 as well. The hinge member 23 may be locked to the lower profile 5.

[0028] The hinge member 22 and/or the hinge member 23 may comprise an axle journal which supports the panel 2 when pivoted. The hinge member 22 and/or the hinge member 23 may comprise a locking element by which the hinge member 22, 23 is locked to the hinge member 6 or 7 of the adjacent panel 1, to the upper profile 4 or to the lower profile 5.

[0029] The upper edge of the panel 2 may be equipped with a frame member 9, to which the hinge member 22 can be fastened, for example with screws or nuts.

[0030] The lower edge of the panel 2 may be equipped with a frame member 8, to which the hinge member 23 can be fastened, for example with screws or nuts. The frame member 8 constitutes a part of the panel 2.

[0031] As shown in Fig. 1, the upper edge of the panel 2 may be provided with a locking element 20 which engages the upper profile 4 and is spaced from the hinge element 22. For opening the panel 2, the locking element 20 can be released and disengaged from the upper profile 4. The locking element 20 is controlled by means of e.g. a pull wire 25, a chain, a cord, or the like. The panel 2 may be equipped with a handle part 27. The handle part 27 may be applied to control the locking element 20, another locking element, or other parts of the panel system, for example by means of a force transmitted by the wire 25, chain or cord. The locking part 20 is released by moving the handle part 27. The handle part 27 is, for example, a pivotable or rotatable handle or knob fastened to the mid-section of the panel 2 as shown in Fig. 1, or alternatively to the lower edge of the panel 2, for example to the frame member 8. In an example, the handle part 27 is part of said locking element or said other part of the panel system, for example its mechanisms.

[0032] As shown in the example of Fig. 1, the panel system comprises at least one panel 1 which is movable along the upper and lower profiles 4, 5. Further, the panel 1 is openable so that it will pivot about a vertical rotation axis X2. For opening, the panel 1 is movable to a predetermined location where the rotation axes X1 and X2 are close to each other. The rotation axis X2 is perpendicular to the longitudinal directions of the upper and lower profiles 4, 5. Further, said rotation axis X2 is placed close to one vertical edge of the panel 1.

[0033] The upper edge of the panel 1 is provided with a hinge member 6 which is placed inside the upper profile 4 and allows the panel 1 to be opened. The rotation axis X2 passes through the hinge member 6. The hinge member 6 is movable along the upper profile 4.

[0034] The lower edge of the panel 1 is provided with a hinge member 7 which is placed inside the lower profile 5 and allows the panel 1 to be opened. Said rotation axis X2 passes through the hinge member 7 as well. The hinge member 7 is movable along the lower profile 5. The hinge member 7, as well as the other corresponding hinge members, extends to the inside of the lower profile 5, and part of the hinge member 7 is placed inside the lower profile 5.

[0035] The hinge member 6 and/or the hinge member 7 may comprise an axle journal which supports the panel 1 when pivoted. The hinge member 6 and/or the hinge member 7 may comprise a locking element, by which the hinge member is locked to the upper profile 4, the lower profile 5, or the hinge member of the adjacent panel, for example the hinge member 7 of the panel 12 in Fig. 7.

[0036] The upper edge of the panel 1 may be equipped with a guide member 3 which is

placed inside the upper profile 4, is movable along the upper profile 4, and is spaced from the hinge member 6. Remaining inside the upper profile 4, the guide member 3 keeps the panel 1 closed. The upper profile 4 may be equipped with an opening that allows the guide member 3 to come out of the upper profile 4 and to disengage from the upper profile 4 to make it possible to open the panel 1. Said opening may be placed underneath the locking element 20.

[0037] Next to the panel 1, corresponding panels may be placed which are also equipped with corresponding hinge members 6 and 7 which may have corresponding axle journals and locking elements, and possibly also a corresponding guide member 3 as well as frame members 8 and 9. Said panels are also placed between the upper and lower profiles 4 and 5. At least one of said panels may be a mirror image of the panel 1, with respect to its structure and the elements fastened to it, as well as its function. One example of said panels is the panel 12 shown in Fig. 5 and Fig. 7.

[0038] The panel 1 and the following panels may be followed by a panel corresponding to the panel 2 and having corresponding hinge members 22 and 23 which may comprise corresponding axle journals and locking elements, and possibly a corresponding locking element 20, a handle part 27 or a wire 25 as well. Said panel is also placed between the upper and lower profiles 4 and 5. Said panel may also be a mirror image of the panel 2, with respect to its structure, the elements connected to it, and its function.

[0039] In Fig. 3, the panel 2 is shown in an open position, pivoted about the rotation axis X1. A supporting member 10 is fastened underneath the frame member 8 of the panel 2. The supporting member 10 is in a position in which it extends further than the vertical edge of the panel 2 in the longitudinal direction of the lower profile 5 and in the direction determined by the plane of the panel 2. With respect to its reach, the supporting member 10 is configured to extend to the adjacent panel 1 and to be capable of engaging it.

[0040] According to an example, the supporting member 10 engages the adjacent panel 1 or the frame member 8 on it, for example by means of an end connector or cover in the frame member 8. An end connector or cover according to the example, installable in the end of the frame member 8, is shown in the figures.

[0041] The supporting member 10 is separated from the lower profile 5 and thereby from the upper profile 4 as well. According to an example, the supporting member 10 is placed at that edge of the panel 2 which is placed at the lower profile 5, for example the lower edge of the panel 2, and to which the frame member 8 is fastened as well. The edge refers to the narrow end surface of the panel, or the combination of the panel and the frame member, and also the adjacent edge area of the large side surface of the panel.

[0042] The supporting member 10 is placed between the lower profile 5 and the panel 2, that is, between the lower profile 5 and the frame member 8. Thus, the supporting member 10 does not extend to the inside of the lower profile 5 or lower than the top surface or part defined by it, when the panel 2 is in its position of use. Thus, the lower profile 5 may be left without the

apertures opening to the side. The supporting member 10 is thus placed in its entirety on a higher level than the lower profile 8.

[0043] As shown in the example of Fig. 3, the supporting member 10 extends outwards underneath the adjacent panel 1 and the frame member 8 thereof, and engages the hinge member 7 fastened to the frame member 8.

[0044] For opening the panel 2, the supporting member 10 is fastened to the frame member 8 in a movable way so that the supporting member 10 can be shifted inwards to reduce its reach and to disengage it from the panel 1, the frame member 8 thereof, or the hinge member 7. The supporting member 10 is configured to move back and forth in the longitudinal direction of the lower profile 5 and in the direction determined by the plane of the panel 2.

[0045] In an example, the supporting member 10 is movable back and forth manually. In another example, the supporting means 10 is movable manually inwards, and it is configured to reversibly shift outward by itself, for example pushed by a force generated by a spring.

[0046] According to the invention and as shown in Fig. 3, a mechanism 21 for generating an inwards movement of the supporting member 10 is connected to the supporting member 10. The mechanism 21 may be spaced from the hinge member 23, placed e.g. in the lower corner of the panel 2.

[0047] The mechanism 21 is controlled by a pull wire 25, a chain, or a cord. Said wire 25 is connected to a handle part 27 as shown in Fig. 1, whose movement will activate the mechanism 21 and shift the supporting member 10. The supporting member 10 may be configured to reversibly shift outwards by itself, for example assisted by a force generated by a spring in the mechanism 21.

[0048] In Fig. 5, the panels 1, 2 and 12 are shown in the closed position, aligned with the lower profile 5. The supporting member 10 is fastened to the frame member 8 of the panel 1, for example underneath the frame member 8 or at its lower edge. The supporting member 10 is in a position in which it extends further from the vertical edge of the panel 1 in the longitudinal direction of the lower profile 5 and in the direction determined by the plane of the panel 1. The reach of the supporting member 10 is configured such that it extends to the next adjacent panel 12 and may engage it.

[0049] The supporting member 10 engages the adjacent panel 1, 12 or the frame member 8 therein, for example via an end connector or cover in the frame member 8. In the example shown in Fig. 5, the supporting member 10 extends outward below the adjacent panel 1, 12 and its frame member 8 when the panel 1, 12 is in the position of use, and engages the hinge member fastened to the frame member 8.

[0050] The supporting member 10 may be fixed to the frame member 8. In the situation of Fig. 3, in which the panel 2 is open, the whole panel 1 may be shifted along the lower profile 5 so

that the supporting member 10 may be released from the adjacent panel 12 (see Fig. 5), its frame member 8 or the hinge member 7 (see Fig. 7).

[0051] In an example, the supporting member 10 of the panel 1 is manually movable back and forth or inwards, or movable outwards by e.g. a spring force, as described above.

[0052] Figure 6 shows a supporting member 10 according to an example. The supporting member 10 comprises a frame 16 which is placed under a frame member on the panel and fastened to the lath. The frame 16 of the supporting member 10 comprises one or more connecting and fastening elements 18, by which the supporting member 10 is fastened to the panel in an either movable or immovable way. The connecting and fastening element 18 may be an integral part of the frame 16 or a separate element fastened to the frame 16. In the example shown in Fig. 6, the supporting member 10 comprises at least two connecting and fastening elements 18 spaced from each other and configured to be placed in a groove in the frame member, where they are movable or stationary.

[0053] As shown in Fig. 4, the frame member 8 for the panel may comprise a groove 13 that opens upwards when the frame member 8 is in the position of use and is fastened to the panel. The frame member 8 comprises a groove 11 for the supporting member 10, which groove opens downwards in said position of use. The connecting and fastening element 18 of the supporting member 10 is received in the groove 11.

[0054] In the example shown in Fig. 6, the supporting member 10 comprises one or more brake elements 20 by which the supporting member 10 can be locked to be immovable in the frame member. In the example shown in Fig. 6, the brake element 20 comprises a screw provided in the frame 16, the end of the screw being placed and tightened against the frame member when screwed up. The end of the screw is placed against the bottom of the groove 11 of the frame member 8 shown, for example, in Fig. 3.

[0055] In the example shown in Fig. 6, the supporting member 10 further comprises a supporting element 17 formed as an extension to the frame 16 and engaging the adjacent panel or a frame member thereon, for example via an end connector or cover on the frame member.

[0056] The supporting element 17 according to the examples of Figs. 6 and 7 extends outwards below the adjacent panel 12 and its frame member 8, and engages the hinge member 7 fastened to the frame member 8, as presented above.

[0057] In the example shown in Fig. 6, the supporting element 17 is equipped with a recess 19 for the hinge member 7 or a part thereof. The recess 19 opens in the direction of the adjacent panel 12 and its hinge member 7. The panel 12 can be opened by pivoting it about a vertical rotation axis X3. The function of the panel 12 and its parts corresponds to the function of the panel 1. The hinge member 7 of the panel 12 or a part thereof is received in the recess 19 when the panel 12 moves along the lower profile towards the panel 1, or *vice versa*. In an

example, the supporting element 17 is forked or comprises two substantially parallel protrusions forming the recess 19 between them. Said protrusions extend towards the hinge member 7 of the adjacent panel 12, aligned with the frame member 8.

[0058] In an example, the frame 16 corresponds to the frame member 8 in its width. In an example, the width of the supporting member 17 is greater than that of the frame member 8.

[0059] Figure 7 shows a more detailed view of the fastening of the supporting member 10 under the frame member 8 and the engagement of the supporting member 17 with the panel 12, particularly the hinge member 7 of the panel 12. The hinge member 7 comprises an axle journal 14 which supports the panel 1 when pivoted. The hinge member 7 may comprise a locking element 15 by which the hinge member 7 is locked to the hinge member of the adjacent panel. Figure 7 does not show the lower profile in which the hinge member 7 is partly placed. The locking element may be entirely within the lower profile. The locking element 15 and the other locking elements mentioned above utilize the locking of said e.g. rotatable axle journal 14 to the shape, recess or slot in the locking element 15. The supporting member 10 of Fig. 7 is coupled to the frame member 8 to be preferably immovable.

[0060] Figure 8 shows a more detailed view of the fastening of the supporting member 10 underneath the frame member 8 in a movable way, and the engagement of the supporting member 17 with the panel 1, particularly the hinge member 7 of the panel 1, in a way corresponding to Fig. 7. What has been described above, applies to the movable supporting member 10 as well. Figure 8 does not show the lower profile inside which the hinge member 7 is placed.

[0061] In the example shown in Fig. 8, the supporting member 10 comprises a counterpart 24. The counterpart 24 is preferably a separate part to be fastened to the frame 16 of the supporting member 10, and via which the supporting member 10 is movable. The counterpart 24 may extend from the frame member 8 in the lateral direction and curve upwards to extend in parallel with the frame member 8, if necessary. The counterpart 24 is connected to the mechanism 21 which moves the supporting member 10. In Fig. 8, the mechanism 21 is shown in the open position, the cover removed, for the sake of illustration. What has been described above, applies to the mechanism 21 as well. The mechanism may be fastened to the frame member 8.

[0062] In the example shown in Fig. 8, e.g. the pulling force of the wire 25 turns a lever mechanism 26 in the mechanism 21 to engage the counterpart 24 and to push the supporting member 10 inwards by means of the counterpart 24. In an example, the lever structure 26 can also be turned by applying a pivotable or rotatable handle or knob, as an alternative or in addition to the wire 25. In an example, the handle part 27 is part of the mechanism 21. The supporting member 10 may be reversed and shifted outwards by e.g. a spring force.

[0063] The upper profile 4 and/or the lower profile 5, or the frame member 8 and/or the frame member 9 are, in an example, made of aluminium or an aluminium mixture and have a

continuous or elongated shape. Other materials and metals are also feasible.

[0064] The hinge member 22, 23, 6, and 7, the guide member 3, the supporting member 10 are preferably pieces made of a plastic material, and other materials, such as metals, can be used as well.

[0065] In an example, the panel is made of tempered glass. Other glass materials and sheet-like materials may be used as well. The panel is preferably transparent, but opaque panels are also feasible.

[0066] The different embodiments of the presented solution are disclosed in the appended claims.

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- EP1149222A1 **[0007]**
- WO2011135131A1 **[0008]**
- US3654732A **[0008]**

PATENTKRAV

1. Et panelsystem omfattende:

- et første panel (2), der kan åbnes;
 - 5 - et sekundært panel (1), der kan åbnes og flyttes
 - en nedre profil (5) og en øvre profil (4), som i det væsentlige er parallelle med hinanden, og mellem hvilke første og sekundære paneler kan placeres efter hinanden, og hvortil første og sekundære paneler (1, 2) er forbundet til åbning ved at dreje omkring en lodret rotation akse eller til flytning langs de
 - 10 nedre og øvre profiler, eller begge, de første og sekundære paneler er indbyrdes parallelle, når de er lukket, og
 - et understøtningsselement (10), der fastgjort til det første panel og placeret ved den nedre profil (5), idet understøtningsselementet er konfigureret til at gå i indgreb med det nærliggende sekundære panel for at understøtte det første
 - 15 panel;
- kendetegnet ved, at**
- understøtningsselementet (10) er adskilt fra den nedre profil og konfigureret til at gå i indgreb med det nærliggende sekundære panel (1) på en udløselig måde og er bevægeligt forbundet med det første panel (2) på en sådan måde,
- 20 at understøtningsselementet fastgøres til panelet (2) på en bevægelig måde, at understøtningsselementet kan forskydes indad for at frigøre det fra det nærliggende sekundære panel og udad for at engagere det nærliggende sekundære panel;
- en mekanisme (21) er forbundet med understøtningsselementet (10), hvilken mekanisme genererer den indadgående bevægelse af understøtningsselementet og er styrbar ved hjælp af en trækwire (25), kæde, eller ledning; og
- 25 - panelet (2) er udstyret med en håndtagsdel (27), hvortil wire, kæde eller ledning er forbundet, og hvis bevægelse er konfigureret til at aktivere mekanismen og til at skifte understøtningsselementet.

30

2. Panelsystemet ifølge krav 1,

- hvor understøtningselementet (10) omfatter en ramme (16) og et understøtningselement (17) udformet som en forlængelse af rammen og omfattende en fordybning (19) til at engagere det sekundære panel og til modtagelse af en del af det sekundære panel; og
- 5 - hvor det første panel (2) omfatter et rammeelement (8), der er fastgjort til den nedre kant af det første panel (2), og hvortil understøtningselementet (10) er fastgjort.

3. Panelsystemet ifølge krav 2,

- 10 - hvor understøtningselementet (17) er gaffelformet eller understøtningselementet omfatter to tilnærmelsesvis parallelle fremspring, mellem hvilke nævnte fordybning (19) er udformet.

4. Panelsystemet ifølge ethvert af kravene 1-3,

- 15 - hvor understøtningselementet (10) omfatter en modpart (24); og
- hvor mekanismen (21) omfatter en håndtagsstruktur (26), der er konfigureret til at blive drejet ved trækraften fra wiren (25), kæde eller ledning, og som er koblet til modparten og konfigureret til at skubbe understøtningselementet indad via modparten.

20

5. Panelsystemet ifølge ethvert af kravene 1-4,

- hvor understøtningselementet (10) er konfigureret til at skifte udad af sig selv på en reversibel måde.

25 6. Panelsystemet ifølge ethvert af kravene 1-5,

- hvor understøtningselementet (10) er konfigureret til at blive placeret i sin helhed i et niveau højere end det nedre profil (5), når det første panel er i dens brugsstilling.

30 7. Panelsystemet ifølge ethvert af kravene 1-6,

- hvor understøtningselementet (10) for at engagere det sekundære panel er konfigureret til at forlænges yderligere i langsgående retning af den nedre profil (5) end den lodrette kant af det første panel.

DRAWINGS

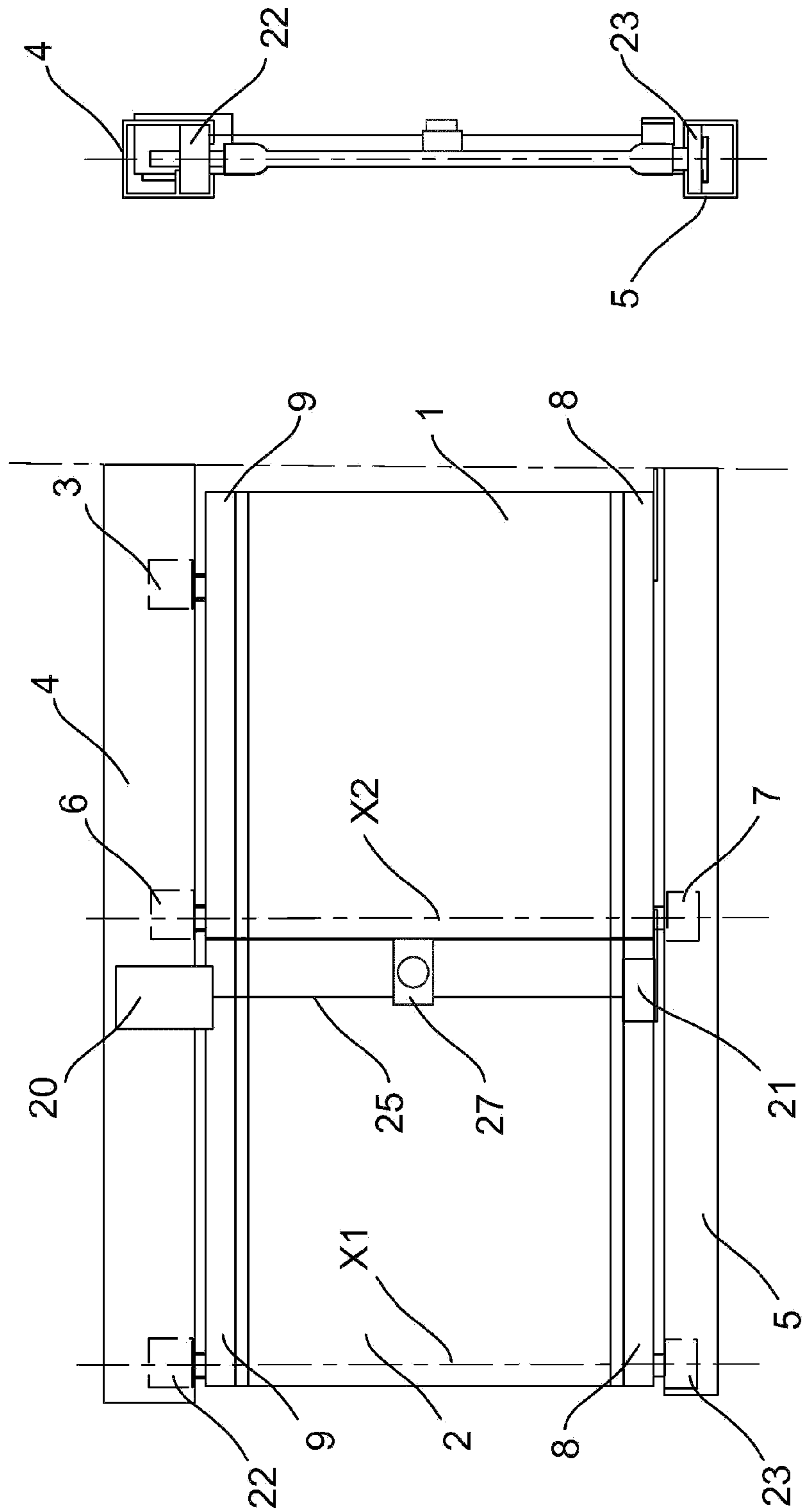


Fig. 2

Fig. 1

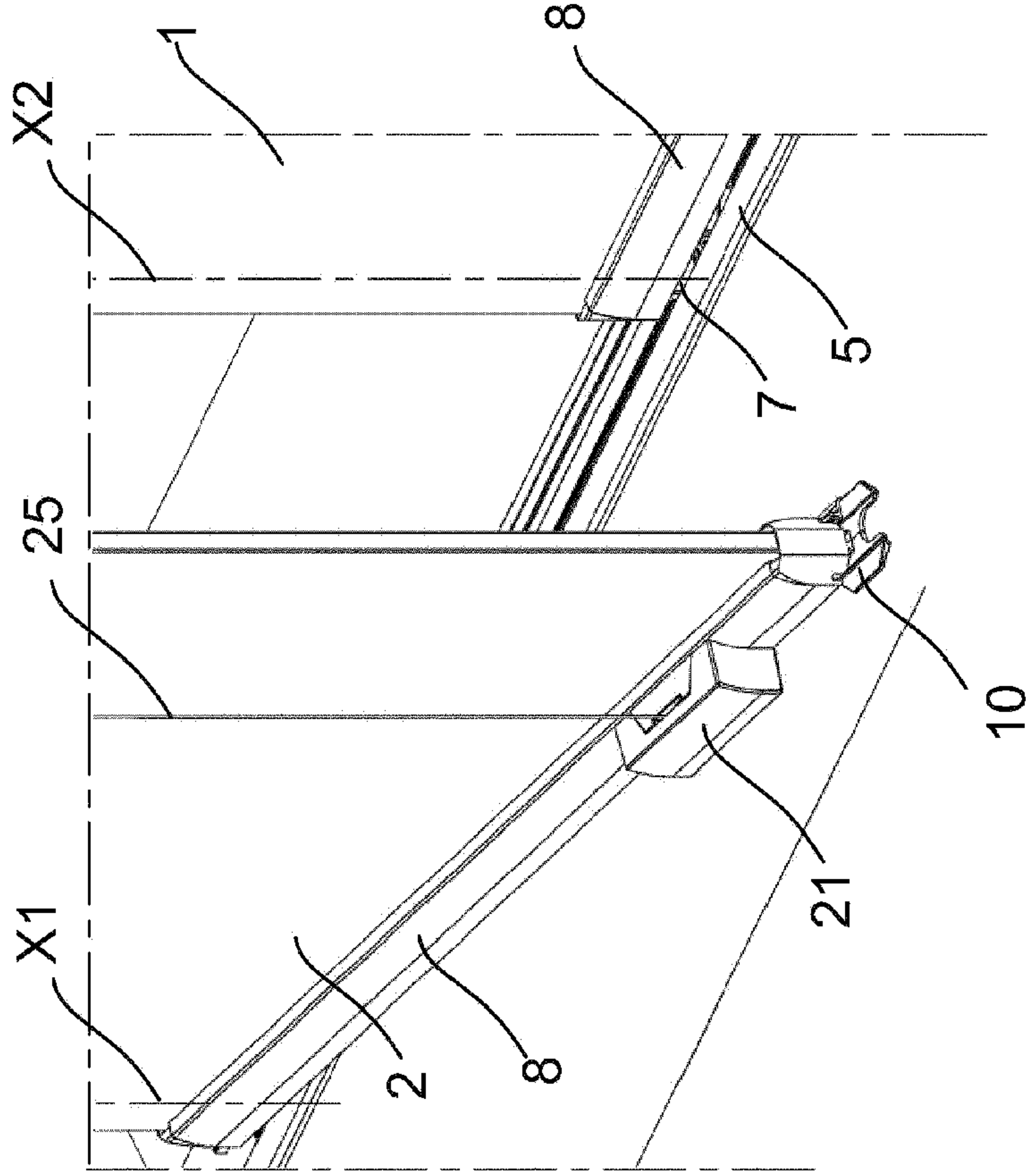


Fig. 3

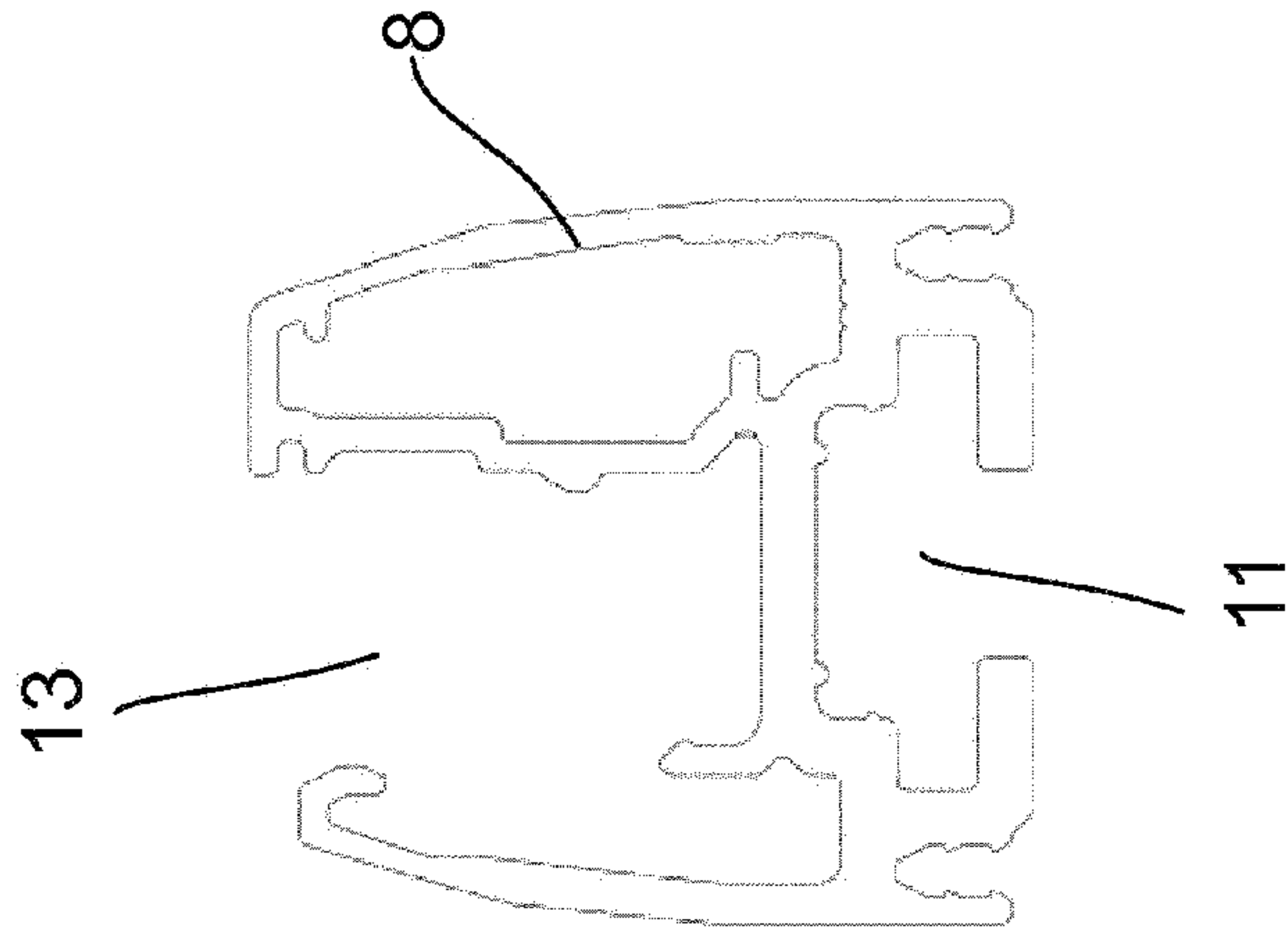


Fig. 4

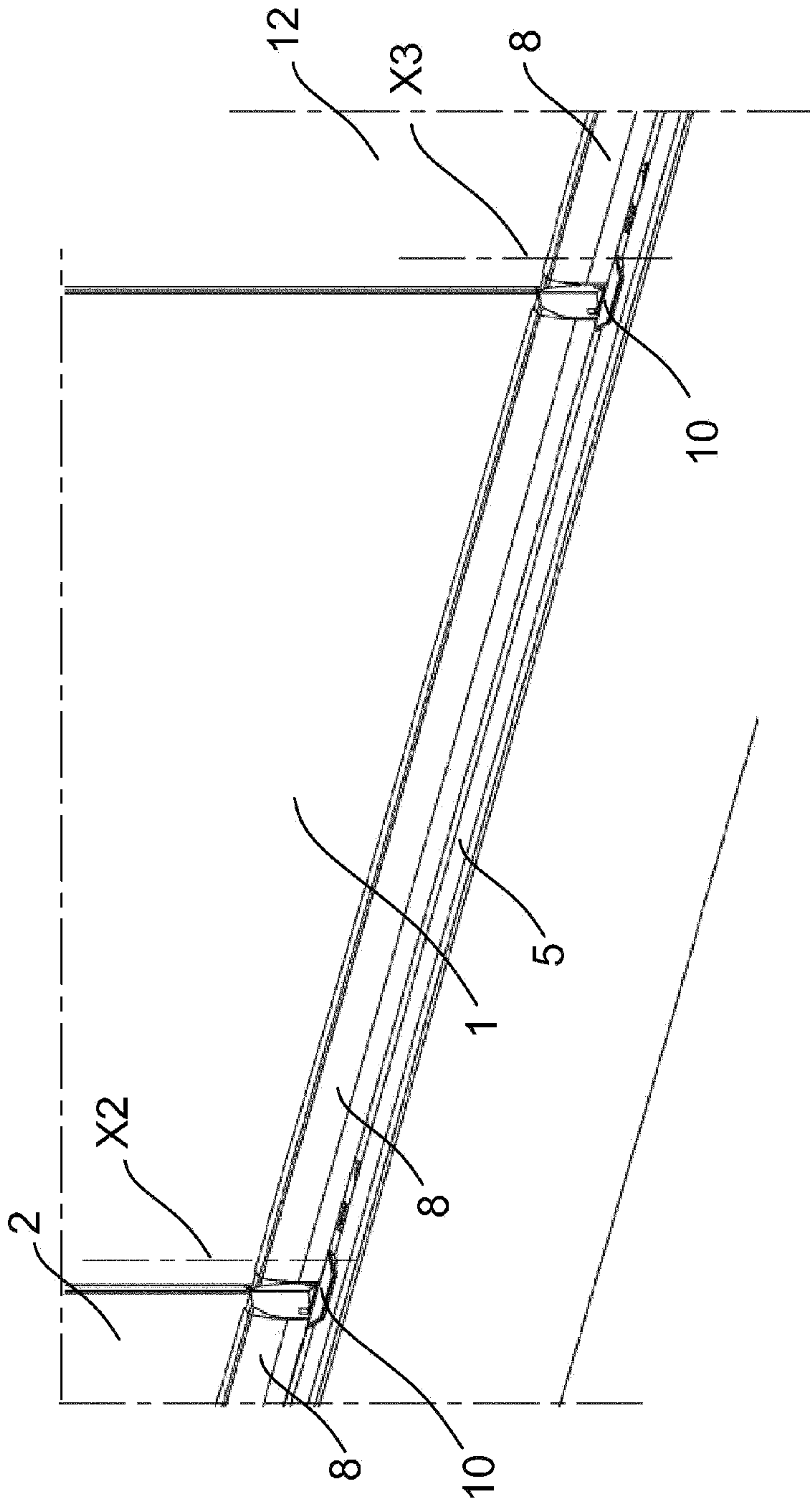


Fig. 5

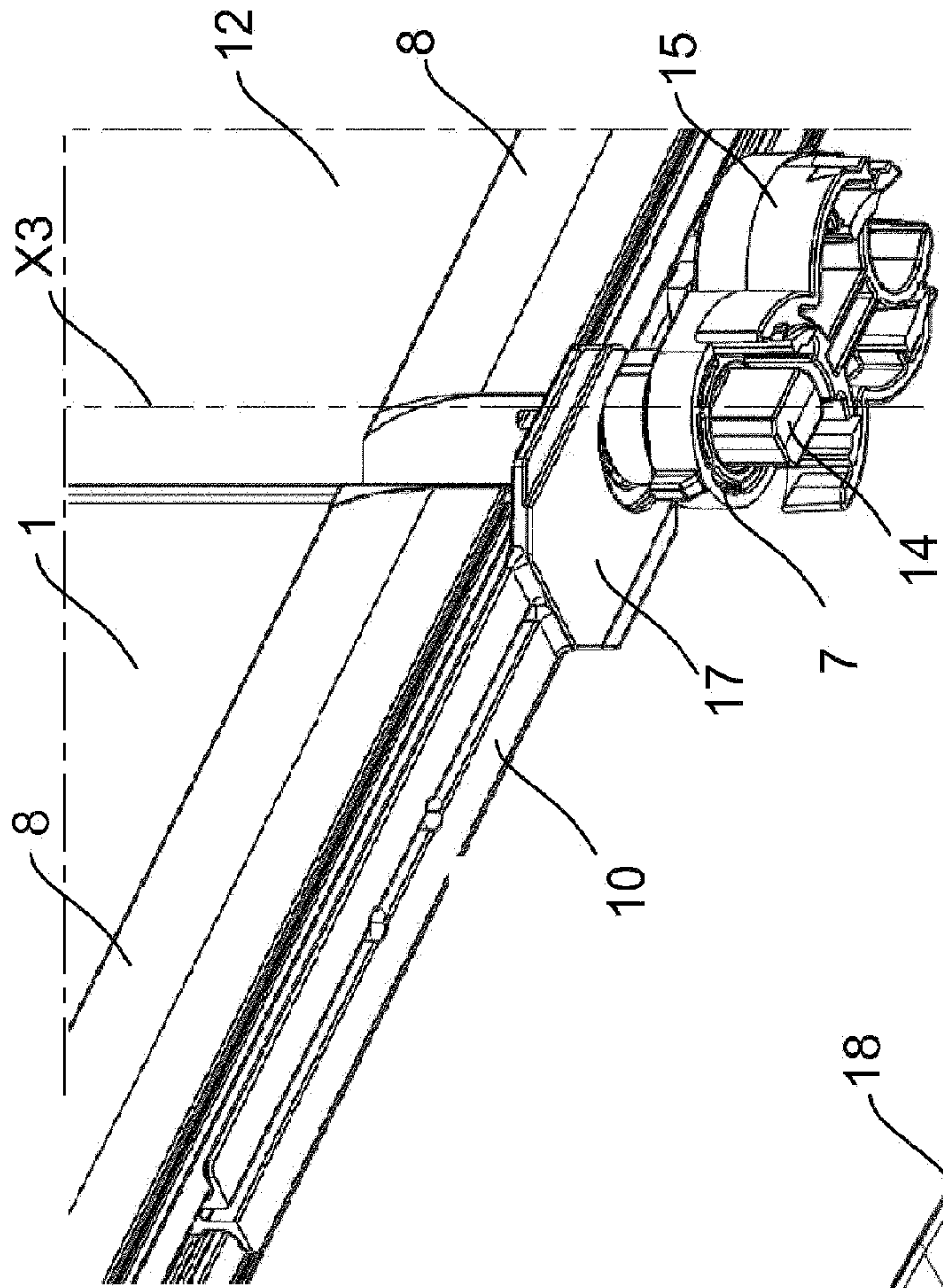


Fig. 7

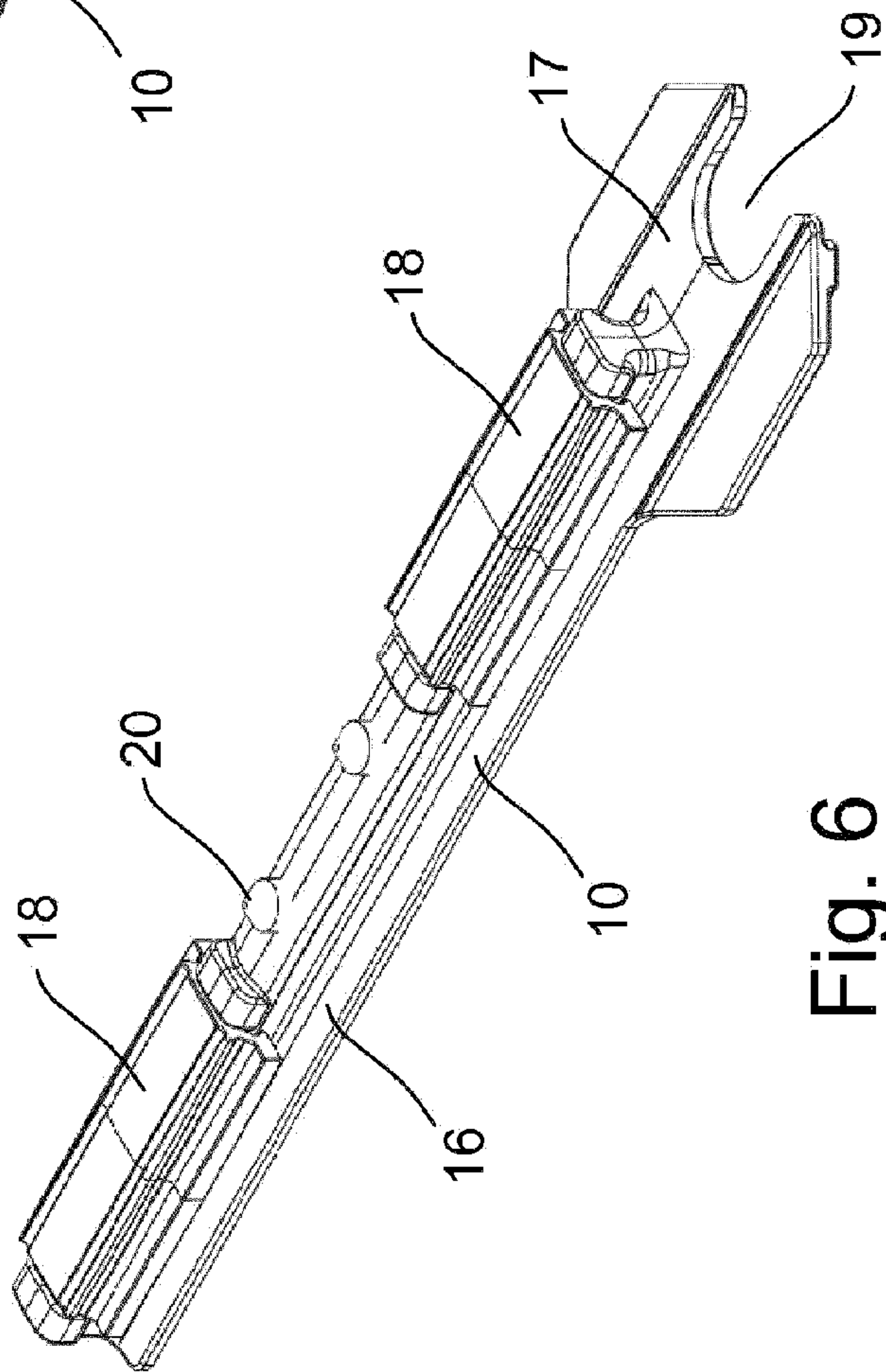


Fig. 6

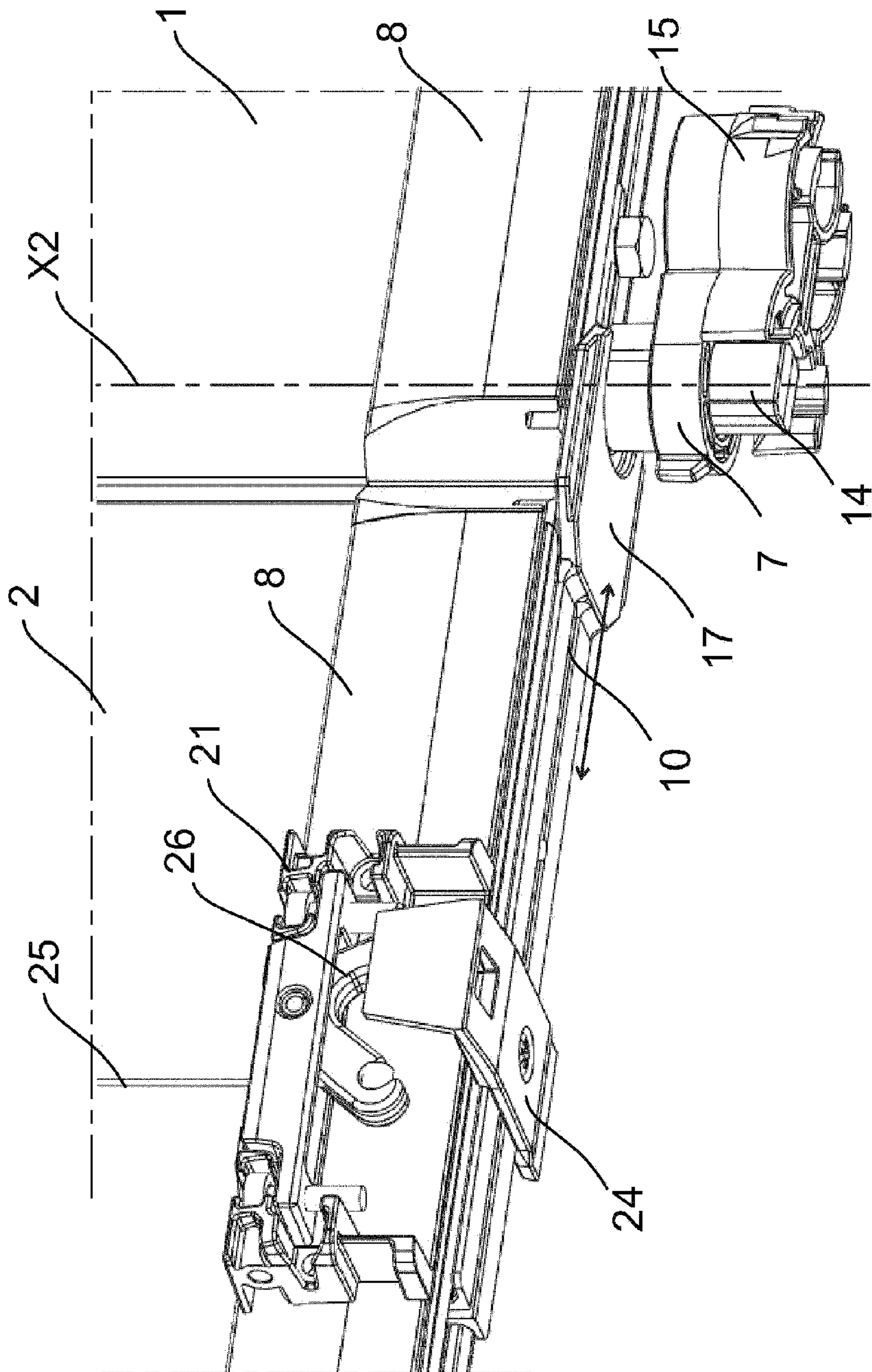


Fig. 8