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(54) **DECORATIVE STRUCTURE, PANEL MATERIAL, AND METHOD FOR CONSTRUCTING DECORATIVE STRUCTURE**

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(57) **ABSTRACT**

A decorative structure includes: a plurality of base materials extending in a first direction and provided in parallel with each other at predetermined intervals in a second direction intersecting the first direction; and a plurality of panel materials, each of the plurality of panel materials being attached to two base materials adjacent to each other in the second direction among the plurality of base materials. Each of the plurality of base materials includes a protrusion protruding in the second direction. Each of the plurality of panel materials includes a body including an outer edge portion having a square shape in a plan view, and four legs provided along four sides of the outer edge portion. The panel material is attached by inserting the protrusion of one of the two base materials through an insertion hole provided in one of the four legs.

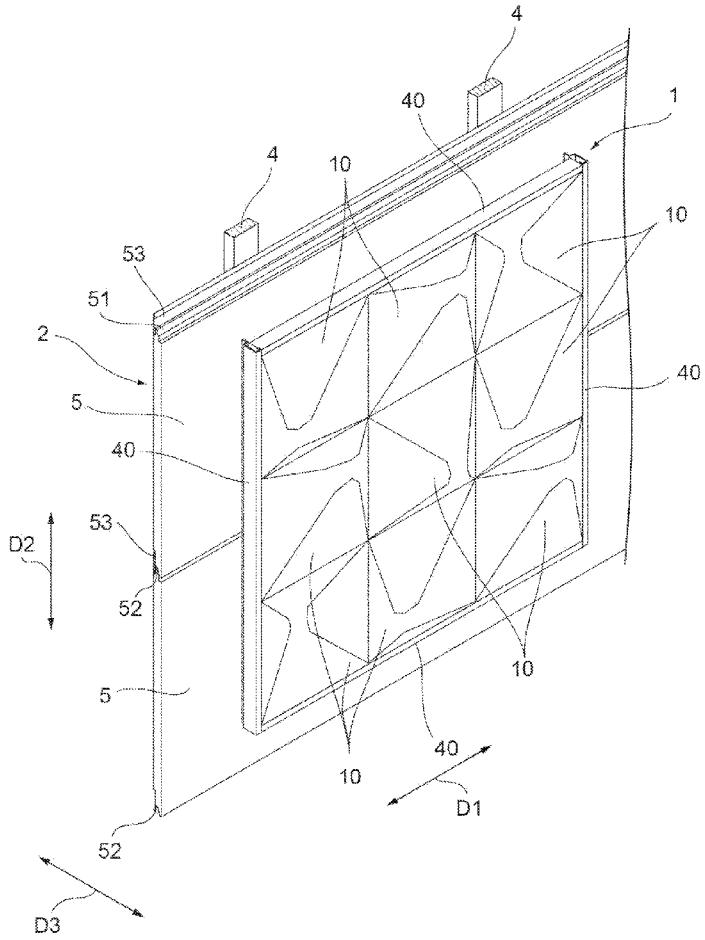


Fig.1

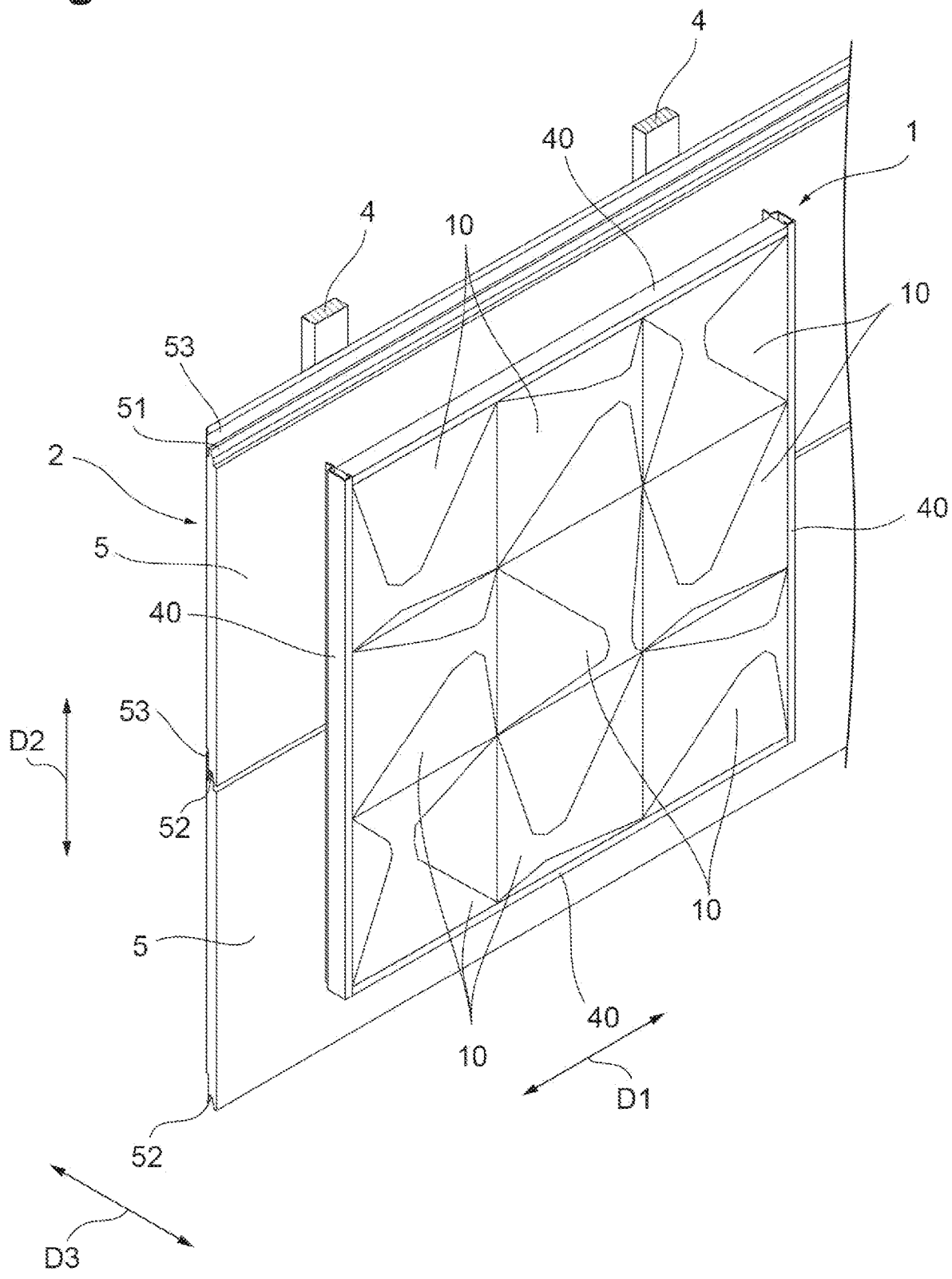


Fig.2

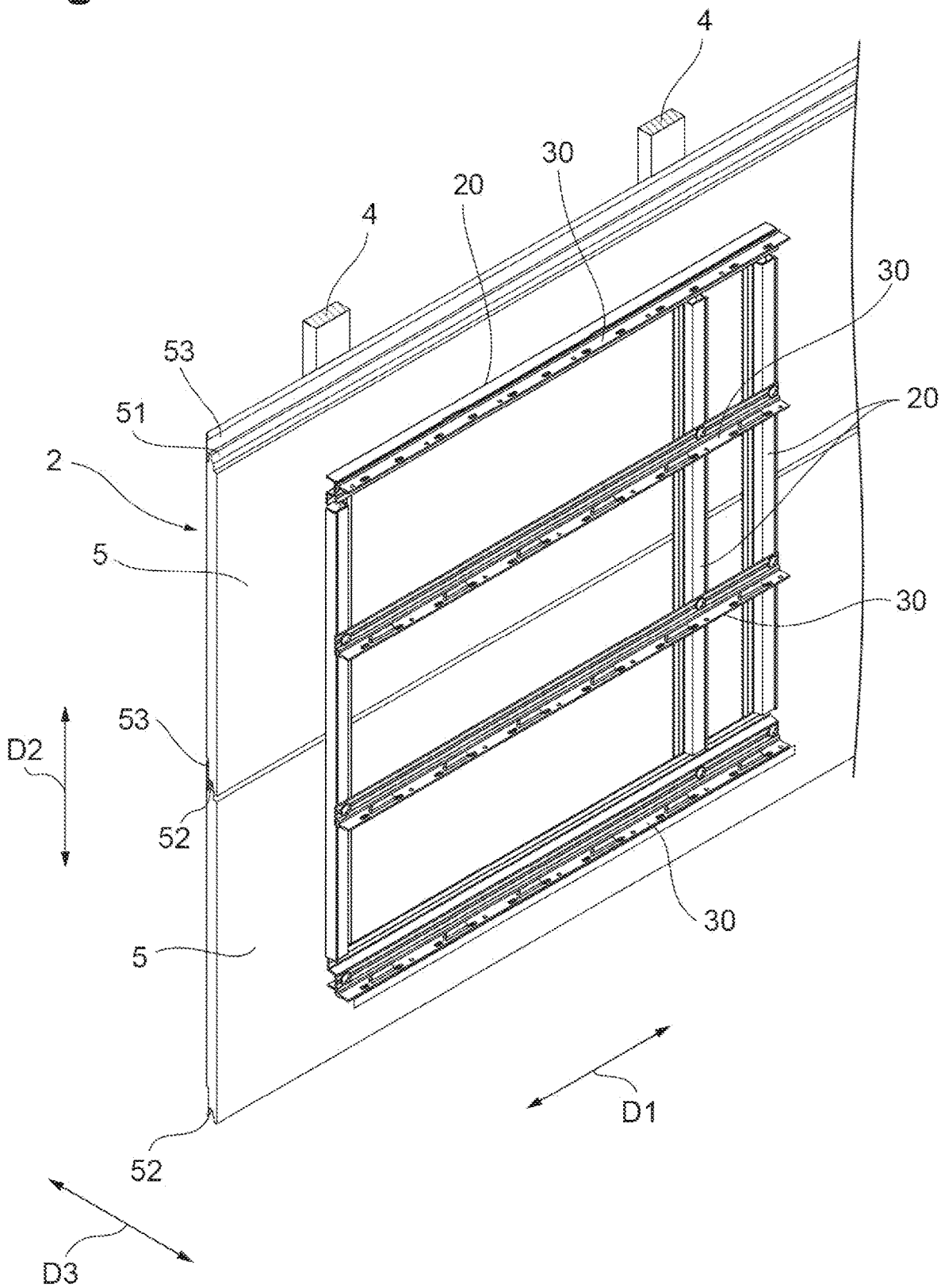
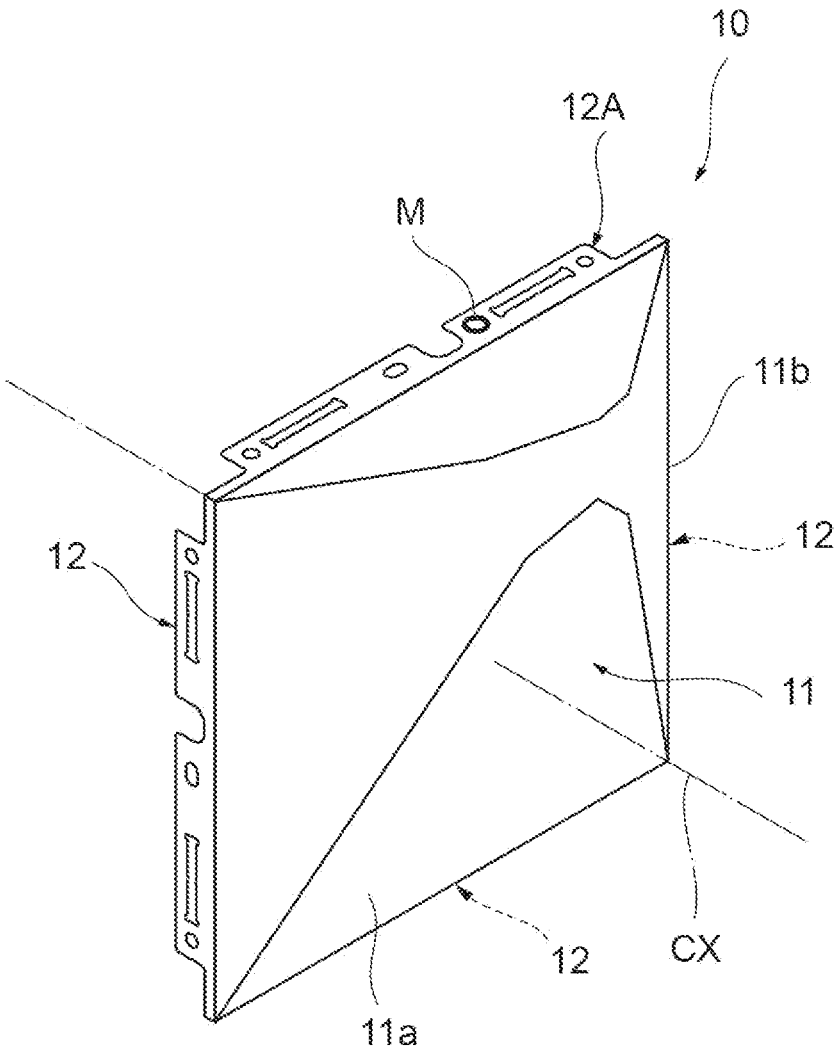


Fig.3



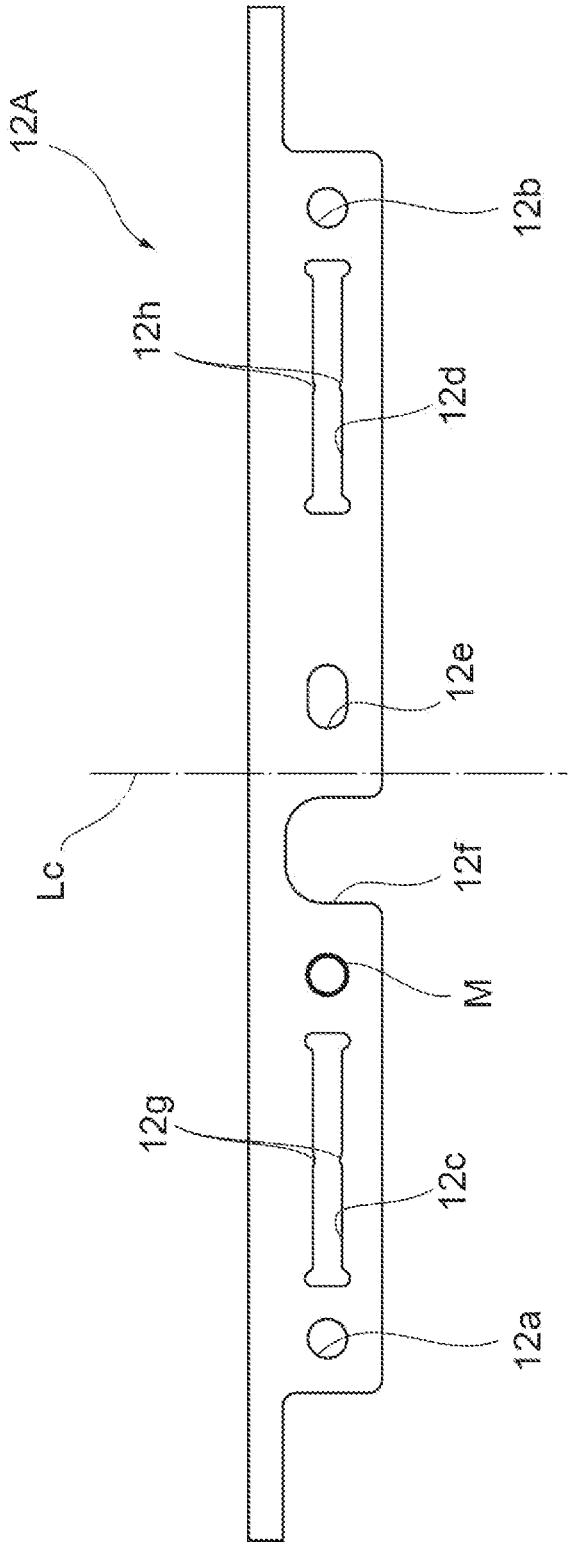


Fig.4

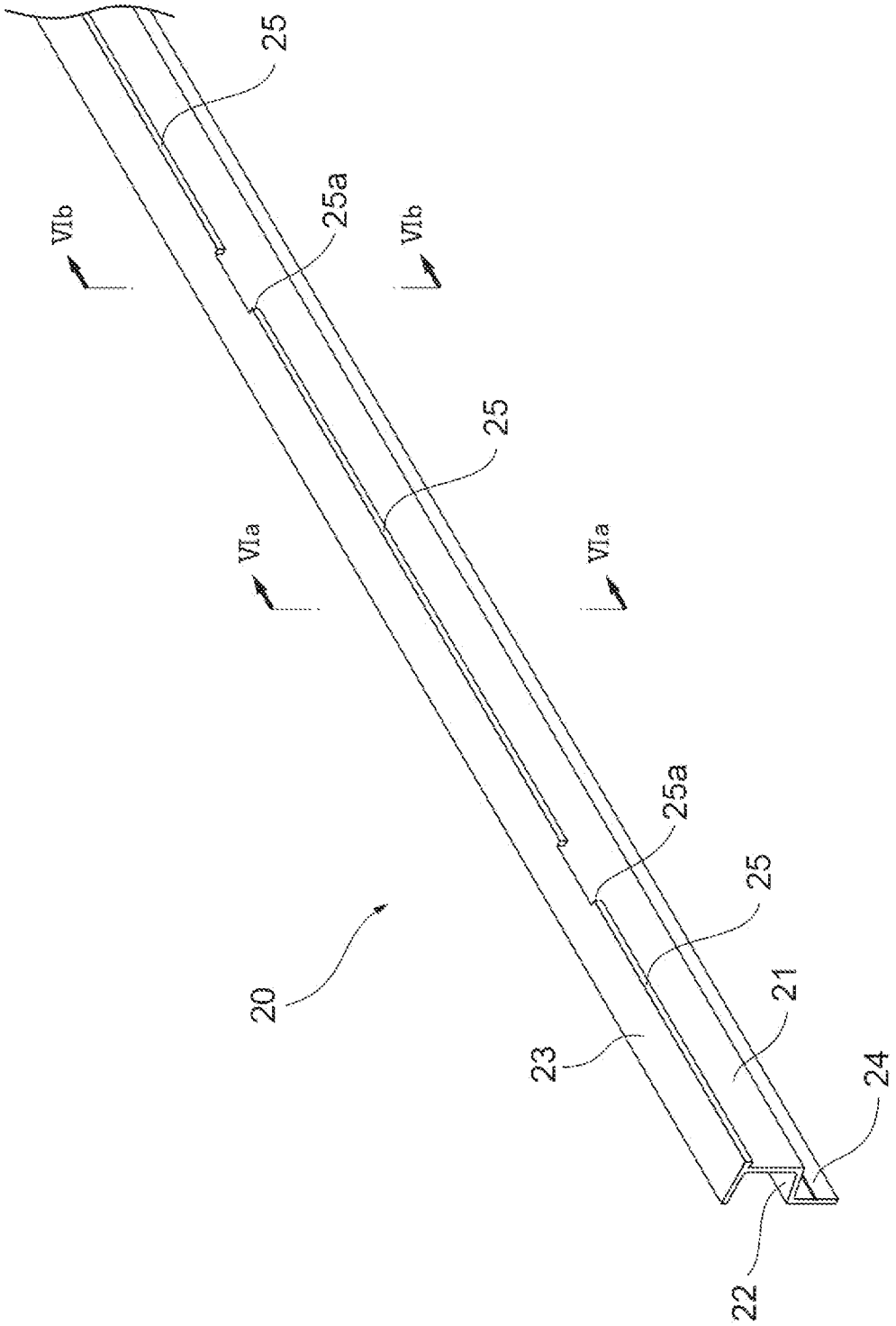
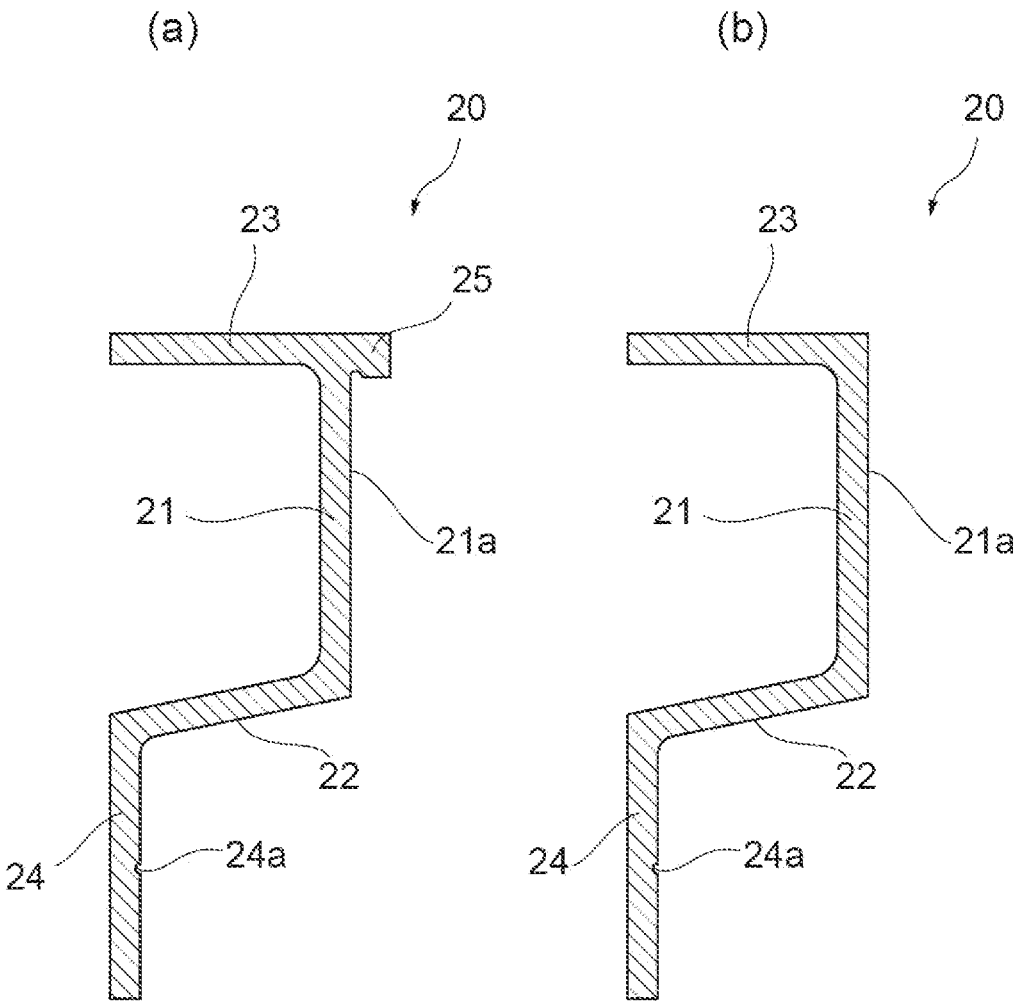


Fig.5

Fig.6



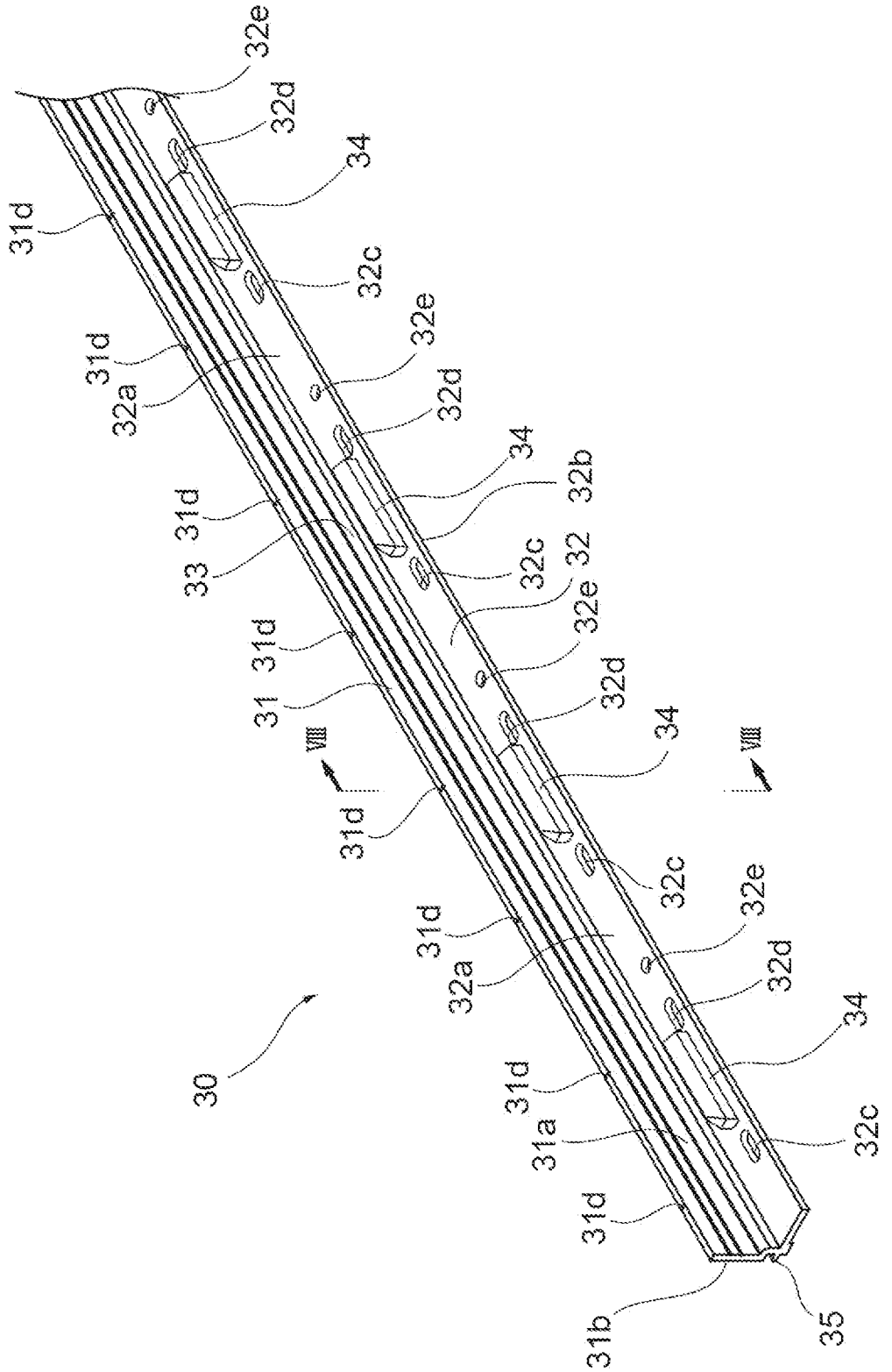
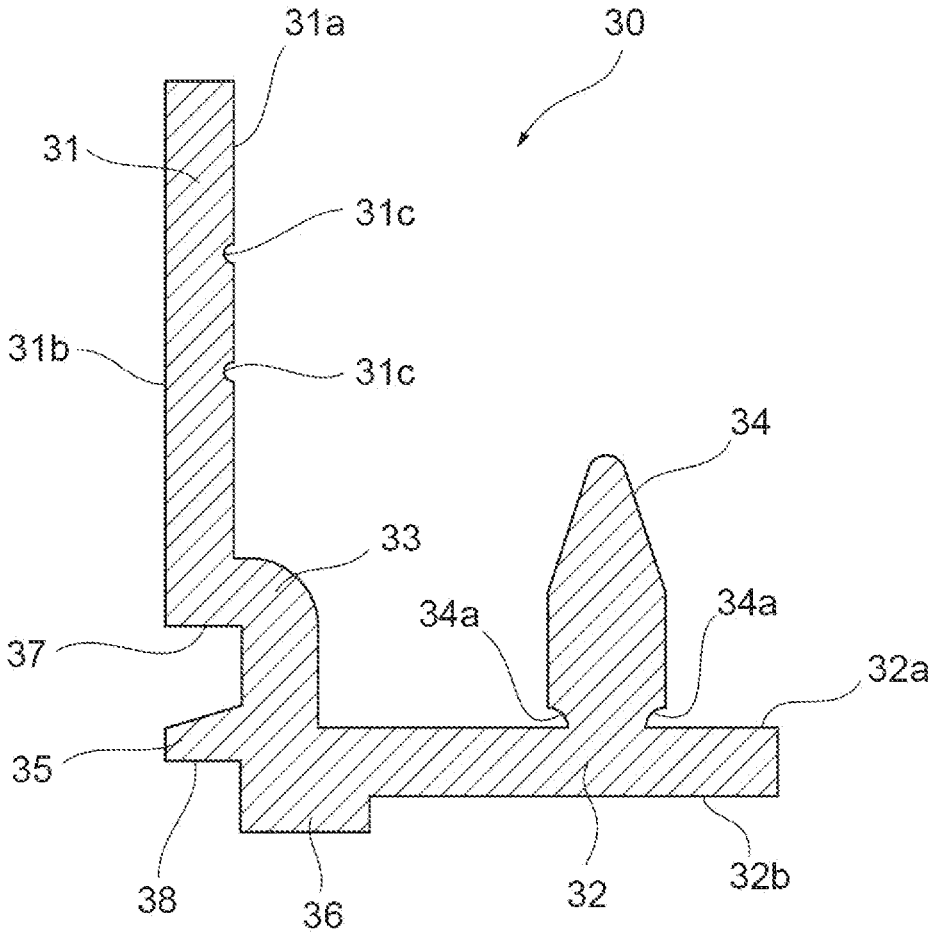


Fig.7

Fig.8



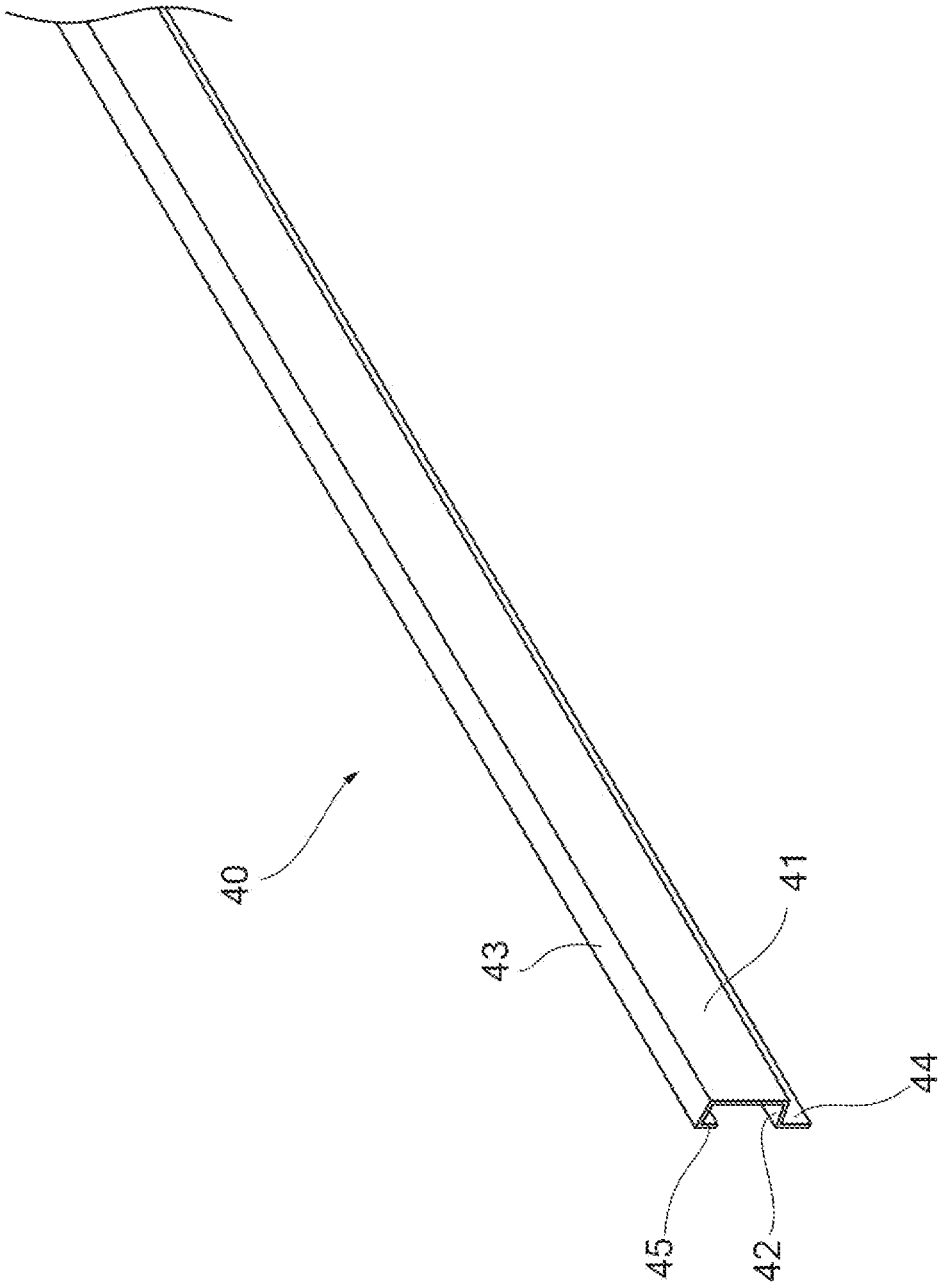


Fig.9

Fig.10

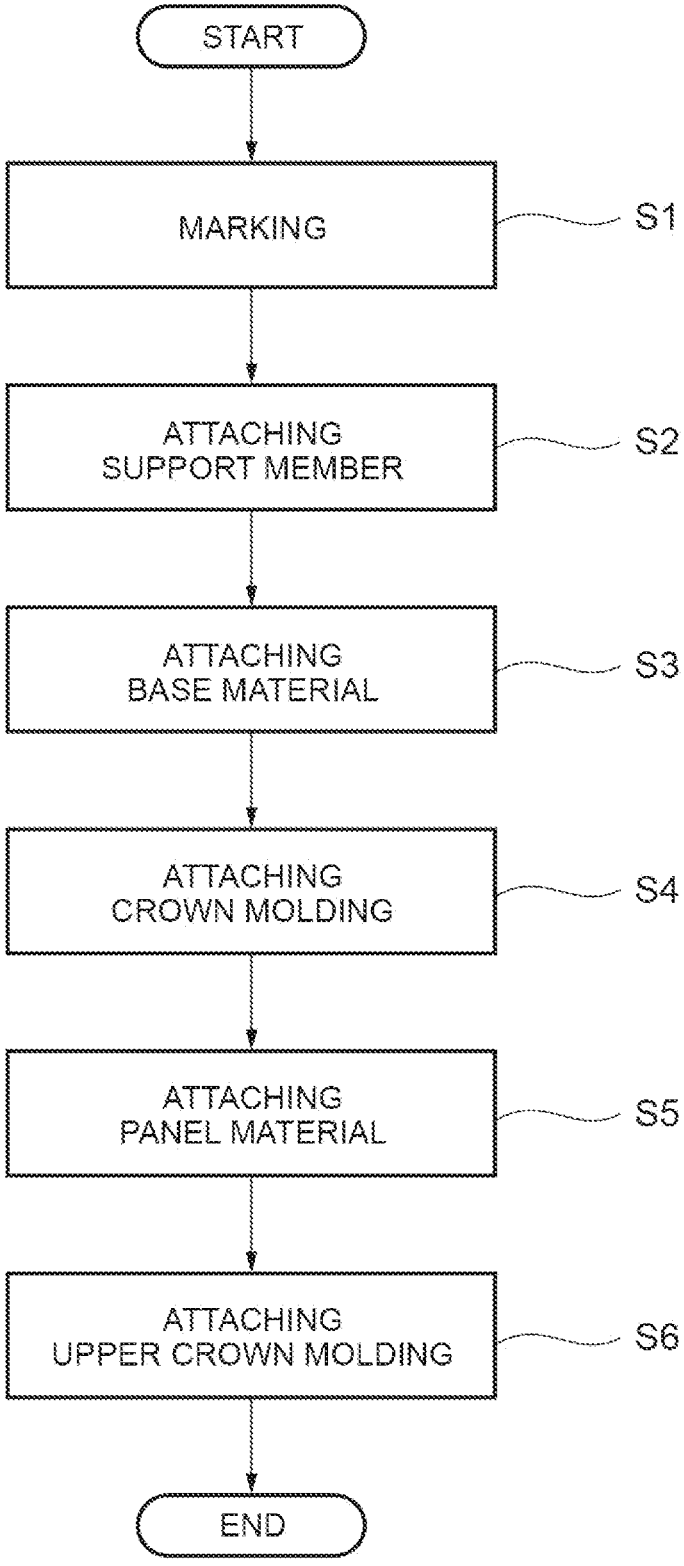

START
MARKING
S1
ATTACHING SUPPORT MEMBER
S2
ATTACHING BASE MATERIAL
S3
ATTACHING CROWN MOLDING
S4
ATTACHING PANEL MATERIAL
S5
ATTACHING UPPER CROWN MOLDING
S6
END

Fig.11

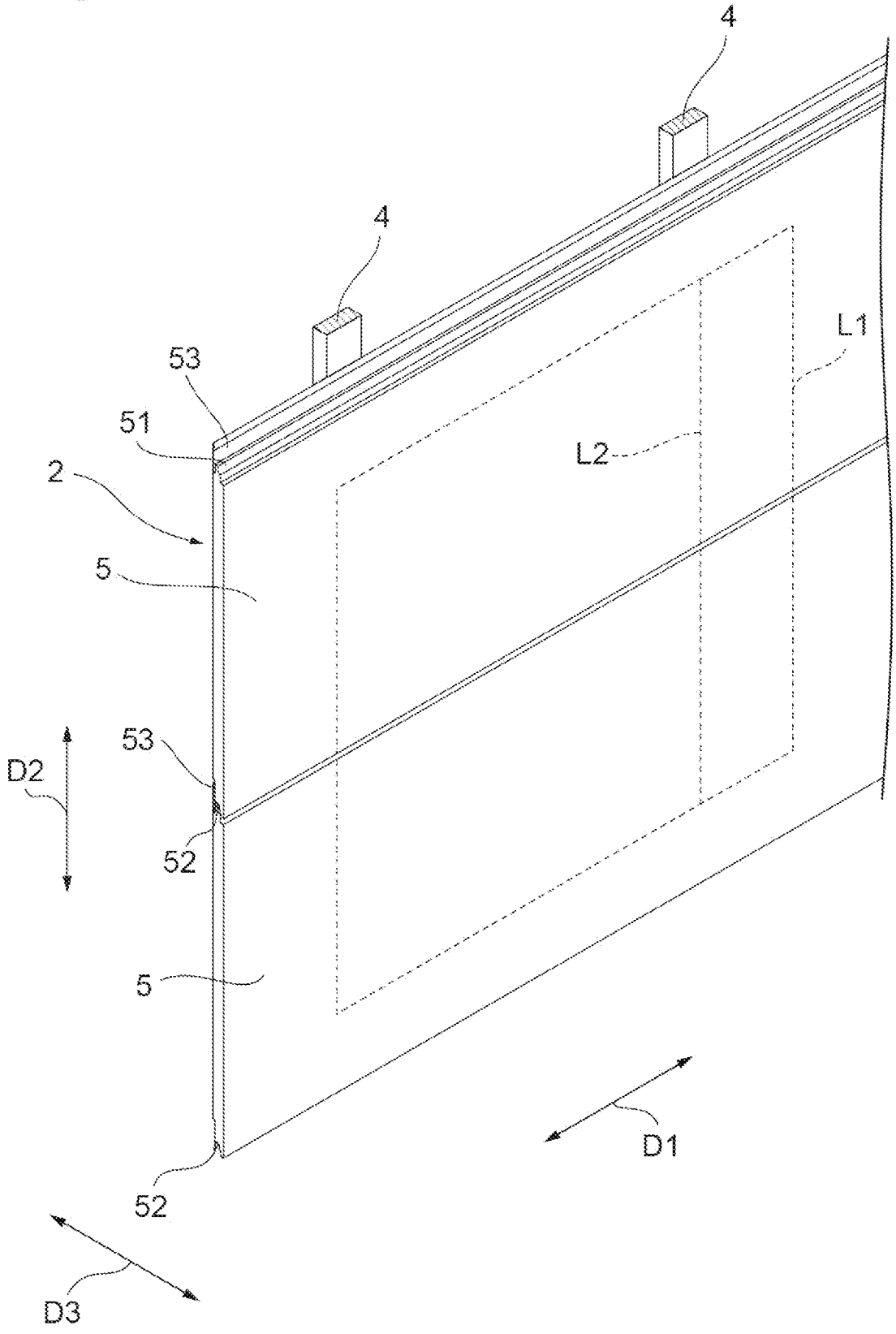


Fig.12

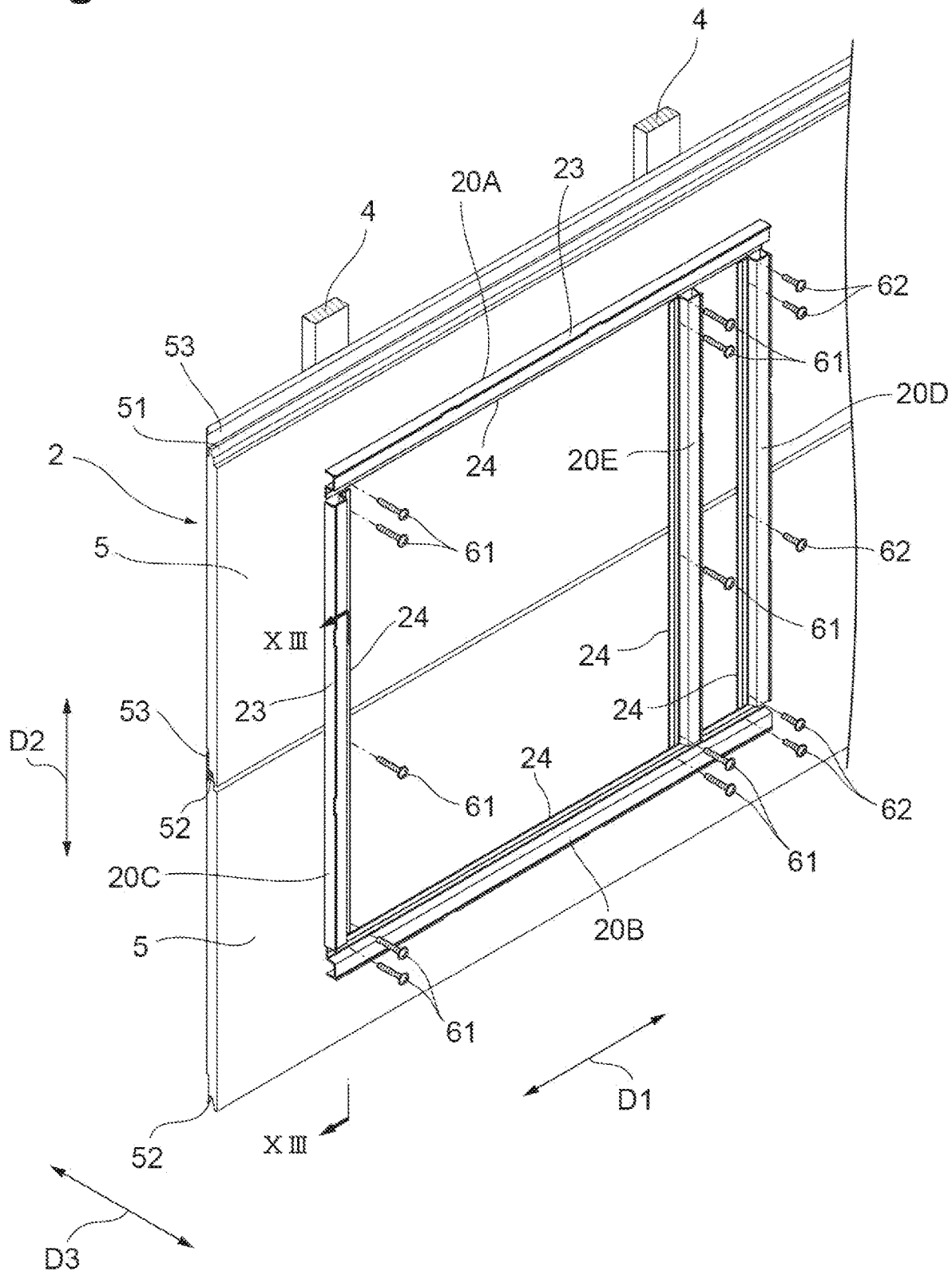

4
4
20A
23
53
62
61
51
20D
2
24
20E
61
62
5
XIII
24
61
24
24
53
23
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D2
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62
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61
20C
20B
5
61
D1
XIII
52
D3

Fig.13

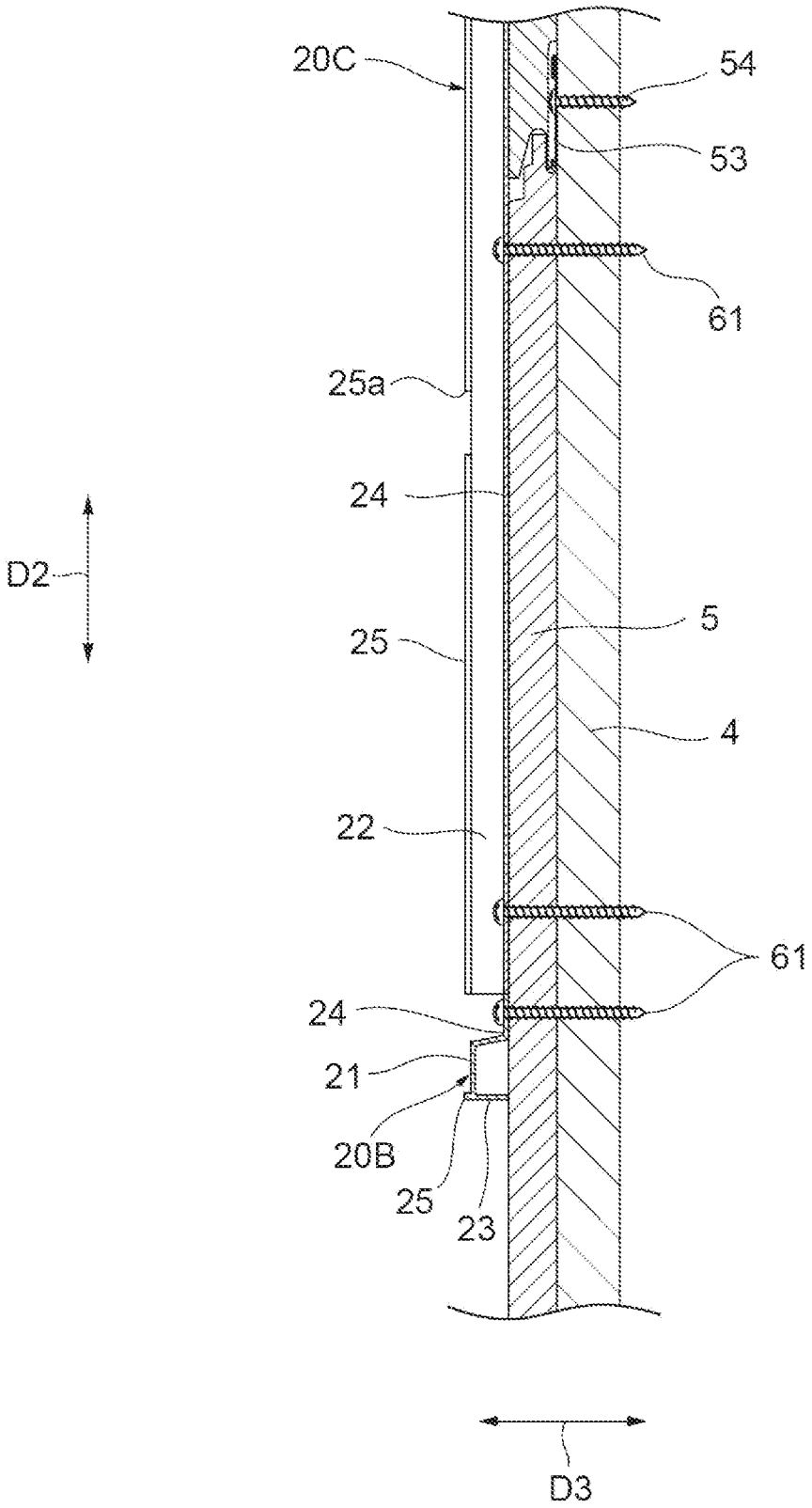


Fig.14

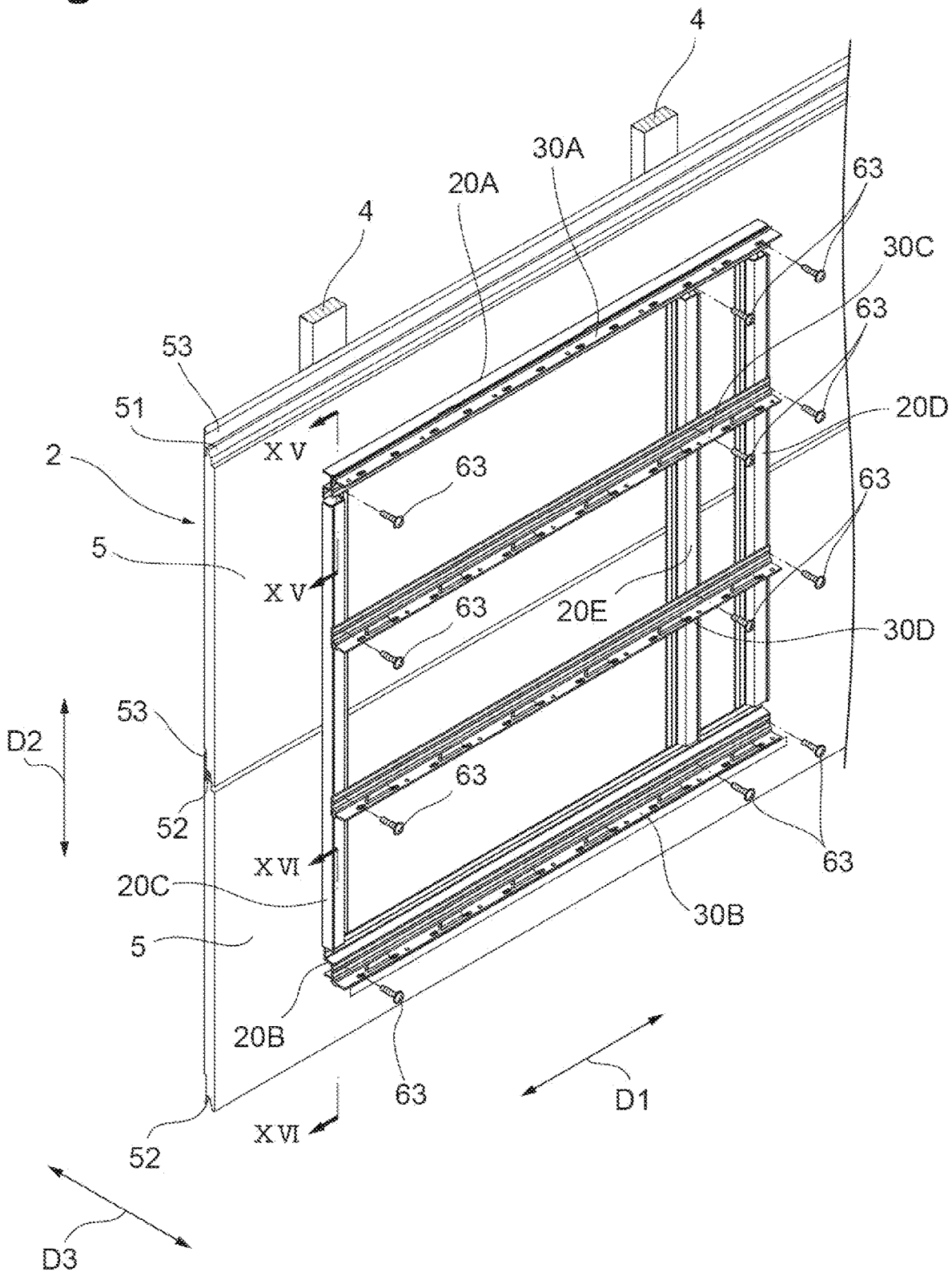

4
30A
20A
63
4
30C
53
63
51
20D
XV
2
63
63
5
XV
20E
63
30D
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XVI
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D1
XVI
52
D3

Fig.15

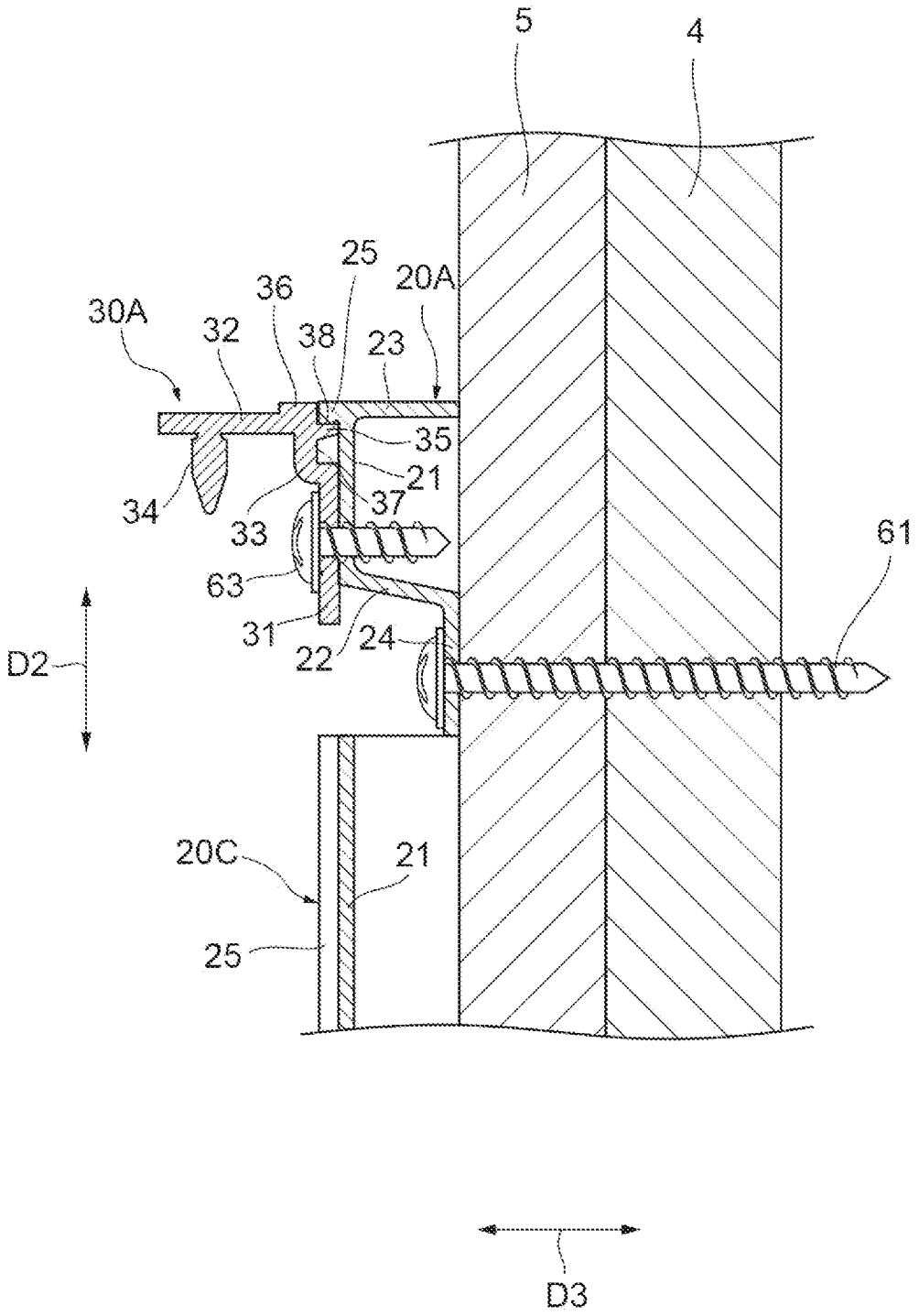


Fig.16

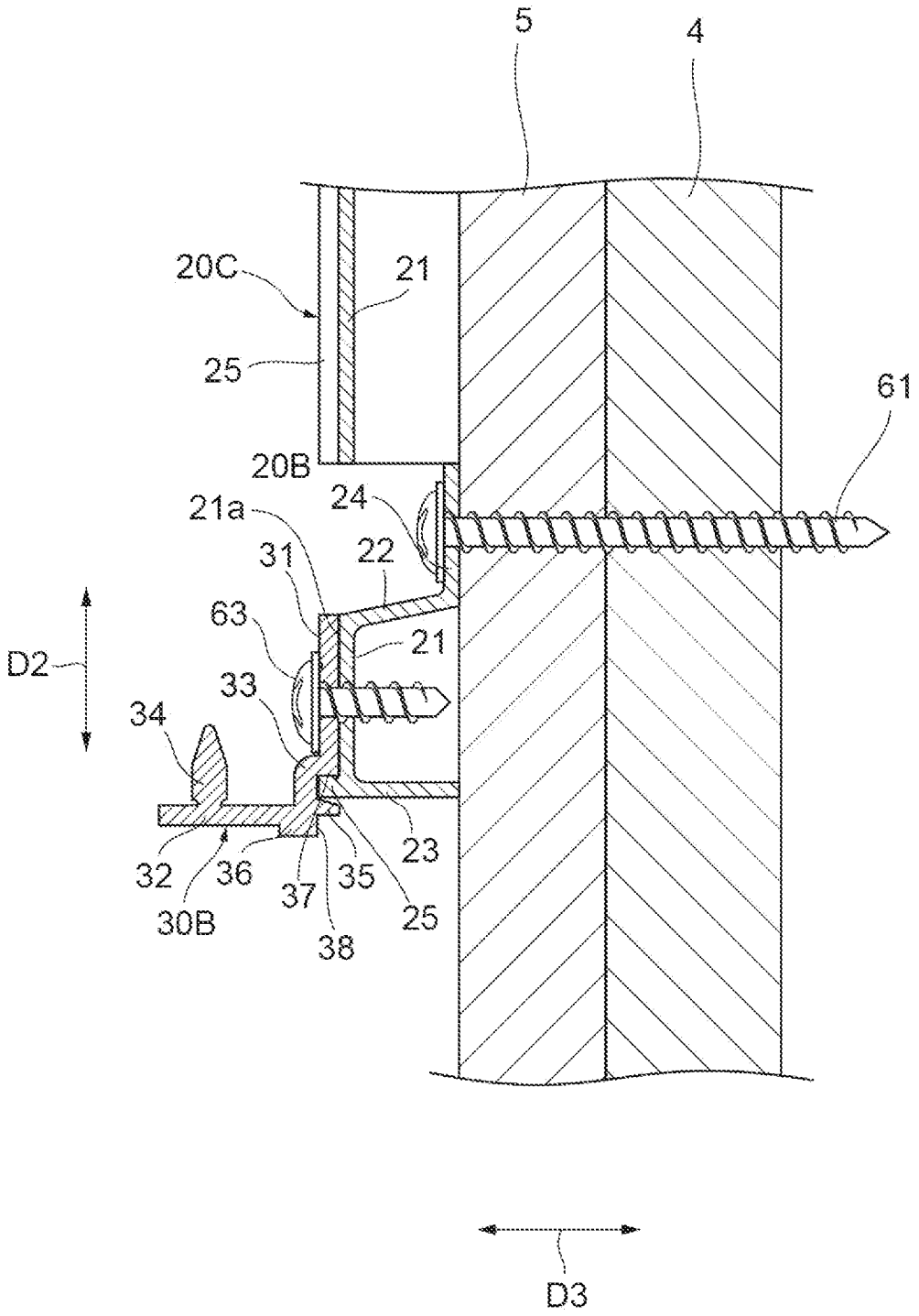

5
4
20C
21
25
61
20B
24
21a
22
31
63
21
D2
33
34
23
32
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25
30B
38
D3

Fig.17

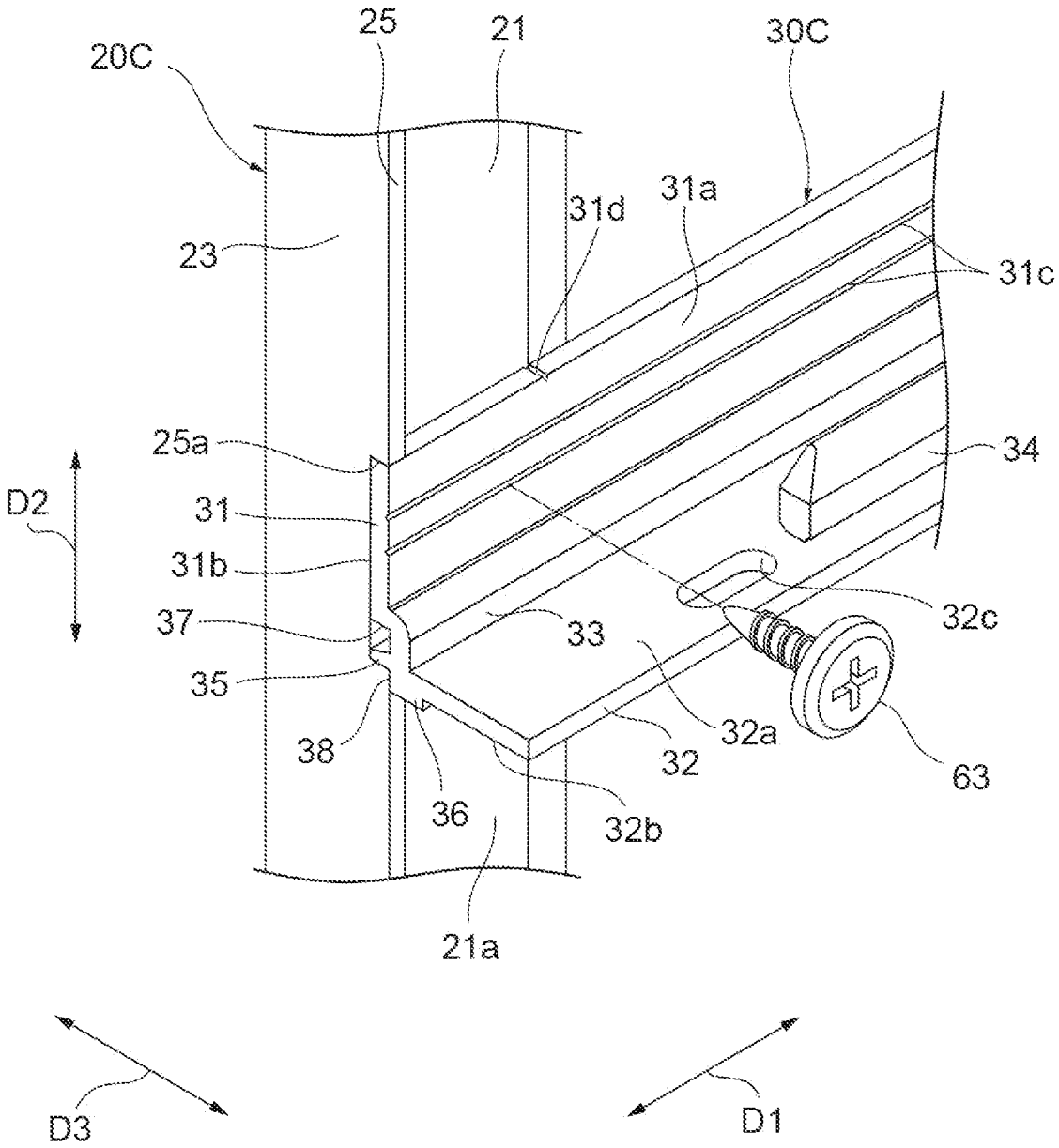

20C
25
21
30C
31a
31d
23
31c
25a
34
D2
31
31b
37
33
32c
35
32a
38
32
63
36
32b
21a
D3
D1

Fig.18

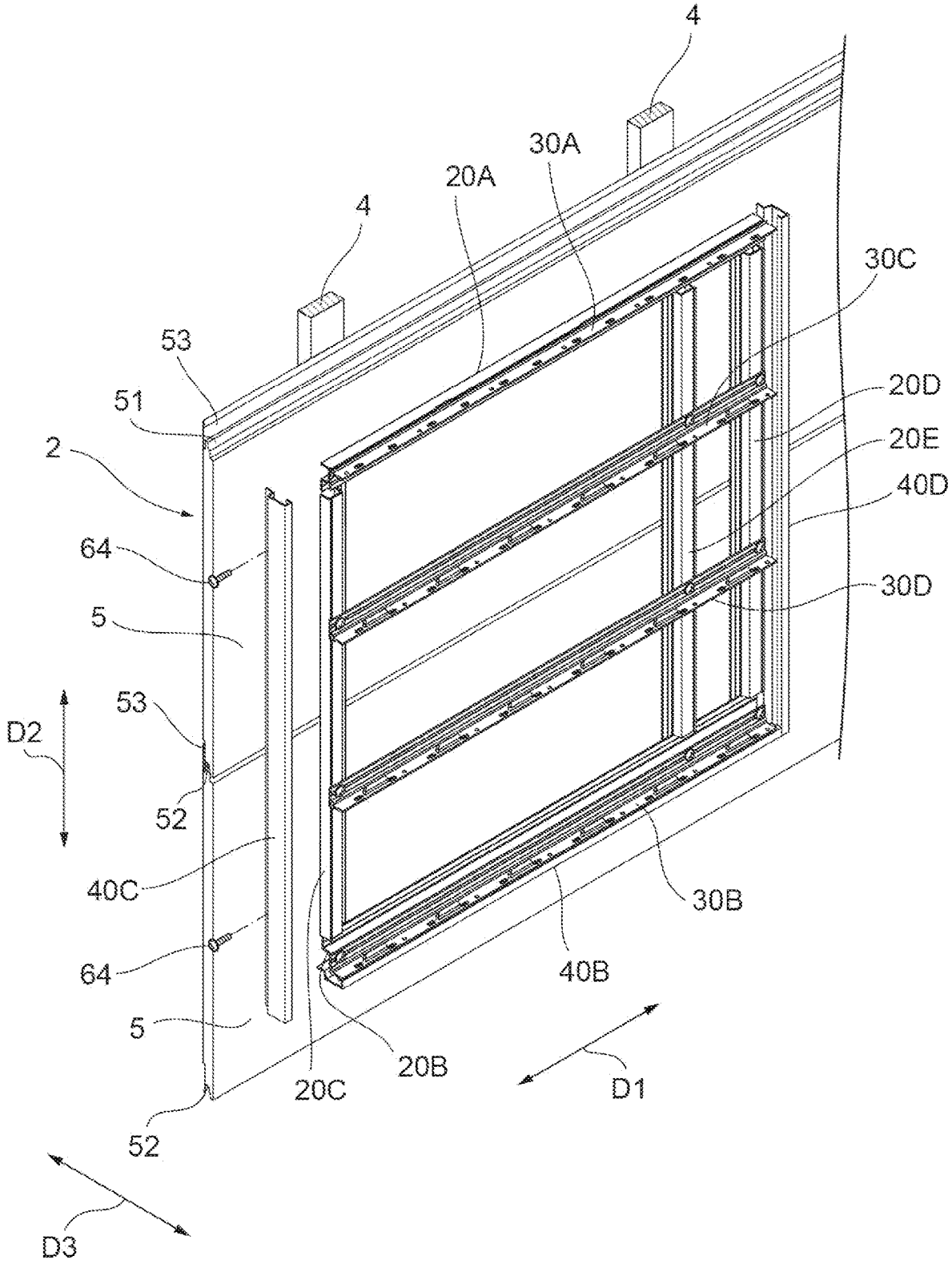

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30A
20A
4
30C
53
20D
51
20E
2
40D
64
30D
5
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D2
52
40C
30B
64
40B
5
20B
D1
20C
52
D3

Fig.19

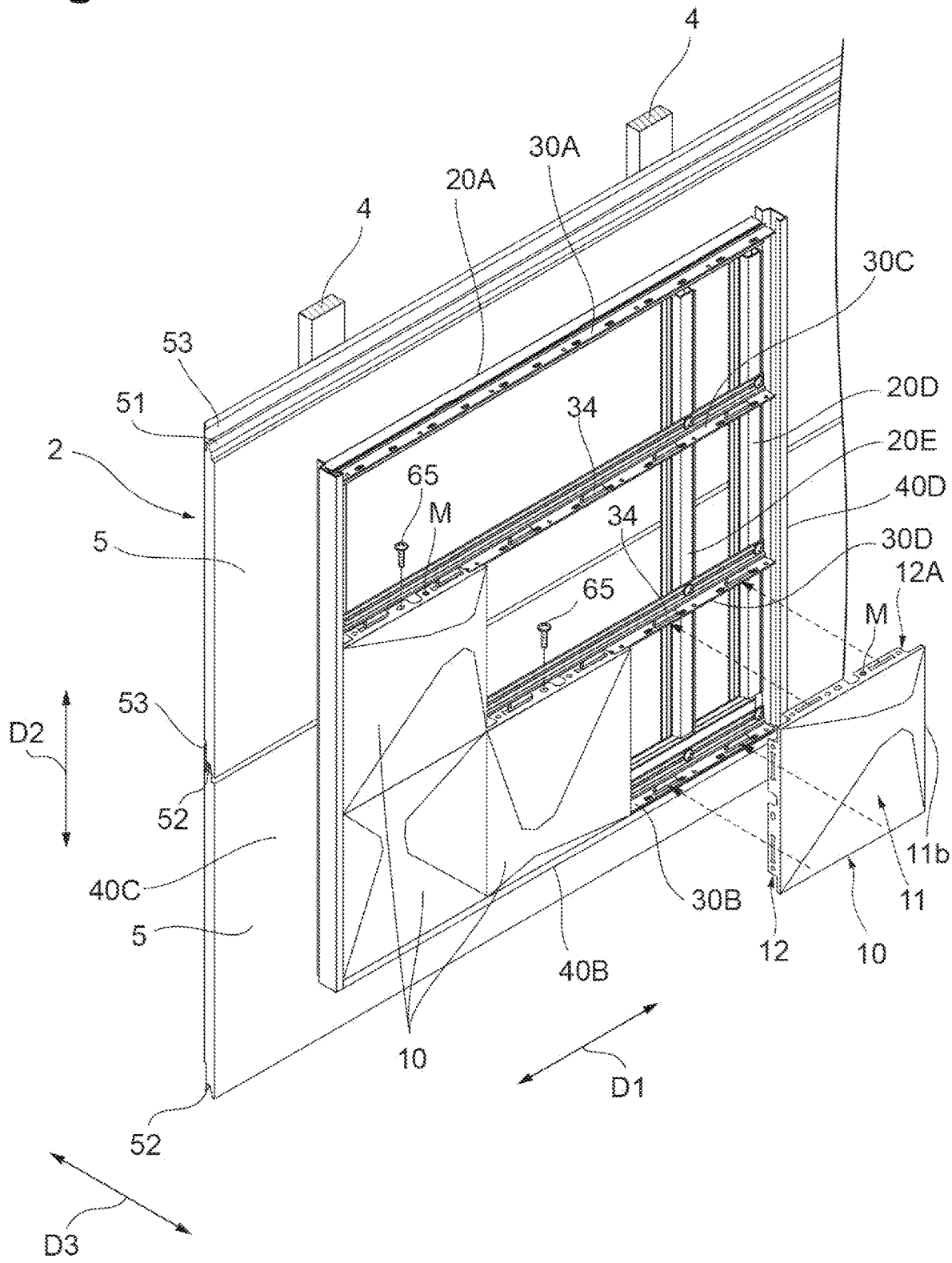

4
30A
20A
4
30C
53
20D
51
34
20E
2
65
40D
M
34
5
30D
65
12A
M
53
D2
52
40C
11b
30B
11
5
12
10
40B
10
D1
52
D3

Fig.20

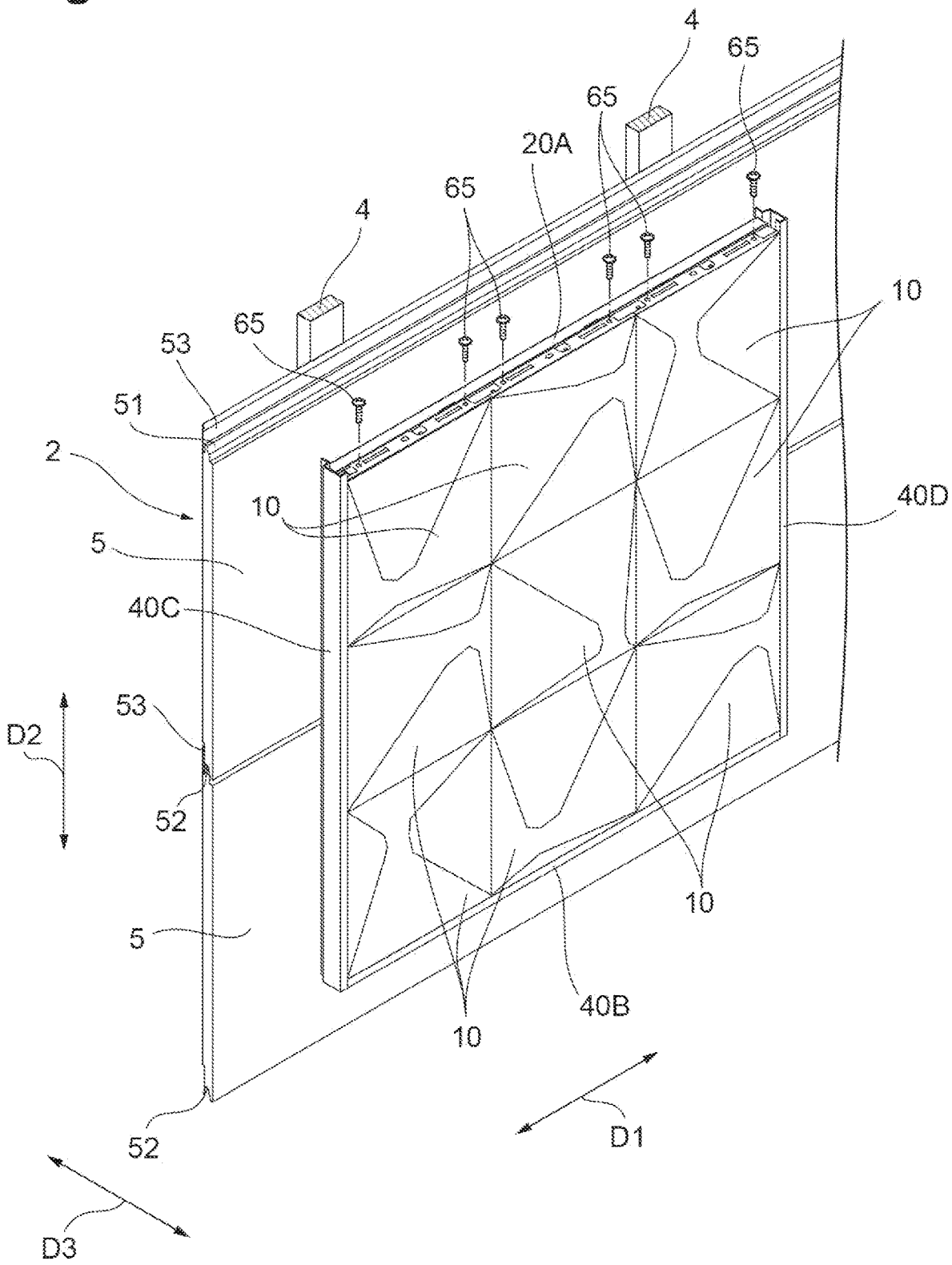


Fig.21

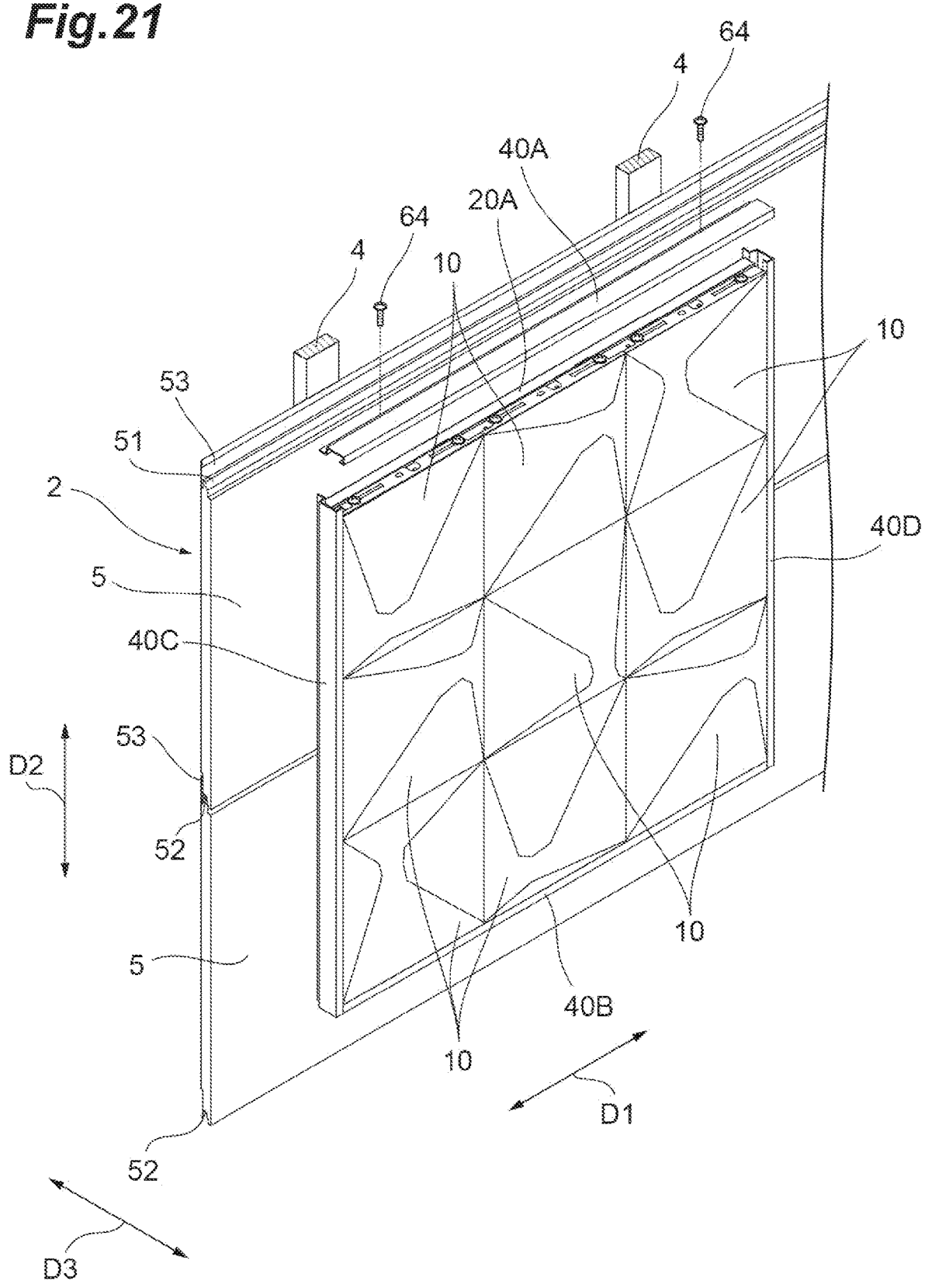


Fig.22

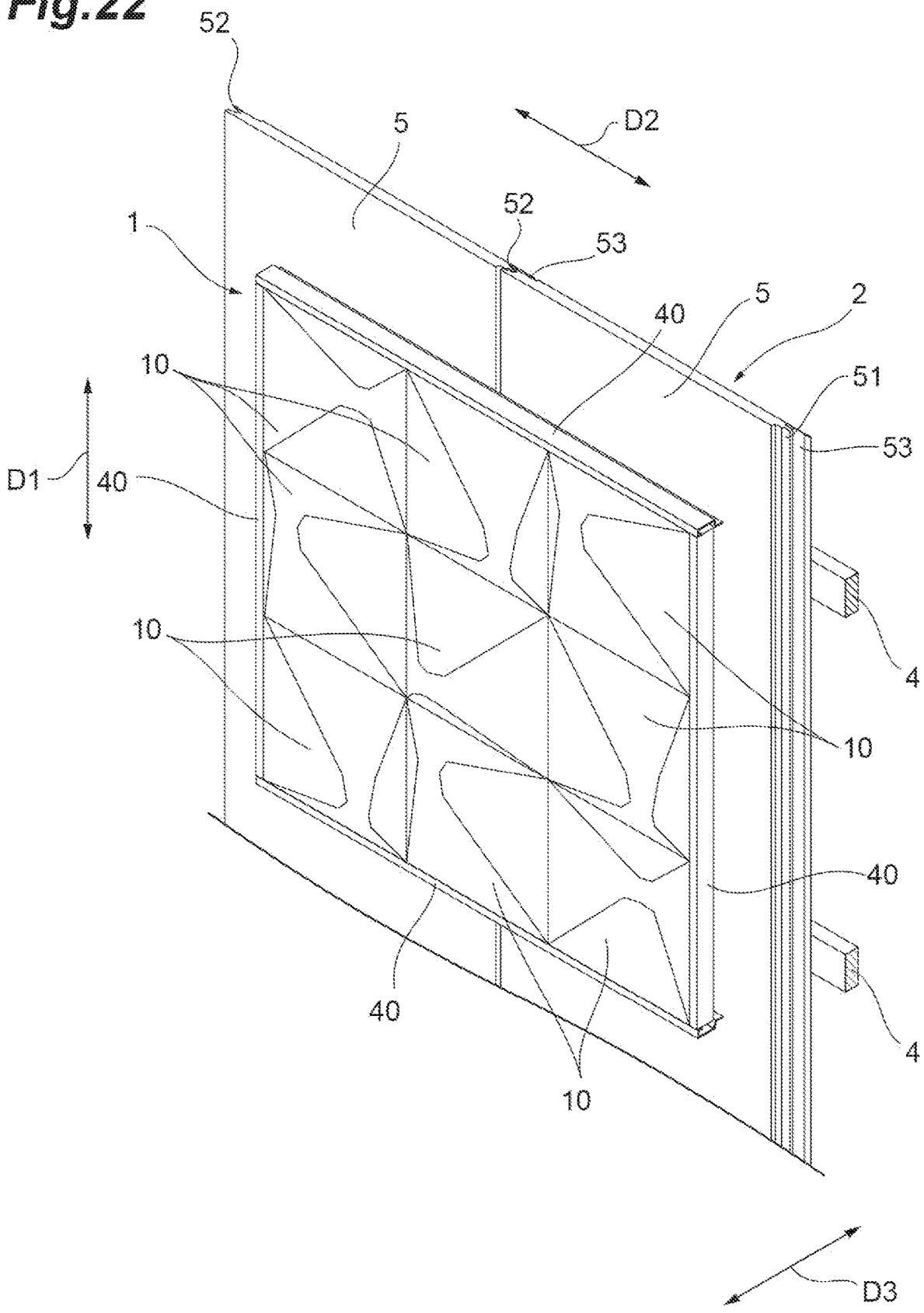
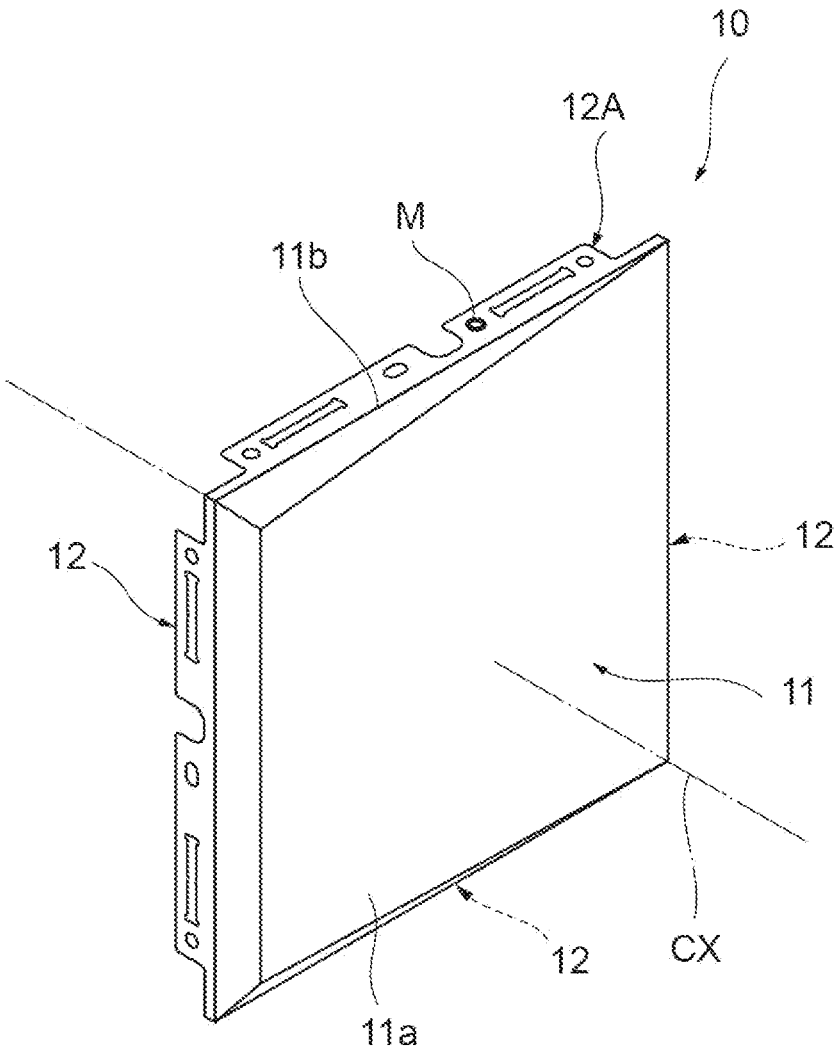


Fig.23



DECORATIVE STRUCTURE, PANEL MATERIAL, AND METHOD FOR CONSTRUCTING DECORATIVE STRUCTURE

TECHNICAL FIELD

[0001] The present disclosure relates to a decorative structure, a panel material, and a method for constructing a decorative structure.

BACKGROUND ART

[0002] Panel materials are sometimes placed on the outer walls of buildings. For example, Patent Document 1 describes an exterior structure in which a panel material is attached to a base material attached to a wall surface.

CITATION LIST

Patent Literature

[0003] Patent Document 1: Japanese Unexamined Patent Application Publication No. 2003-253847

SUMMARY OF INVENTION

Technical Problem

[0004] In the exterior structure described in Patent Document 1, panel locking bolts are provided at a predetermined pitch in the vertical direction on the base material, and the panel material is attached by hooking a hook-shaped notch provided on the side surface of the panel material on the panel locking bolts. Therefore, the direction in which the panel material is attached is fixed. In the present technical field, it is desired to freely change the direction in which the panel material is attached.

[0005] The present disclosure describes a decorative structure, a panel material, and a method for constructing a decorative structure capable of changing the direction in which a panel material is attached.

Solution to Problem

[0006] A decorative structure according to one aspect of the present disclosure includes: a plurality of base materials extending in a first direction and provided in parallel with each other at predetermined intervals in a second direction intersecting the first direction; and a plurality of panel materials, each of the plurality of panel materials being attached to two base materials adjacent to each other in the second direction among the plurality of base materials. Each of the plurality of base materials includes a protrusion protruding in the second direction. Each of the plurality of panel materials includes a body including an outer edge portion having a square shape in a plan view, and four legs provided along four sides of the outer edge portion and extending from the outer edge portion in a direction intersecting the body. The four legs have the same shape as each other. An insertion hole into which the protrusion can be inserted is provided in each of the four legs. The panel material is attached by inserting the protrusion of one of the two base materials through the insertion hole provided in one of the four legs.

[0007] In this decorative structure, the panel material is attached by inserting the protrusion of one of two base materials adjacent to each other in the second direction into the insertion hole provided in one of the four legs of the panel material. The four legs are provided along four sides of the outer edge portion having a square shape in a plan view, extend from the outer edge portion in a direction intersecting with the body, and have the same shape as each other. That is, the four legs of the panel material are rotationally symmetric about the center point of the body at 90°, 180°, 270°, and 360°. Therefore, the panel material can be attached to the base material even if the panel material is rotated by any angle of 90°, 180°, 270°, or 360° about the central point of the body. As a result, it is possible to change the direction in which the panel material is attached.

[0008] The decorative structure may further include a plurality of elongated support members that support the plurality of base materials. Each of the plurality of support members may include a protruding piece that extends in a direction in which the support member extends and protrudes in a third direction intersecting the first direction and the second direction. The plurality of base materials may be positioned by the protruding piece. In this case, the plurality of base materials are positioned by the protruding pieces of the support members. Therefore, when the decorative structure is constructed, the work of attaching the base material can be simplified.

[0009] The plurality of base materials may include a first base material located at one end of the plurality of base materials in the second direction. The plurality of support members may include a first support member that supports the first base material. The first support member may extend in the first direction and may overlap the first base material when viewed from the third direction. A groove into which the protruding piece of the first support member fits may be provided in the first base material. In this case, the first base material can be positioned by fitting the protruding piece of the first support member in the groove of the first base material. Therefore, when the decorative structure is constructed, the work of attaching the first base material can be simplified.

[0010] The plurality of base materials may further include a second base material located at the other end of the plurality of base materials in the second direction. The plurality of support members may further include a second support member that supports the second base material. The second support member may extend in the first direction and may overlap the second base material when viewed from the third direction. The second base material may further include a projection that is contact with the protrusion of the second support member in the second direction. In this case, the projection of the second base material is brought into contact with the protruding piece of the second support member in the second direction, whereby the second base material is positioned in the second direction. Therefore, when the decorative structure is constructed, the work of attaching the second base material can be simplified.

[0011] The plurality of base materials may further include a third base material located between the first base material and the second base material in the second direction. The plurality of support members may further include a plurality of third support members that support the third base material. The plurality of third support members may extend in the second direction and may be provided in parallel with each other in the first direction. Missing portions into which the third base material fits may be provided in the protruding

pieces of the plurality of third support members. In this case, the third base material can be positioned by fitting the third base material to the missing portions provided on the protruding pieces of the plurality of third support members. Therefore, when the decorative structure is constructed, the work of attaching the third base material can be simplified.

[0012] A panel material according to another aspect of the present disclosure includes: a body including an outer edge portion having a square shape in a plan view; and four legs provided along four sides of the outer edge portion and extending from the outer edge portion in a direction intersecting the body. The four legs have the same shape as each other. An insertion hole into which a protrusion of a base material can be inserted is provided in each of the four legs.

[0013] In this panel material, the four legs are provided along four sides of the outer edge portion having a square shape in a plan view, extend from the outer edge portion in a direction intersecting with the body, and have the same shape as each other. That is, the four legs of the panel material are rotationally symmetric about the center point of the body at 90°, 180°, 270°, and 360°. Therefore, the panel material can be attached to the base material even if the panel material is rotated by any angle of 90°, 180°, 270°, or 360° about the central point of the body. As a result, it is possible to change the direction in which the panel material is attached.

[0014] A method for constructing a decorative structure according to still another aspect of the present disclosure includes: a step of attaching a plurality of base materials so that each of the plurality of base materials extends in a first direction and the plurality of base materials are arranged in parallel with each other at predetermined intervals in a second direction intersecting the first direction; and a step of attaching a panel material to two base materials adjacent to each other in the second direction among the plurality of base materials. Each of the plurality of base materials includes a protrusion protruding in the second direction. The panel material includes a body including an outer edge portion having a square shape in a plan view, and four legs provided along four sides of the outer edge portion and extending from the outer edge portion in a direction intersecting the body. The four legs have the same shape as each other. An insertion hole into which the protrusion can be inserted is provided in each of the four legs. In the step of attaching the panel material, the panel material is attached by inserting the protrusion of one base material of the two base materials into the insertion hole provided in one of the four legs.

[0015] In this method for constructing the decorative structure, the panel material is attached by inserting the protrusion of one of two base materials adjacent to each other in the second direction into the insertion hole provided in one of the four legs of the panel material. The four legs are provided along four sides of the outer edge portion having a square shape in a plan view, extend from the outer edge portion in a direction intersecting with the body, and have the same shape as each other. That is, the four legs of the panel material are rotationally symmetric about the center point of the body at 90°, 180°, 270°, and 360°. Therefore, the panel material can be attached to the base material even if the panel material is rotated by any angle of 90°, 180°, 270°, or 360° about the central point of the body. As a result, it is possible to change the direction in which the panel material is attached.

Advantageous Effects of Invention

[0016] According to each aspect and each embodiment of the present disclosure, the direction in which the panel material is attached can be changed.

BRIEF DESCRIPTION OF DRAWINGS

[0017] FIG. **1** is a perspective view showing a decorative structure according to an embodiment.

[0018] FIG. **2** is a perspective view showing support members and base materials of the decorative structure shown in FIG. **1**.

[0019] FIG. **3** is a perspective view showing the panel material shown in FIG. **1**.

[0020] FIG. **4** is an enlarged view showing a leg of the panel material shown in FIG. **3**.

[0021] FIG. **5** is a perspective view showing the support member shown in FIG. **2**.

[0022] FIG. **6**(*a*) is a cross-sectional view taken along the line VIa-VIa of FIG. **5**. FIG. **6**(*b*) is a cross-sectional view taken along the line VIb-VIb of FIG. **5**.

[0023] FIG. **7** is a perspective view showing the base material shown in FIG. **2**.

[0024] FIG. **8** is a cross-sectional view taken along the line VIII-VIII of FIG. **7**.

[0025] FIG. **9** is a perspective view showing the crown molding shown in FIG. **1**.

[0026] FIG. **10** is a flowchart showing a method for constructing the decorative structure shown in FIG. **1**.

[0027] FIG. **11** is a view for explaining a step of marking shown in FIG. **10**.

[0028] FIG. **12** is a view for explaining a step of attaching the support member shown in FIG. **10**.

[0029] FIG. **13** is a cross-sectional view taken along line XIII-XIII of FIG. **12**.

[0030] FIG. **14** is a view for explaining a step of attaching the base material shown in FIG. **10**.

[0031] FIG. **15** is a cross-sectional view taken along the line XV-XV of FIG. **14**.

[0032] FIG. **16** is a cross-sectional view taken along the line XVI-XVI of FIG. **14**.

[0033] FIG. **17** is an enlarged view of a part of FIG. **14**.

[0034] FIG. **18** is a view for explaining a step of attaching the crown molding shown in FIG. **10**.

[0035] FIG. **19** is a view for explaining a step of attaching the panel material shown in FIG. **10**.

[0036] FIG. **20** is a view for explaining a step of attaching the panel material shown in FIG. **10**.

[0037] FIG. **21** is a view for explaining a step of attaching the upper crown molding shown in FIG. **10**.

[0038] FIG. **22** is a view showing another example of an outer wall.

[0039] FIG. **23** is a perspective view showing another example of a panel material.

DESCRIPTION OF EMBODIMENTS

[0040] Hereinafter, embodiments of the present disclosure will be described in detail with reference to the drawings. In the description of the drawings, the same components are designated with the same reference signs, and the redundant description is omitted. In each drawing, a lateral direction D**1** (first direction), a longitudinal direction D**2** (second direction), and a direction D**3** (third direction) are shown. The longitudinal direction D**2** is a direction (vertical direc-

tion) intersecting with (here, orthogonal to) the lateral direction D1 and the direction D3. The direction D3 is a direction intersecting with (here, orthogonal to) the lateral direction D1 and the longitudinal direction D2. The longitudinal direction D2 is a vertical direction, for example, and the lateral direction D1 and the direction D3 are horizontal directions, for example.

[0041] FIG. **1** is a perspective view showing a decorative structure according to an embodiment. FIG. **2** is a perspective view showing support members and base materials of the decorative structure shown in FIG. **1**. A decorative structure **1** shown in FIG. **1** is used for decorating a building. In the present embodiment, the decorative structure **1** is constructed on the outer wall **2**. Examples of the outer wall **2** include an outer wall composed of metal siding panels, an outer wall made of reinforced concrete (RC), an outer wall made of a ceramic-based outer covering material, and an outer wall made of autoclaved lightweight concrete (ALC).

[0042] In the example shown in FIGS. **1** and **2**, the outer wall **2** is formed by a plurality of siding panels **5** attached so as to extend in the horizontal direction. The siding panel **5** is an elongated metal siding. The siding panel **5** includes a male end portion **51**, a female end portion **52**, and a fixing portion **53**. The male end portion **51** is provided at one end of the siding panel **5** in the shorter direction of the siding panel **5** and extends along the longer direction of the siding panel **5** over the entire length of the siding panel **5**. The female end portion **52** is provided at the other end of the siding panel **5** in the shorter direction of the siding panel **5**, and extends along the longer direction of the siding panel **5** over the entire length of the siding panel **5**. The male end portion **51** and the female end portion **52** are configured to be able to fit to each other. Specifically, the male end portion **51** has a protruding shape protruding in the shorter direction of the siding panel **5**. The female end portion **52** has a recessed shape recessed in the shorter direction of the siding panel **5**.

[0043] The fixing portion **53** is a portion for fixing the siding panel **5** to the furring strip **4**. The fixing portion **53** is provided at a position closer to the back surface than the male end portion **51** at one end in the shorter direction of the siding panel **5**, and extends along the longer direction of the siding panel **5** over the entire length of the siding panel **5**. The siding panel **5** is fixed to the furring strip **4** by driving fixing members **54** (see FIG. **13**) such as a nail or the like into the fixing portion **53**. The siding panel **5** is not fixed to the furring strip **4** at the female end portion **52**. Therefore, even if an external force is applied to the outer wall **2** due to an earthquake or the like, the outer wall **2** deforms in response to the external force. That is, it is possible to obtain the follow-up property to the external force caused by an earthquake or the like.

[0044] In the example shown in FIGS. **1** and **2**, each siding panel **5** is arranged to extend in the lateral direction D1. The plurality of siding panels **5** are arranged in the longitudinal direction D2. In other words, the siding panel **5** is attached to the furring strip **4** extending in the longitudinal direction D2 so as to extend in the horizontal direction. Specifically, each siding panel **5** is disposed such that the male end portion **51** and the fixing portion **53** are positioned above and the female end portion **52** is positioned below. The female end portion **52** of the upper siding panel **5** and the male end portion **51** of the lower siding panel **5** are fitted to each other, so that the two siding panels **5** adjacent to each other in the longitudinal direction D2 are connected.

[0045] As shown in FIGS. **1** and **2**, the decorative structure **1** includes a plurality of panel materials **10**, a plurality of support members **20**, a plurality of base materials **30**, and a plurality of crown moldings **40**. In the present embodiment, the decorative structure **1** includes nine panel materials **10**, five support members **20**, four base materials **30**, and four crown moldings **40**.

[0046] The panel material **10** is a decorative member. Each panel material **10** is attached to two base materials **30** which are adjacent to each other in the longitudinal direction D2 among the base materials **30**. The panel material **10** can be installed in four directions. Specifically, the panel material **10** is rotationally symmetric about the central axis CX of a body **11** at 90°, 180°, 270°, and 360°, except for the surface **11***a* of the body **11** described later. Therefore, the panel material **10** is attached in a direction rotated by any one of 90°, 180°, 270° and 360° about the central axis CX of the body **11**. The material of the panel material **10** is, for example, a metal such as aluminum or titanium, or a resin such as plastic or vinyl chloride. The panel material **10** is produced, for example, by punching a metal plate and then bending the plate.

[0047] The panel material **10** will be described in detail with further reference to FIGS. **3** and **4**. FIG. **3** is a perspective view showing the panel material shown in FIG. **1**. FIG. **4** is an enlarged view showing a leg of the panel material shown in FIG. **3**. As shown in FIG. **3**, the panel material **10** includes the body **11** and four legs **12**.

[0048] The body **11** is a plate-like portion having a square shape in a plan view. The body **11** has a surface **11***a* exposed to the outside. The surface **11***a* is a decorative surface. The surface **11***a* has an asymmetric decoration with respect to the central axis CX. In the example shown in FIG. **3**, the decoration of the surface **11***a* has a shape raised toward the outside. The body **11** has an outer edge portion **11***b* having a square shape in a plan view.

[0049] The four legs **12** are plate-like portions for attaching the panel material **10** to the base materials **30**. The four legs **12** are provided along four sides of the outer edge portion **11***b* of the body **11**, and project from the outer edge portion **11***b* in a direction intersecting the body **11** (surface **11***a*). Each leg **12** extends along the outer edge portion **11***b*. The four legs **12** have the same shape as each other. Only one leg **12**A of the four legs **12** is marked with a mark M. That is, the leg **12**A is the same as any other leg **12** except for the mark M.

[0050] As shown in FIG. **4**, through holes **12***a* and **12***b*, insertion holes **12***c* and **12***d*, a through hole **12***e*, and a depression **12***f* are provided in each leg **12**.

[0051] The through holes **12***a* and **12***b* are provided at both end portions of the leg **12** in the longer direction of the leg **12**. The through hole **12***a* and the through hole **12***b* are line-symmetric with respect to the center line Lc of the leg **12** in the longer direction as a symmetry axis. The through holes **12***a* and **12***b* are used for fixing the panel materials **10** in the uppermost row to the uppermost base material **30** (base material **30**A). Each of the through holes **12***a* and **12***b* has a shape into which a shaft portion of a fixing member **65** (see FIG. **20**) such as a screw or the like can be inserted. In the present embodiment, the through holes **12***a* and **12***b* are round holes.

[0052] The insertion hole **12***c* is provided at a position closer to the center line Lc than the through hole **12***a* in the longer direction of the leg **12**. The insertion hole **12***d* is provided at a position closer to the center line Lc than the through hole **12***b* in the longer direction of the leg **12**. The insertion hole **12***c* and the insertion hole **12***d* are line-symmetric with respect to the center line Lc as a symmetry axis. Each of the insertion holes **12***c* and **12***d* is a slotted hole extending in the longer direction of the leg **12**, and has a shape into which a protrusion **34** (see FIG. **7**) of the base material **30** can be inserted. The insertion holes **12***c* and **12***d* are slightly larger than the outer shape of the protrusion **34** in order to facilitate the insertion of the protrusion **34**. Narrowed portions **12***g* and **12***h* are provided near the center of the insertion holes **12***c* and **12***d* in the longer direction in order to reduce the backlash of the protrusions **34**, respectively. R angles are formed at both ends of the insertion holes **12***c* and **12***d* in the longer direction. The protrusions **34** of the base material **30** are inserted into the insertion holes **12***c* and **12***d* when the panel material **10** is attached to the base material **30** other than the uppermost row.

[0053] The through hole **12***e* is provided at a position closer to the center line Lc than the insertion hole **12***d* in the longer direction of the leg **12**. The through hole **12***e* has a shape into which a shaft portion of a fixing member **65** (see FIG. **19**) can be inserted. In the present embodiment, the through hole **12***e* is an elongated hole extending in the longer direction of the leg **12**. The through hole **12***e* is used for fixing the panel material **10** other than the uppermost row to the base material **30**. The depression **12***f* is provided at a position closer to the center line Lc than the insertion hole **12***c* in the longer direction of the leg **12**. The through hole **12***e* and the depression **12***f* are provided at positions that are line-symmetric with respect to the center line Lc as a symmetry axis. The depression **12***f* is used for avoiding interference between the head portion of the fixing member **65** for fixing the panel material **10** one row below the panel material **10** on which the depression **12***f* is provided to the base material **30** and the leg **12**. In other words, the head portion of the fixing member **65** is inserted into the depression **12***f*.

[0054] Since the leg **12**A is shown in FIG. **4**, the mark M is further provided. The mark M is used to improve the discrimination of the orientation of the panel material **10**.

[0055] The support member **20** is an elongated member for supporting the base material **30**. The material for forming the support member **20** is aluminum, for example. The support member **20** is produced, for example, by extrusion molding. The support member **20** defines a position at which the decorative structure **1** is attached.

[0056] The support member **20** will be described in detail with further reference to FIGS. **5**, **6**(*a*) and **6**(*b*). FIG. **5** is a perspective view showing the support member shown in FIG. **2**. FIG. **6**(*a*) is a cross-sectional view taken along the line VIa-VIa of FIG. **5**. FIG. **6**(*b*) is a cross-sectional view taken along the line VIb-VIb of FIG. **5**. As shown in FIGS. **5**, **6**(*a*) and **6**(*b*), the support member **20** includes an upper plate **21**, side plates **22** and **23**, a bottom plate **24**, and a protruding piece **25**.

[0057] The upper plate **21** is a plate-like portion on which the base material **30** is mounted. The upper plate **21** is provided over the entire length of the support member **20** along the longer direction of the support member **20**. The upper plate **21** has a mounting surface **21***a* on which the base material **30** is mounted. The side plates **22** and **23** are plate-like portions that support the upper plate **21**. The side plates **22** and **23** are provided over the entire length of the support member **20** along the longer direction of the support member **20**. The side plates **22** and **23** are provided so as to face each other across the upper plate **21**, and extend in a direction intersecting the upper plate **21**. One end of the side plate **22** is connected to one end of the upper plate **21** in the shorter direction of the upper plate **21**. One end of the side plate **23** is connected to the other end of the upper plate **21** in the shorter direction of the upper plate **21**. The upper plate **21**, the side plate **22** and the side plate **23** constitute a mounting table on which the base material **30** is mounted. The mounting table has a U-shaped cross-sectional shape in a cross-section crossing the longer direction of the support member **20**.

[0058] The bottom plate **24** is a portion for fixing the support member **20** to the outer wall **2**. The bottom plate **24** is provided over the entire length of the support member **20** along the longer direction of the support member **20**. One end of the bottom plate **24** is connected to the other end of the side plate **22**. The bottom plate **24** extends substantially in parallel with the upper plate **21** from the other end of the side plate **22** in a direction away from the upper plate **21**. A groove **24***a* for positioning fixing members **61** and **62** (see FIG. **12**) such as a screw is provided in the bottom plate **24**. The groove **24***a* extends along the longer direction of the bottom plate **24** and is provided over the entire length of the bottom plate **24**. The distal ends of the fixing members **61** and **62** are positioned in the groove **24***a* of the bottom plate **24**, and the fixing members **61** and **62** are driven into the groove **24***a*, whereby the support member **20** is fixed to the outer wall **2**.

[0059] The protruding piece **25** is connected to one end of the side plate **23** and protrudes from the mounting surface **21***a* of the upper plate **21**. The protruding piece **25** is provided over the entire length of the support member **20** along the longer direction of the support member **20**, and is partially missing in the longer direction of the support member **20**. In other words, several missing portions **25***a* are provided in the protruding piece **25**. The missing portion **25***a* has a shape into which the base material **30** can be fitted. The length of the missing portion **25***a* in the longer direction is substantially the same as that of a base **31** (see FIG. **7**) described later in the shorter direction of the base **31**.

[0060] In the example shown in FIG. **2**, five support members **20** are arranged. In order to distinguish them, the upper support member **20**, the lower support member **20**, the left support member **20**, the right support member **20**, and the middle support member **20** are referred to as a support member **20**A (second support member), a support member **20**B (first support member), a support member **20**C (third support member), a support member **20**D (third support member), and a support member **20**E (third support member), respectively (see FIG. **12** and the like).

[0061] The support members **20**A to **20**D are arranged in a rectangular shape along the outer periphery of the decorative structure **1**. The support members **20**A and **20**B extend in the lateral direction D**1** and are arranged in parallel with each other. The support members **20**C and **20**D extend in the longitudinal direction D**2** and are arranged in parallel with each other. Each of the support members **20**A to **20**D is disposed such that the mounting surface **21***a* faces away from the outer wall **2** and the bottom plate **24** is positioned

inside. The support member **20**E is disposed between the support members **20**C and **20**D and extends along the furring strip **4**. That is, the support members **20**C to **20**E extend in the longitudinal direction D**2** and are provided in parallel with each other in the lateral direction D**1**.

[0062] The base material **30** is a member for attaching the panel material **10**. The base material **30** is an elongated member. The material for forming the base material **30** is aluminum, for example. The base material **30** is produced, for example, by extrusion molding.

[0063] The base material **30** will be described in detail with further reference to FIGS. **7** and **8**. FIG. **7** is a perspective view showing the base material shown in FIG. **2**. FIG. **8** is a cross-sectional view taken along the line VIII-VIII of FIG. **7**. As shown in FIGS. **7** and **8**, the base material **30** includes the base **31**, a mounting plate **32**, a joint **33**, the protrusion **34**, a projection **35**, and a bulge **36**.

[0064] The base **31** is a plate-like portion mounted on the upper plate **21** of the support member **20** and fixed to the support member **20**. The base **31** is provided over the entire length of the base material **30** along the longer direction of the base material **30**. The base **31** has a surface **31***a* and a surface **31***b* opposite to the surface **31***a*. The surface **31***b* is in contact with the mounting surface **21***a* of the support member **20**. Two grooves **31***c* for positioning fixing members **63** (see FIG. **14**) such as a screw are provided on the surface **31***a* of the base **31**. The groove **31***c* extends along the longer direction of the base **31** and is provided over the entire length of the base **31**. A groove **31***d* extending from the surface **31***a* to the surface **31***b* on an end surface opposite to the mounting plate **32** is provided on the base **31**. The distance between one end of the base **31** in the longer direction of the base **31** and the groove **31***d* nearest to the one end is substantially equal to the length (width) of the upper plate **21** in the shorter direction of the upper plate **21**.

[0065] The mounting plate **32** is a plate-shaped portion for attaching the panel material **10** to the base material **30**. The mounting plate **32** is provided over the entire length of the base material **30** along the longer direction of the base material **30**. The mounting plate **32** is provided at a right angle to the base **31**. The mounting plate **32** has a surface **32***a* and a surface **32***b* opposite to the surface **32***a*. The surface **32***a* faces toward the base **31**.

[0066] A plurality of protrusions **34** are provided on the surface **32***a*. Each protrusion **34** protrudes in the direction normal to the surface **32***a* and extends in the longer direction of the base material **30**. The protrusion **34** has a tapered shape that becomes thinner toward the distal end in order to facilitate insertion into the insertion holes **12***c* and **12***d*. That is, in the cross section intersecting with the longer direction of the base material **30**, the protrusion **34** has a pentagonal cross section. The plurality of protrusions **34** are provided at regular intervals in the longer direction of the base material **30**. The interval between the two adjacent protrusions **34** is substantially the same as the interval between the insertion hole **12***c* and the insertion hole **12***d* of the leg **12**. A constriction **34***a* is provided at the root portion of the protrusion **34**. The length of the constriction **34***a* in the direction in which the protrusion **34** protrudes is about the same as the thickness of one leg **12**.

[0067] Through holes **32***c*, **32***d* and **32***e* are provided in the mounting plate **32** to penetrate through the mounting plate **32**. The through holes **32***c*, **32***d* and **32***e* penetrate through the mounting plate **32** from the surface **32***a* toward the surface **32***b*. The through holes **32***c* and **32***d* are used for fixing the panel material **10** in the uppermost row to the uppermost base material **30** (base material **30**A). The through holes **32***c* and **32***d* have a shape into which the shaft portion of the fixing member **65** (see FIG. **20**) can be inserted. The through holes **32***c* and **32***d* are elongated holes extending in the longer direction of the base material **30**. The through holes **32***c* and **32***d* are provided so as to sandwich the protrusion **34** in the longer direction of the base material **30**.

[0068] The through hole **32***e* is used for fixing the panel material **10** other than the uppermost row to the base material **30**. The through hole **32***e* has a shape into which the shaft portion of the fixing member **65** (see FIG. **19**) can be inserted. The through hole **32***e* is a round hole. The through hole **32***e* is provided so as to be adjacent to the through hole **32***d* in the longer direction of the base material **30**. In the longer direction of the base material **30**, the through hole **32***c*, the protrusion **34**, the through hole **32***d*, and the through hole **32***e* are arranged in this order. In the mounting plate **32**, combinations of a through hole **32***c*, a protrusion **34**, a through hole **32***d*, and a through hole **32***e* are provided at regular intervals.

[0069] The joint **33** connects the base **31** and the mounting plate **32**. The joint **33** is provided along the longer direction of the base material **30** over the entire length of the base material **30**. The joint **33** connects the base **31** and the mounting plate **32** such that the base **31** and the mounting plate **32** are perpendicular to each other. One end of the joint **33** is connected to the surface **31***a* of the base **31**, and the other end of the joint **33** is connected to the surface **32***a* of the mounting plate **32**. A step portion is formed between the surface **31***b* and the joint **33**.

[0070] The projection **35** and the bulge **36** are portions for locking the base material **30** to the support member **20**. The projection **35** is provided on a surface forming a step portion of the joint **33** and extends over the entire length of the base material **30** in the longer direction of the base material **30**. The projection **35** projects to the same plane as the surface **31***b* of the base **31**. A groove **37** is defined by the projection **35**, the base **31** and the joint **33**. The bulge **36** is provided on the surface **32***b* and extends over the entire length of the base material **30** in the longer direction of the base material **30**. The bulge **36** and the projection **35** are perpendicular to each other, and a recess **38** is defined by the bulge **36** and the projection **35**.

[0071] In the example shown in FIG. **2**, the four base materials **30** extend in the lateral direction D**1** and are arranged in parallel with each other at a predetermined interval in the longitudinal direction D**2**. In order to distinguish them, the base material **30** positioned at one end (upper end) in the longitudinal direction D**2** is referred to as a base material **30**A (second base material), the base material **30** positioned at the other end (lower end) in the longitudinal direction D**2** is referred to as a base material **30**B (first base material), and the base materials **30** positioned between the base material **30**A and the base material **30**B are referred to as a base material **30**C (third base material) and a base material **30**D (third base material) in order from the top (see FIG. **14**, etc.).

[0072] The base material **30**A is arranged such that the surface **31***b* faces the mounting surface **21***a* and the protrusion **34** protrudes downward, and the other base materials **30**B, **30**C and **30**D are arranged such that the surface **31***b*

faces the mounting surface **21***a* and the protrusion **34** protrudes upward. The base material **30**A overlaps with the support member **20**A when viewed from the direction D**3**. The base material **30**B overlaps with the support member **20**B when viewed from the direction D**3**. The base materials **30**C and **30**D are provided so as to intersect the support members **20**C, **20**E and **20**D. The locking structure between the support member **20** and the base material **30** will be described in detail in the description of a method for constructing the decorative structure **1**.

[0073] The crown molding **40** is a member for hiding a bonder. The material for forming the crown molding **40** is, for example, a metal such as aluminum and titanium. The crown molding **40** is formed, for example, by extrusion molding. The leg **12** of the panel material **10**, the support member **20** and the base material **30** are covered by the crown molding **40**.

[0074] The crown molding **40** will be described in detail with further reference to FIG. **9**. FIG. **9** is a perspective view showing the crown molding shown in FIG. **1**. As shown in FIG. **9**, the crown molding **40** includes an upper plate **41**, side plates **42** and **43**, a bottom plate **44**, and a locking piece **45**.

[0075] The upper plate **41** is a plate-like portion for covering a bonder. The upper plate **41** is provided along the longer direction of the crown molding **40** over the entire length of the crown molding **40**. The side plates **42** and **43** are plate-like portions that support the upper plate **41**. Each of the side plates **42** and **43** is provided along the longer direction of the crown molding **40** over the entire length of the crown molding **40**. The side plates **42** and **43** are provided so as to face each other across the upper plate **41**, and extend in a direction intersecting the upper plate **41**. One end of the side plate **42** is connected to one end of the upper plate **41** in the shorter direction of the upper plate **41**. One end of the side plate **43** is connected to the other end of the upper plate **41** in the shorter direction of the upper plate **41**.

[0076] The bottom plate **44** is a portion for fixing the crown molding **40** to the support member **20**. The bottom plate **44** is provided over the entire length of the crown molding **40** along the longer direction of the crown molding **40**. One end of the bottom plate **44** is connected to the other end of the side plate **42**, and the bottom plate **44** extends substantially in parallel with the upper plate **41** from the other end of the side plate **42** in a direction away from the upper plate **41**. The crown molding **40** is fixed to the side plate **23** of the support member **20** by driving fixing members **64** (see FIGS. **18** and **21**) such as a screw into the bottom plate **44**. The locking piece **45** is connected to the other end of the side plate **23** and protrudes inward from the other end of the side plate **23**. The locking piece **45** is provided along the longer direction of the crown molding **40** over the entire length of the crown molding **40**. The locking piece **45** is in contact with the leg **12** of the panel material **10**.

[0077] In the example shown in FIG. **1**, the four crown moldings **40** are located at the upper end, the lower end, and the left and right ends of the decorative structure **1**, respectively, and form a frame of the decorative structure **1**. In order to distinguish them, the upper crown molding **40**, the lower crown molding **40**, the left crown molding **40**, and the right crown molding **40** are referred to as a crown molding **40**A, a crown molding **40**B, a crown molding **40**C, and a crown molding **40**D, respectively (see FIGS. **18** and **21**, etc.). The crown moldings **40**A to **40**D are disposed such that the bottom plates **44** are placed on the side plates **23** of the support members **20**A to **20**D, and the locking pieces **45** are in contact with the legs **12**, respectively.

[0078] The fixing members **61** to **65** are made of stainless steel, for example. The fixing members **61** to **65** may be subjected to a high corrosion-resistant surface treatment. In order to prevent rainwater from entering, a fixing member with a packing may be used as the fixing members **61** to **65**. The packing is made of, for example, ethylene propylene diene rubber (EPDM).

[0079] Next, a method for constructing the decorative structure **1** will be described with reference to FIGS. **10** to **21**. FIG. **10** is a flowchart showing a method for constructing the decorative structure shown in FIG. **1**. FIG. **11** is a view for explaining a step of marking shown in FIG. **10**. FIG. **12** is a view for explaining a step of attaching the support member shown in FIG. **10**. FIG. **13** is a cross-sectional view taken along line XIII-XIII of FIG. **12**. FIG. **14** is a view for explaining a step of attaching the base material shown in FIG. **10**. FIG. **15** is a cross-sectional view taken along the line XV-XV of FIG. **14**. FIG. **16** is a cross-sectional view taken along the line XVI-XVI of FIG. **14**. FIG. **17** is an enlarged view of a part of FIG. **14**. FIG. **18** is a view for explaining a step of attaching the crown molding shown in FIG. **10**. FIG. **19** is a view for explaining a step of attaching the panel material shown in FIG. **10**. FIG. **20** is a view for explaining a step of attaching the panel material shown in FIG. **10**. FIG. **21** is a view for explaining a step of attaching the upper crown molding shown in FIG. **10**.

[0080] As shown in FIG. **10**, a step S**1** of marking is performed first. In the step S**1** of marking, a dashed line L**1** is drawn on the outer wall **2** at a position where the decorative structure **1** is attached. The position where the decorative structure **1** is attached is, for example, the outer periphery of the decorative structure **1**. The outer periphery of the decorative structure **1** is determined in accordance with the number of panel materials **10** to be installed in the lateral direction D**1** and the longitudinal direction D**2**. In the step S**1** of marking, a dashed line L**2** indicating the position of the furring strip **4** is further drawn on the outer wall **2**.

[0081] Subsequently, a step S**2** of attaching the support member **20** is performed. In the step S**2** of attaching the support member **20**, the support members **20**A to **20**D are arranged on the outer wall **2** along the dashed line L**1**. Specifically, the support members **20**A to **20**D are disposed such that the bottom plate **24** faces the center of the frame surrounded by the dashed line L**1**, the protruding piece **25** protrudes outward (away from the outer wall **2**), and the other end of the side plate **23** extends along the dashed line L**1**. Further, the support member **20**E is disposed on the outer wall **2** along the dashed line L**2**. Specifically, the support member **20**E is disposed such that the protruding piece **25** protrudes outward (away from the outer wall **2**) and the distal end of the bottom plate **24** extends along the dashed line L**2**.

[0082] Each support member **20** is fixed to the outer wall **2** by a fixing member **61** and a fixing member **62**. Each support member **20** is fixed by a fixing member **61** or a fixing member **62** at three positions along the longer direction, for example. A fixing member **61** is used for the bottom plate **24** located on the furring strip **4**, and a fixing member **62** shorter than the fixing member **61** is used for the bottom plate **24** not located on the furring strip **4**. The fixing members **61** and **62**

are driven in a state in which the distal ends of the fixing members **61** and **62** are positioned in the groove **24***a*. As a result, the fixing member **61** penetrates through the bottom plate **24**, the siding panel **5**, and the furring strip **4**, and the fixing member **62** penetrates through the bottom plate **24** and sticks in the siding panel **5**.

[0083] The support members **20**A and **20**B are disposed across two furring strips **4** adjacent to each other in the lateral direction D**1**. Each of the support members **20**A and **20**B is fixed by the fixing members **61** on the two furring strips **4**, and fixed by the fixing member **62** at the right end. The support members **20**C to **20**E are disposed across two siding panels **5** adjacent to each other in the longitudinal direction D**2**. Each of the support members **20**C and **20**E is fixed by the fixing members **61** at both ends and near the center in the longitudinal direction D**2**. The support member **20**D is fixed by the fixing members **62** at both ends and near the center in the longitudinal direction D**2**. At this time, the fixing members **61** and **62** are driven into the vicinity of the male end portion **51** of the siding panel **5** so as not to hinder the follow-up property of the outer wall **2** at the centers of the support members **20**C to **20**E.

[0084] Subsequently, a step S**3** of attaching the base material **30** is performed. In the step S**3** of attaching the base material **30**, a plurality of base materials **30** are attached so as to extend in the lateral direction D**1** and to be arranged in parallel with each other at predetermined intervals in the longitudinal direction D**2**. Specifically, the base material **30**A is attached to the support member **20**A. More specifically, as shown in FIG. **15**, the base **31** of the base material **30**A is superposed on and placed on the upper plate **21** of the support member **20**A such that the protrusion **34** protrudes downward. At this time, the projection **35** of the base material **30**A is pressed against the protruding piece **25** of the support member **20**A from below, and the protruding piece **25** of the support member **20**A is fitted into the recess **38** of the base material **30**A. Then, the base material **30**A is fixed to the upper plate **21** of the support member **20**A by the fixing members **63** at three positions along the longer direction, for example.

[0085] The base material **30**B is attached to the support member **20**B. More specifically, as shown in FIG. **16**, the base **31** of the base material **30**B is placed on the upper plate **21** of the support member **20**B such that the protrusion **34** protrudes upward. At this time, while the protruding piece **25** of the support member **20**B is inserted into the groove **37** of the base material **30**B, the base **31** of the base material **30**B is superposed on the upper plate **21** of the support member **20**B and placed thereon. Then, the base material **30**B is fixed to the upper plate **21** of the support member **20**B by the fixing members **63** at three positions along the longer direction, for example.

[0086] Each of the base materials **30**C and **30**D is attached across the support members **20**C to **20**E. More specifically, as shown in FIG. **17**, the base **31** of each of the base materials **30**C and **30**D is placed across the upper plates **21** of the support members **20**C to **20**E such that the protrusion **34** protrudes upward. At this time, the base **31** and the projection **35** of each of the base materials **30**C and **30**D are fitted into the missing portions **25***a* of the support members **20**C to **20**E, and the positions of the base materials **30**C and **30**D in the lateral direction D**1** are adjusted so that the grooves **31***d* of the base materials **30**C and **30**D overlap the corner formed by the upper plate **21** and the side plate **22** of the support member **20**C. The base materials **30**C and **30**D are fixed to the upper plate **21** of each support member **20** by the fixing member **63**, on the upper plates **21** of the support members **20**C to **20**E.

[0087] Note that the fixing member **63** is driven in a state where the distal end of the fixing member **63** is positioned in the groove **31***c*. As a result, the fixing member **63** penetrates through the base **31** and the upper plate **21**.

[0088] Subsequently, a step S**4** of attaching the crown molding **40** (crown moldings **40**B to **40**D) is performed. In the step S**4** of attaching the crown molding **40**, the crown moldings **40**B to **40**D are attached. Specifically, the crown moldings **40**B to **40**D are disposed so that the bottom plates **44** are superposed on the side plates **23** of the support members **20**B, **20**C and **20**D, respectively, and that the locking pieces **45** of the crown moldings **40**B to **40**D form a U-shape. The crown moldings **40**B to **40**D are fixed to the side plates **23** of the support members **20**B, **20**C and **20**D by the fixing members **64** in the vicinity of both ends in the longer direction of the crown molding **40**, respectively. The fixing member **64** penetrates through the bottom plate **44** and the side plate **23**.

[0089] Subsequently, a step S**5** of attaching the panel material **10** is performed. In the step S**5** of attaching the panel material **10**, each panel material **10** is attached to two base materials **30** adjacent to each other in the longitudinal direction D**2** among the base materials **30**. Each panel material **10** is attached to the base material **30** by inserting the protrusions **34** of the base material **30** into the insertion holes **12***c* and **12***d* provided in at least one of the four legs **12**. For example, in the work instruction sheet, the direction of the panel material **10** is indicated by the direction (top, bottom, left and right) of the mark M. For example, when the mark M indicates the bottom, a worker orients the direction of the panel material **10** so that the leg **12**A is located below.

[0090] Specifically, as shown in FIG. **19**, first, the lower left panel material **10** is attached to the base material **30**D and the base material **30**B. Specifically, the first and second protrusions **34** from the left end of the base material **30**B are inserted through the insertion holes **12***c* and **12***d* of the lower leg **12** among the four legs **12**, respectively, and the first and second protrusions **34** from the left end of the base material **30**D are inserted through the insertion holes **12***c* and **12***d* of the upper leg **12** among the four legs **12**, respectively. As a result, since the through hole **12***e* of the upper leg **12** and the first through hole **32***e* from the left end of the base material **30**D overlap each other in the longitudinal direction D**2**, the fixing member **65** is inserted through the through hole **12***e* and screwed into the through hole **32***e*.

[0091] Here, the distance in the longitudinal direction D**2** between the surface **32***a* of the mounting plate **32** of the base material **30**B and the surface **32***a* of the mounting plate **32** of the base material **30**D is larger than the distance between the legs **12** of the panel material **10** facing each other by about the thickness of one leg **12**. In this configuration, the upper leg **12** is fitted into the constriction **34***a* of the protrusion **34** of the base material **30**D. Although a slight space is formed between the protrusion **34** and the peripheral edges of the insertion holes **12***c* and **12***d* in the constriction **34***a*, the leg **12** is fixed by the fixing member **65**. On the other hand, the lower leg **12** is not fitted into the constriction **34***a* of the protrusion **34** of the base material **30**B, but is positioned above the constriction **34***a*. At this position, there is almost no space between the protrusion **34** and the

peripheral edges of the insertion holes **12***c* and **12***d*, and further movement of the leg **12** is suppressed by the narrowed portions **12***g* and **12***h*. Therefore, even if the lower leg **12** is not fixed to the base material **30**B by the fixing member, the possibility of shifting its position is reduced.

[0092] The lengths of the insertion holes **12***c* and **12***d* in the lateral direction D**1** are larger than the length of the protrusion **34** in the lateral direction D**1**, and the through hole **12***e* is an elongated hole extending in the lateral direction D**1**. Therefore, the position of the panel material **10** in the lateral direction D**1** can be finely adjusted before the upper leg **12** is fixed to the base material **30**B. Here, the left end of the panel material **10** is brought into contact with (the locking piece **45** of) the crown molding **40**C to position the panel material **10**. Then, another panel material **10** is sequentially attached to the right side of the attached panel material **10** by the same procedure.

[0093] Further, in the second row from the bottom, panel materials **10** are attached to the base material **30**C and the base material **30**D. Similarly, the panel materials **10** are attached to the base material **30**C and the base material **30**D in order from the left end. Specifically, the first and second protrusions **34** from the left end of the base material **30**D are inserted through the insertion holes **12***c* and **12***d* of the lower leg **12** among the four legs **12**, respectively, and the first and second protrusions **34** from the left end of the base material **30**C are inserted through the insertion holes **12***c* and **12***d* of the upper leg **12** among the four legs **12**, respectively. At this time, the head portion of the fixing member **65** used for fixing the lower panel material **10** is inserted into the depression **12***f* of the lower leg **12**. As a result, since the through hole **12***e* of the upper leg **12** and the first through hole **32***e* from the left end of the base material **30**C overlap each other in the longitudinal direction D**2**, the fixing member **65** is inserted through the through hole **12***e* and screwed into the through hole **32***e*.

[0094] Here, the distance in the longitudinal direction D**2** between the surface **32***a* of the mounting plate **32** of the base material **30**C and the surface **32***a* of the mounting plate **32** of the base material **30**D is larger than the distance between the legs **12** of the panel material **10** facing each other by about the thickness of one leg **12**. In this configuration, the upper leg **12** is fitted into the constriction **34***a* of the protrusion **34** of the base material **30**C. On the other hand, since the leg **12** of the lower panel material **10** is already fitted into the constriction **34***a* of the protrusion **34** of the base material **30**D, the lower leg **12** is not fitted into the constriction **34***a* of the protrusion **34** of the base material **30**D but is located above the constriction **34***a*. At this position, there is almost no space between the protrusion **34** and the peripheral edges of the insertion holes **12***c* and **12***d*, and further movement of the leg **12** is suppressed by the narrowed portions **12***g* and **12***h*. Therefore, even if the lower leg **12** is not fixed to the base material **30**D by the fixing member, the possibility of shifting its position is reduced.

[0095] Then, the left end of the panel material **10** is brought into contact with (the locking piece **45** of) the crown molding **40**C to position the panel material **10**. Then, another panel material **10** is sequentially attached to the right side of the attached panel material **10** by the same procedure.

[0096] Further, in the uppermost row, panel materials **10** are attached to the base material **30**A and the base material **30**C. The panel materials **10** are also attached to the base material **30**A and the base material **30**C in order from the left end. Specifically, the first and second protrusions **34** from the left end of the base material **30**C are inserted through the insertion holes **12***c* and **12***d* of the lower leg **12** among the four legs **12**, respectively, and the upper leg **12** among the four legs **12** are placed on the surface **32***b* of the mounting plate **32** of the base material **30**A. At this time, the head portion of the fixing member **65** used for fixing the lower panel material **10** is inserted into the depression **12***f* of the lower leg **12**. As a result, the through hole **12***a* of the upper leg **12** overlaps with the first through hole **32***d* from the left end of the base material **30**A in the longitudinal direction D**2**, and the through hole **12***b* of the upper leg **12** overlaps with the second through hole **32***c* from the left end of the base material **30**A in the longitudinal direction D**2**. Therefore, the fixing members **65** are inserted through the through holes **12***a* and **12***b* and screwed into the through holes **32***d* and **32***c*, respectively.

[0097] Here, the distance in the longitudinal direction D**2** between the surface **32***b* of the mounting plate **32** of the base material **30**A and the surface **32***a* of the mounting plate **32** of the base material **30**C is larger than the distance between the legs **12** of the panel material **10** facing each other by about the thickness of one leg **12**. Since the leg **12** of the lower panel material **10** is already fitted into the constriction **34***a* of the protrusion **34** of the base material **30**C, the lower leg **12** is not fitted into the constriction **34***a* of the protrusion **34** of the base material **30**C but is located above the constriction **34***a*. At this position, there is almost no space between the protrusion **34** and the peripheral edges of the insertion holes **12***c* and **12***d*, and further movement of the leg **12** is suppressed by the narrowed portions **12***g* and **12***h*. Therefore, even if the lower leg **12** is not fixed to the base material **30**C by the fixing member, the possibility of shifting its position is reduced.

[0098] The through holes **32***c* and **32***d* are elongated holes extending in the lateral direction D**1**. Therefore, the position of the panel material **10** in the lateral direction D**1** can be finely adjusted before the upper leg **12** is fixed to the base material **30**A. Here, the left end of the panel material **10** is brought into contact with (the locking piece **45** of) the crown molding **40**C to position the panel material **10**. Then, another panel material **10** is sequentially attached to the right side of the attached panel material **10** by the same procedure.

[0099] The position of each panel material **10** in the lateral direction D**1** is finely adjusted so as to align the positions in the lateral direction D**1** of the adjacent panel materials **10** in the longitudinal direction D**2**.

[0100] Subsequently, a step S**6** of attaching the crown molding **40**A is performed. In the step S**6** of attaching the crown molding **40**A, similarly to the step S**4** of attaching the crown molding **40**, the crown molding **40**A is disposed such that the bottom plate **44** is superposed on the side plate **23** of the support member **20**A and the locking piece **45** is in contact with the legs **12** of the panel materials **10** in the uppermost row. The crown molding **40**A is fixed to the side plate **23** of the support member **20**A by the fixing members **64** in the vicinity of both ends of the crown molding **40**A in the longer direction of the crown molding **40**A.

[0101] As described above, the decorative structure **1** is constructed on the outer wall **2**.

[0102] In the decorative structure **1**, the panel material **10** and the method for constructing the decorative structure **1** described above, the panel material **10** is attached by inserting the protrusions **34** of one of the two base materials **30**

adjacent to each other in the longitudinal direction D2 into the insertion holes **12***c* and **12***d* provided in at least one leg **12** of the four legs **12** of the panel material **10**. The four legs **12** are provided along four sides of the outer edge portion **11***b* having a square shape in a plan view, extend from the outer edge portion **11***b* in a direction intersecting (orthogonal to) the body **11**, and have the same shape as each other. That is, except for the surface **11***a*, the panel material **10** is rotationally symmetric about the central axis CX of the body **11** at 90°, 180°, 270°, and 360°. In other words, the four legs **12** of the panel material **10** are rotationally symmetric about the central axis CX of the body **11** at 90°, 180°, 270°, and 360°. Therefore, the panel material **10** can be attached to the base material **30** even if the panel material **10** is rotated by any angle of 90°, 180°, 270°, or 360° about the central axis CX of the body **11**. As a result, it is possible to change the direction in which the panel material **10** is attached.

[0103] The surface **11***a* of the panel material **10** has an asymmetrical decoration with respect to the central axis CX. Therefore, the decorative structure **1** can produce various appearances by arbitrarily attaching each panel material **10** at any one of the rotation angles of 90°, 180°, 270° and 360° for each panel material **10**. Therefore, it is possible to improve the design of the decorative structure **1**.

[0104] Each of the plurality of support members **20** includes the protruding piece **25** which extends in a direction in which the support member **20** extends and protrudes in the direction D3. Since each base material **30** is positioned by the protruding piece **25** of the support member **20**, the work of attaching the base material **30** can be simplified, and the construction accuracy of the base material **30** can be improved.

[0105] Specifically, the plurality of support members **20** include the support member **20**A for supporting the base material **30**A, the support member **20**B for supporting the base material **30**B, and the support members **20**C to **20**E for supporting the base materials **30**C and **30**D. The base material **30**A is attached to the support member **20**A in a state in which the projection **35** of the base material **30**A is brought into contact with the protruding piece **25** of the support member **20**A in the longitudinal direction D2. Since the position of the base material **30**A in the longitudinal direction D2 is determined by this contact, the work for the worker to adjust the position of the base material **30**A in the longitudinal direction D2 can be omitted. This makes it possible to simplify the work of attaching the base material **30**A.

[0106] The base material **30**B is attached to the support member **20**B in a state in which the protruding piece **25** of the support member **20**B is fitted into the groove **37** provided in the base material **30**B. Since the position of the base material **30**B in the longitudinal direction D2 is determined by this fitting structure, the work for the worker to adjust the position of the base material **30**B in the longitudinal direction D2 can be omitted. This makes it possible to simplify the work of attaching the base material **30**B.

[0107] The base materials **30**C and **30**D are attached to the support members **20**C, **20**D and **20**E in a state in which the base materials **30**C and **30**D are fitted into the missing portions **25***a* provided in the protruding pieces **25** of the support members **20**C, **20**D and **20**E. Since the positions of the base materials **30**C and **30**D in the longitudinal direction D2 are determined by these fitting structures, the work for the worker to adjust the position of the base materials **30**C and **30**D in the longitudinal direction D2 can be omitted. This makes it possible to simplify the work of attaching the base materials **30**C and **30**D.

[0108] In this way, the base material **30** can be systematically attached to the support member **20**.

[0109] The leg **12**A of the panel material **10** is marked with the mark M. This makes it possible to indicate the direction in which the panel material **10** is attached by the direction (top, bottom, left and right) of the mark M in the work instruction sheet. Therefore, the worker can easily judge the direction in which the panel material **10** is attached, so that the workability of the panel material **10** can be improved.

[0110] The support members **20**A to **20**E are mounted on the outer wall **2**, and the base materials **30**A to **30**D are mounted on the support members **20**A to **20**E. Further, the plurality of panel materials **10** are attached to the base materials **30**A to **30**D. Therefore, the panel material **10** can be attached without influence of the shape of the outer wall **2**.

[0111] The support members **20**C to **20**E are arranged in the longitudinal direction D2 orthogonal to a direction (lateral direction D1) in which the siding panel **5** extends, and are attached across two siding panels **5** adjacent to each other in the longitudinal direction D2. This configuration makes it difficult for the female end portion **52** of the upper siding panel **5** and the male end portion **51** of the lower siding panel **5** to disengaged from each other. As a result, the wind pressure resistance performance of the outer wall **2** can be improved.

[0112] The panel material **10** at the left end is positioned by bringing the left end of the panel material **10** into contact with (the locking piece **45** of) the crown molding **40**C. The panel material **10** other than the left end is positioned by bringing the left end of the panel material **10** into contact with the right end of the panel material **10** located on the left side of the panel material **10**. This configuration makes it possible to reduce the gap (joint) between the two panel materials **10** adjacent to each other in the lateral direction D1.

[0113] The protrusions **34** of the base materials **30**C and **30**D are inserted through the insertion holes **12***c* and **12***d* provided in the leg **12** of the lower panel material **10** and the insertion holes **12***c* and **12***d* provided in the leg **12** of the upper panel material **10**, and the legs **12** of the two panel materials **10** adjacent to each other in the longitudinal direction D2 are attached to the base materials **30**C and **30**D. This configuration makes it possible to reduce the gap (joint) between the two panel materials **10** adjacent to each other in the longitudinal direction D2.

[0114] It should be noted that the decorative structure, the panel material, and the method for constructing the decorative structure according to the present disclosure are not limited to the above-described embodiments.

[0115] In the above-described embodiments, the outer wall **2** on which the decorative structure **1** is installed is configured by attaching a plurality of siding panels **5** so as to extend in the horizontal direction, but the outer wall **2** is not limited to this configuration. For example, as shown in FIG. **22**, the outer wall **2** on which the decorative structure **1** is installed may be configured by attaching a plurality of siding panels **5** so as to extend in the vertical direction. In this case, the decorative structure **1** may be provided by

being rotated 90 degrees clockwise. The decorative structure **1** may be installed on not only the outer wall but also the inner wall.

[0116] As the shape of the decoration of the surface **11***a*, any shape can be adopted. For example, as shown in FIG. **23**, the decorative shape of the surface **11***a* may be a shape inclined from one side to the other side among a pair of mutually facing sides of the outer edge portion **11***b*.

[0117] In the above embodiments, the decorative structure **1** includes nine panel materials **10**, but the number of panel materials **10** can be changed depending on the size of the desired decorative structure **1**. The lengths of the support members **20**A and **20**B, the base materials **30**A to **30**D, and the crown moldings **40**A and **40**B are adjusted depending on the number of the panel materials **10** in the lateral direction D**1**. The lengths of the support members **20**C to **20**E and the crown moldings **40**C and **40**D, and the number of the base materials **30** are adjusted depending on the number of the panel materials **10** in the longitudinal direction D**2**.

[0118] In the above-described embodiments, the support members **20**A to **20**E have the same shape but may have different shapes. Similarly, in the above-described embodiments, the base materials **30**A to **30**D have the same shape but may have different shapes. For example, the base material **30**A may include at least the projection **35** which is contact with the protruding piece **25** of the support member **20**A in the longitudinal direction D**2**, and the groove **37** may not be provided. At least the groove **37** which is fitted into the protruding piece **25** of the support member **20**B may be provided in the base material **30**B, and the base material **30**B may not include the bulge **36**. The base materials **30**C and **30**D may have a shape that fits into the missing portions **25***a* provided in the support members **20**C to **20**E, and the groove **37** may not be provided.

[0119] In the above embodiments, the crown moldings **40**A to **40**D have the same shape, but may have different shapes.

REFERENCE SIGNS LIST

[0120] **1** decorative structure
[0121] **2** outer wall
[0122] **4** furring strip
[0123] **5** siding panel
[0124] **10** panel material
[0125] **11** body
[0126] **11***a* surface
[0127] **11***b* outer edge portion
[0128] **12** leg
[0129] **12***a* through hole
[0130] **12***b* through hole
[0131] **12***c* insertion hole
[0132] **12***d* insertion hole
[0133] **12***e* through hole
[0134] **20** support member
[0135] **20**A support member (second support member)
[0136] **20**B support member (first support member)
[0137] **20**C, **20**D, **20**E support member (third support member)
[0138] **21** upper plate
[0139] **21***a* mounting surface
[0140] **22** side plate
[0141] **23** side plate
[0142] **24** bottom plate
[0143] **24***a* groove
[0144] **25** protruding piece
[0145] **25***a* missing portion
[0146] **30** base material
[0147] **30**A base material (second base material)
[0148] **30**B base material (first base material)
[0149] **30**C, **30**D base material (third base material)
[0150] **31** base
[0151] **31***a* surface
[0152] **31***b* surface
[0153] **31***c* groove
[0154] **31***d* groove
[0155] **32** mounting plate
[0156] **32***a* surface
[0157] **32***b* surface
[0158] **32***c* through hole
[0159] **32***d* through hole
[0160] **32***e* through hole
[0161] **33** joint
[0162] **34** protrusion
[0163] **34***a* constriction
[0164] **35** projection
[0165] **36** bulge
[0166] **37** groove
[0167] **38** recess
[0168] **40**, **40**A, **40**B, **40**C, **40**D crown molding
[0169] **41** upper plate
[0170] **42** side plate
[0171] **43** side plate
[0172] **44** bottom plate
[0173] **45** locking piece
[0174] **51** male end portion
[0175] **52** female end portion
[0176] **53** fixing portion
[0177] **54**, **61** to **65** fixing member
[0178] CX central axis
[0179] D**1** lateral direction (first direction)
[0180] D**2** longitudinal direction (second direction)
[0181] D**3** direction (third direction)
[0182] L**1** dashed line
[0183] L**2** dashed line
[0184] Lc center line
[0185] M mark

1. A decorative structure comprising:

a plurality of base materials extending in a first direction and provided in parallel with each other at predetermined intervals in a second direction intersecting the first direction; and

a plurality of panel materials, each of the plurality of panel materials being attached to two base materials adjacent to each other in the second direction among the plurality of base materials,

wherein each of the plurality of base materials comprises a protrusion protruding in the second direction,

wherein each of the plurality of panel materials comprises a body including an outer edge portion having a square shape in a plan view, and four legs provided along four sides of the outer edge portion and extending from the outer edge portion in a direction intersecting the body,

wherein the four legs have the same shape as each other, and an insertion hole into which the protrusion can be inserted is provided in each of the four legs, and

wherein the panel material is attached by inserting the protrusion of one of the two base materials through the insertion hole provided in one of the four legs.

2. The decorative structure according to claim 1, further comprising a plurality of elongated support members that support the plurality of base materials,

wherein each of the plurality of support members comprises a protruding piece that extends in a direction in which the support member extends and protrudes in a third direction intersecting the first direction and the second direction, and

wherein the plurality of base materials are positioned by the protruding piece.

3. The decorative structure according to claim 2,

wherein the plurality of base materials include a first base material located at one end of the plurality of base materials in the second direction,

wherein the plurality of support members include a first support member that supports the first base material,

wherein the first support member extends in the first direction and overlaps the first base material when viewed from the third direction, and

wherein a groove into which the protruding piece of the first support member fits is provided in the first base material.

4. The decorative structure according to claim 3,

wherein the plurality of base materials further include a second base material located at the other end of the plurality of base materials in the second direction,

wherein the plurality of support members further include a second support member that supports the second base material,

wherein the second support member extends in the first direction and overlaps the second base material when viewed from the third direction, and

wherein the second base material further comprises a projection that is contact with the protrusion of the second support member in the second direction.

5. The decorative structure according to claim 4,

wherein the plurality of base materials further include a third base material located between the first base material and the second base material in the second direction,

wherein the plurality of support members further include a plurality of third support members that support the third base material,

wherein the plurality of third support members extend in the second direction and are provided in parallel with each other in the first direction, and

wherein missing portions into which the third base material fits are provided in the protruding pieces of the plurality of third support members.

6. A panel material comprising:

a body including an outer edge portion having a square shape in a plan view; and

four legs provided along four sides of the outer edge portion and extending from the outer edge portion in a direction intersecting the body,

wherein the four legs have the same shape as each other, and an insertion hole into which a protrusion of a base material can be inserted is provided in each of the four legs.

7. A method for constructing a decorative structure, the method comprising:

a step of attaching a plurality of base materials so that each of the plurality of base materials extends in a first direction and the plurality of base materials are arranged in parallel with each other at predetermined intervals in a second direction intersecting the first direction; and

a step of attaching a panel material to two base materials adjacent to each other in the second direction among the plurality of base materials,

wherein each of the plurality of base materials comprises a protrusion protruding in the second direction, and

wherein the panel material comprises a body including an outer edge portion having a square shape in a plan view, and four legs provided along four sides of the outer edge portion and extending from the outer edge portion in a direction intersecting the body,

wherein the four legs have the same shape as each other, and an insertion hole into which the protrusion can be inserted is provided in each of the four legs, and

wherein in the step of attaching the panel material, the panel material is attached by inserting the protrusion of one base material of the two base materials into the insertion hole provided in one of the four legs.

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