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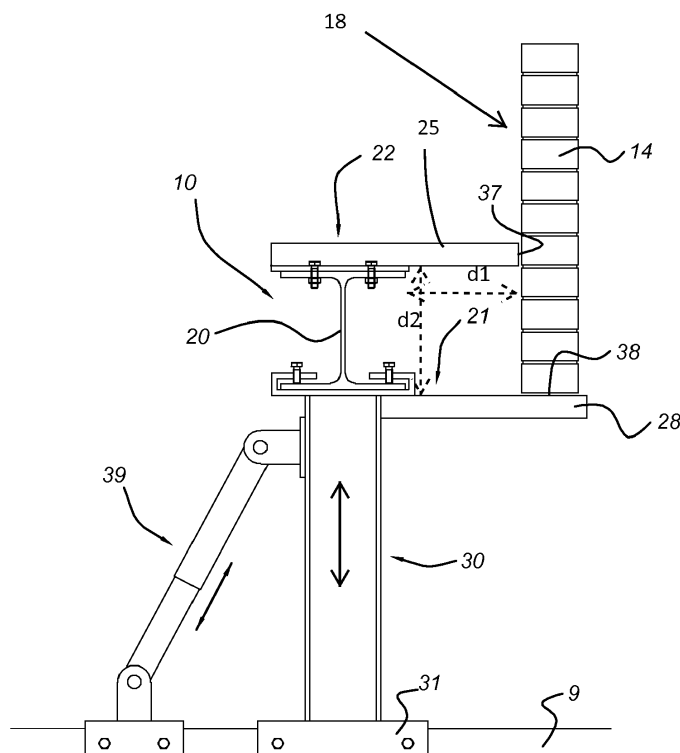
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(54) **Method for making an extension**

(57) Method for building an extension to a façade of a building with at least an exterior wall, particularly a façade of a house such as a terrace house. Bearing de-

vice to be used in the method. Extension. In this way an extension can be built to a house fast en relatively cost-effectively in a standardised manner.

Fig 8



Description

BACKGROUND OF THE INVENTION

[0001] The invention relates to a method for building an extension to a façade of a building, particularly a house such as a terrace house, to a bearing device to be used in the method, and to a building with an extension.

[0002] An extension to an existing building is generally known. Extensions are regularly added, especially to terrace houses and so-called semi-detached houses, as the floor area is found to be too small over the years. Most of such extensions are usually 4-6 meters wide and 1.5-3 meters deep. Although the construction and design are often reasonably similar, most extensions are custom-made and are built individually or sometimes simultaneously for a few houses. Therefore such extensions are relatively expensive and construction time is relatively long. Taking the major nature of such work into account this results in great inconvenience to the residents. Furthermore a resident or client often cannot rely on the construction time to be expected nor on the provided quality.

[0003] NL1022104 relates to a method and a system for temporarily supporting an exterior wall, usually referred to by outer leaf, of a cavity wall, prior to a lowermost part of the exterior wall being removed. In addition holes are made in the exterior wall at a floor level, via which holes supports are arranged in an interior wall, usually referred to by inner leaf, of the cavity wall. Subsequently above the holes additional supports are attached in the cavity wall and the supports are attached to the additional supports using tightening members. This known method has the drawback of the exterior wall and the cavity wall being damaged. Moreover arranging the individual supports and tightening the tightening members is laborious. Furthermore it very much depends on the construction of the cavity wall itself and the conditions around the cavity wall whether this known method can be used. A solidly connected inner leaf of a cavity wall for instance seems to be a condition for using the known method.

[0004] GB2 137 958A relates to a jack, also called lifting screw, lifting jack or prop, wherein the wall support and the ground support are staggered in order to offer space for realising an extension. Nevertheless wall supports are within the opening and are a hindrance.

[0005] In AU67529/81 a clamp or cleat is described, a series of which are hammered in line into the brickwork in case of renovation. Each clamp has a flat, plate-shaped part having a bent part at an end that can be hammered into a joint of the brickwork, and a bent part at the opposing end and that can hook behind a beam. The beam is then supported by a set of traditional props. The temporary bearing structure thus created is able to support a single-brick brickwork when a passage has to be made for a window or door. Due to its nature the temporary support structure needs to be wider than the final passage, or a permanent supporting beam has to be arranged from the opposing side. Moreover this publication

relates to simple openings in a single-brick wall for a door or a window.

[0006] Therefore there is room for improvement of the method for building an extension which method has been known per se for a long time.

SUMMARY OF THE INVENTION

[0007] It is an object of the invention to provide an improved method for building an extension.

[0008] Furthermore or additionally it is an object of the invention to provide a method for building an extension that can be carried out more cost-effectively and/or more quickly.

[0009] For that purpose the invention provides a method according to claim 1.

[0010] By providing the temporary bearing device temporarily entirely outside of the house to a façade or exterior wall and above the full width of the extension, space and opportunity are created first of all for placing a left wall and a right wall of the extension below the façade of the existing house, and subsequently placing a supporting element of the extension for bearing the façade of the existing house, which supporting element supports on the left and right walls of the extension. The method according to the invention in actual practice offers the possibility of placing an extension in the framing stage in one day only whereas in common methods of placing an extension this takes one to several weeks. Moreover this can be done with little to no hindrance inside the building. Particularly in case of houses, more in particular so-called terrace houses or semi-detached houses this can be highly advantageous. Especially considering that an extension usually extends over nearly the full width of a house. Moreover the temporary bearing device provides stability and causes little hindrance during the other activities.

[0011] In this application wall or exterior wall refers to a common wall in construction, a cavity wall. Usually the exterior wall as described is the façade. The invention for that matter is not restricted to use on façades with cavity walls, but can advantageously be used on other types of walls of façades. Outer leaf and inner leaf refer to the exterior wall and interior wall, respectively, of a cavity wall.

[0012] The extension has a right wall and a left wall. This can be cavity walls with an inner leaf and an outer leaf, but also other types of bearing walls.

[0013] Building or house refers to an already realised building construction that is to be extended with the extension.

[0014] In one embodiment the left and right walls are placed on a foundation, particularly on a floor that rests on a foundation. In that way a basic stability is achieved.

[0015] In one embodiment the method comprises the steps of:

- arranging a substantially vertical left groove and right

groove in the exterior wall for the left wall and the right wall, respectively, of the extension (2),

- placing the left wall and the right wall (9) in the left groove and the right groove.

[0016] In that way a basic stability becomes possible without causing hindrance inside the building.

[0017] In one embodiment the method further comprises the step of moment-fixedly connecting the left wall and the right wall to a bottom section of the extension, which bottom section is suitable for connection to a floor of the building, wherein particularly the left wall and the right wall at their lower sides are connected to the bottom section for providing the extension with a bond.

[0018] In one embodiment the method further comprises the step of providing a girder for durably bearing the façade, wherein the girder supports on the left wall and right wall of the extension, specifically on an inner leaf of the left wall and the right wall, and then removing the temporary bearing device.

[0019] In that way stability is safeguarded during construction. Moreover this causes a minimum of hindrance inside the building.

[0020] In one embodiment of the method the supporting element is provided in assembly with a prefab roof element of the extension for connection to a storey floor of the building, wherein the supporting element and the roof element of the extension are connected in a force-transmitting manner.

[0021] In one embodiment the method further comprises the steps of:

- extending the foundation near the house for placing the extension thereon;
- manufacturing or placing the bottom section thereon;
- moment-fixedly connecting the left wall and the right wall of the extension to the bottom section for providing the extension and the building with a bond;
- supporting the girder on the left wall and right wall for supporting the façade and depending on the situation directly or indirectly the inner leaf of the façade of the house and for providing the extension and the building with a bond.

[0022] During construction the extension is stable, and the building remains stable. Hardly any work needs to be done yet inside the building.

[0023] The invention further relates to a bearing device, particularly as the temporary bearing device in the above-mentioned method, comprising

- a supporting beam having a longitudinal axis provided with a number of support parts connected to the supporting beam in a force-transmitting manner, for engagement onto the façade, wherein the bearing device comprises series of upper support parts that in an operational position of the supporting beam are connected at the upper side of the supporting beam

and extend from the supporting beam, and a series of lower support parts that in operational position of the supporting beam, are connected at the lower side of the supporting beam and extend from the supporting beam in the same direction as the upper support parts;

- at least one adjustment part, connected to the supporting beam in a force-transmitting manner for tightening the bearing device for, when used, bearing at least the façade.

[0024] In one embodiment of the bearing device the support parts are adjustably connected to the supporting beam for evenly bearing the façade.

[0025] In one embodiment of the method the bearing device extends in the exterior wall of the house which makes it all the more possible to start supporting the exterior wall of the house by means of the bearing device.

[0026] In one embodiment the method comprises the steps of:

- prior to providing the bearing device, arranging a substantially vertical left groove and/or right groove in the exterior wall for a left wall and/or right wall of the extension, respectively, extending therein;
- providing a left wall and/or right wall of the extension for connection to the exterior wall of the building, which left wall and/or right wall extends in the left groove and/or right groove, respectively, and
- the bearing device engaging onto the left wall and/or right wall of the extension for tightening the bearing device, particularly engagement onto the upper side of the left wall and/or right wall.

[0027] Due to the bearing device engaging onto the left wall and/or right wall the bearing device can be designed more compact which is beneficial to the stability of the bearing device and moreover there is more free space in and around the extension or it becomes easier to realise an extension in a row of houses or between other annexes.

[0028] In one embodiment of the method the left wall and/or the right wall is moment-fixedly connected to a bottom section of the extension which bottom section is suitable for connection to a floor of the building, wherein the left wall and/or right wall at their lower sides are connected to the bottom section for providing a bond to the extension. Bond here means that the left wall and/or right wall is connected such to the bottom section that this wall or these walls can hardly tilt with respect to the bottom section of the extension, or not at all.

[0029] In one embodiment the method comprises the step of:

- providing a supporting element for durably bearing the wall, particularly cavity wall, of the house, wherein the supporting element only supports on the left wall and right wall of the extension, specifically on

an inner leaf of the left wall and right wall.

[0030] Contrary to the bearing device the supporting element is durably connected to the extension and the house and by means of the supporting element the extension offers support to the exterior wall of the house above the extension. Moreover the supporting element provides all the more bond to the extension.

[0031] It is possible that the supporting element supports on a steel structure that rests on the foundation of the extension and provides a bond to the extension and via the supporting element to the building.

[0032] In one embodiment the supporting element is provided in assembly with a prefabricated concrete ceiling element of the extension for connection to a storey floor of the building, wherein the supporting element and the roof element of the extension are connected in a force-transmitting manner. This renders the connection of the supporting element to both the left wall and right wall easier and quicker.

[0033] In one embodiment of the method according to the invention the bearing device only engages onto the outer leaf and depending on the situation directly or indirectly onto the inner leaf of the bearing cavity wall of the house.

[0034] In one embodiment the bearing device is supported only at its left outer end and/or right outer end for bearing at least the outer leaf of the cavity wall above the extension. This provides more space in and around the extension.

[0035] In one embodiment the method comprises the steps of:

- extending the foundation near the house for placing the extension thereon;
- immediate in situ manufacturing of the bottom section thereon;
- moment-fixedly connecting the left wall and/or right wall of the extension to the bottom section for providing the extension with a bond;
- supporting the supporting element on the left wall and right wall for supporting at least the outer leaf and depending on the situation directly or indirectly the inner leaf of the cavity wall of the house and for providing the extension and the building with a bond.

[0036] This makes it possible to realise the extension more quickly and more cost-effectively, which extension moreover contributes all the more to the stability and firmness of the existing building during construction. During construction the (temporary) bearing device is replaced by the girder or the supporting element.

[0037] The invention furthermore relates to a bearing device, particularly for a method according to the invention, comprising:

- a supporting beam having a longitudinal axis provided with a number of support parts connected to the

supporting beam in a force-transmitting manner for engagement onto the exterior wall of the house, specifically the outer leaf and depending on the situation directly or indirectly the inner leaf of the exterior wall, in order to at least bear the exterior wall above the extension, wherein the number of support parts is ranged and distributed along the longitudinal axis of the supporting beam for evenly bearing the exterior wall,

- at least an adjustment part connected to the supporting beam in a force-transmitting manner for tightening the bearing device for bearing at least the exterior wall.

[0038] In one embodiment of the bearing device a support part, in particular each support part, of the number of support parts is adjustably connected to the supporting beam for evenly bearing the exterior wall, specifically the outer leaf and depending on the situation directly or indirectly its inner leaf.

[0039] In one embodiment of the bearing device a first part of the number of support parts, in the operational position of the supporting beam, is connected at the upper side of the supporting beam and/or a second part of the number of support parts, in the operational position of the supporting beam, is connected at the lower side of the supporting beam.

[0040] In one embodiment of the bearing device the support parts are provided with, in the operational position of the supporting beam, a support section facing the façade, which support section, when used, extends in at least the outer leaf and depending on the situation directly or indirectly the inner leaf of the façade, and which support section has a support surface for engagement onto a lower side of the façade in order to bear the façade and depending on the situation the storey floor.

[0041] In one embodiment of the bearing device the supporting beam is an H-beam. Other profiles are possible for the supporting beam such as for instance a T-profile or a tubular profile. Particularly the supporting beam, or more generally the bearing device, is adjustable as regards length for adapting the bearing device to the width of the extension.

[0042] In one embodiment of the bearing device the supporting beam is provided with a first series of slotted holes, which slotted holes extend substantially along the longitudinal direction of the supporting beam for along the longitudinal direction of the supporting beam adjustably connecting the number of support parts to the supporting beam.

[0043] In one embodiment of the bearing device the support parts are provided with at least one slotted hole, which slotted hole, when used, extends substantially transverse to the longitudinal direction of the supporting beam for adjusting the support part from and towards the façade.

[0044] Due to the slotted holes of the supporting beam cooperating with the slotted holes of the support part, the

support part can be adjusted in a plane.

[0045] The invention furthermore relates to a building with an extension, wherein at least a façade of the building situated above the extension is supported by the foundation of the extension, is specifically only supported by the foundation of the extension.

[0046] In one embodiment of the building with an extension at least the right wall and the left wall of the extension are connected in a force-transmitting manner to the façade of the building situated above the extension for supporting the façade and substantively contributing to the bond of the building.

[0047] The invention further relates to a device provided with one or more characterising measures described in the attached description and/or shown in the attached drawings.

[0048] The invention furthermore relates to a method comprising one or more of the characterising steps described in the attached description and/or shown in the attached drawings.

[0049] It will be clear that the various aspects mentioned in this patent application can be combined and each individually may be eligible for a divisional patent application.

SHORT DESCRIPTION OF THE FIGURES

[0050] In the attached figures an embodiment of an extension, a related supporting beam, and a computer program for customized design and planning of an extension are shown in which:

Figure 1 shows a floor plan of an embodiment of a residence with extension;

Figure 2 shows a front view in cross-section of the extension of figure 1;

Figure 3 shows a cross-section of the extension of figure 1;

Figure 4 shows a front view of a bearing device for during the realisation of the extension, supporting the existing wall of the residence of figure 1;

Figure 5 shows a top view of the supporting beam of figure 4, provided with support parts at the upper side;

Figure 5a shows a detail of figure 5;

Figure 6 shows an upper support part for the supporting beam of figure 4;

Figure 7 shows a lower support part for the supporting beam of figure 4;

Figure 8 shows a side view of the supporting beam

assembly of figure 4, when operational, wherein an outer leaf is supported;

Figure 8A shows the embodiment of figure 8 wherein also the inner leaf is supported;

Figure 8B shows the embodiment of figure 8 wherein the inside floor is supported, and

Figures 9A-9J show various steps in a method for building an extension.

DESCRIPTION OF THE EMBODIMENTS

[0051] Figure 1 shows a floor plan of four terrace houses 1, wherein the third from the left is provided with an extension 2, shown in cross-section. In the figure a cross-section shown in figure 2 and a longitudinal section shown in figure 3 are depicted. In the house with extension 2 the original location of the original façade 18 is schematically indicated. The extension 2 has a left wall and a right wall, both indicated with number 9. It can be seen that an inner leaf of said walls extends to the position of the original façade 18 to support the façade 18 above the extension 2, as will be explained further.

[0052] Figure 2 shows a cross-section of the extension 2 as indicated in figure 1. For the extension 2 usually a depth of approximately 15 to 25 cm is excavated, usually as crawl space to avoid humidity contact with the soil. For bearing a concrete floor 3 that was manufactured in situ or a prefab concrete floor 3 provided with an insulation layer 4, a series of piles or cased piles 5 are arranged as foundation 5. This may for instance be a set of piles that can be screwed in. For left wall and right wall the extension 2 has an exterior wall 7, and insulation layer 8 and an interior wall 9, respectively. The interior wall 9 in this case is a prefab concrete wall provided with an attachment member with which the interior wall 9 can moment-fixedly be connected to the floor section 3 and which connection provides the extension 2 with a bond. In an alternative embodiment it is possible that the interior wall and/or exterior wall 7, 9 consist of brickwork, or another construction. In that case the bond is realised by means of a steel structure (not shown). Bond means the stability or resistance against sagging or even collapsing of the extension 2 and the existing house.

[0053] The extension 2 is furthermore provided with a roof 11 that is connected to the rest of an existing building by means of a supporting element or girder 10. The supporting element 10 is connected with, and supports on the interior walls 9 of the extension 2. The supporting element 10 also provides the extension 2 with a bond and lets the extension 2 contribute to a bond of the building by means of the connection between the building and the supporting element 10. The supporting element 10 here rests on the interior walls 9 by means of a left and right connection profile 34, 35, which for instance by means of a threaded connection are connected to both

the supporting element 10 and the interior walls 9.

[0054] A concrete floor 3 like in figure 2, is highly standardised as regards build and structure. The client may for instance be given the choice for a type of building, in which the client indicates the outer width between two existing walls, the inner width between said walls, and the wanted extension depth. The exact required dimensions of the concrete floor 3 are then easy to determine and can be passed on to a person preparing the work. In one embodiment the concrete floor 3 can be supplied as a prefab element.

[0055] Figure 3 shows a longitudinal section of the extension of figure 1 (and figure 2). It can be seen that at the side facing away from the building the extension is provided with a façade element or a casing assembly 12. Such a casing assembly can be standardised to a high degree. The client can now indicate the distance between the existing floor 16 and the ceiling 15. The client can furthermore be presented with a number of possible layouts and dimensions that he can choose from, possibly based on the latitudinal dimensions already given. In figure 3 the dotted lines schematically show the original position of the façade 18. It can be seen how (in this case) the wall 9 extends to inside the house. The wall 9 extends inside the house beyond the original façade 18. As a result the walls 9 are able to support the girder 10, which in its turn supports the façade 18 above the extension. In this case the façade 18 is a cavity wall having an inner leaf 13 and an outer leaf 14. In this case the house has a foundation 17.

[0056] In figures 4-8 an element that is important in the use of the method for realising the extension 2, namely the bearing device 36, will be discussed, which bearing device 36 will form an important temporary support for the façade, in any case the outer leaf of a cavity wall of the building, specifically the cavity wall above the extension 2 to be realised. This bearing device 36 as well is highly standardised and provided with adjustable support parts 21, 22 and with adjustment parts 30 so that it can be adapted in situ to the usually small dimensional deviations of a building. By means of the adjustment parts 30 the bearing device 36 can be tightened for supporting the façade 18 or exterior wall of the building. When a hydraulic cylinder is used in the adjustment part 30, the actual support is easy to control and check. The bearing device 36 can be tightened between the exterior wall of the building and a base, for instance the exterior walls of the extension, the foundation of the extension or props on the concrete floor 3.

[0057] The bearing device 36 is particularly provided with a series of first support parts 22 (when operational) at the upper side of the beam 20, in this case an H-beam. An H-beam is a generally available beam, but also another type of functionally equal beam could be used. The positioning of the support parts 21, 22 makes it possible that the bearing device 36 is also able to compensate for moment forces, and as a result is able to prevent an exterior wall of a façade from keeling over.

[0058] The bearing device 36 is furthermore provided with a second series of support parts 21 (when operational) at the lower side of the beam 20. Such a beam is easy to customize to the wanted length (width of the extension). In one embodiment the position of the support parts on the beam 20 is adjustable. For instance it appeared to be desirable that the position could be set transverse to the beam when placing the bearing device in order to realise a proper connection to an existing wall section of the building. In addition it appeared that as the case may be, it is desirable that the position of the support parts 21, 22 along the longitudinal axis of the beam 20 can also be set in order to take the bond in the brickwork into account, the so-called brickwork bond.

[0059] In addition the bearing device 36 is provided with two adjustment parts 30, connected to the beam 20 in a force-transmitting manner at both outer ends of the beam 20. At their lower sides said adjustment parts 30 are provided with attachment members 31 to attach them to a wall 9. The adjustment parts 30 are furthermore provided with an adjustment means 32 for adapting the length of the adjustment parts 30 and tightening the adjustment parts 30 for supporting at least the exterior wall above the extension 2. In general the length of the adjustment means 32 will be adaptable by approximately 10 cm. It is possible to provide the adjustment means 32 with screwed parts that can be set manually. A solution enabling to properly bear and support an existing structure of a building is provided with a hydraulic pump, such as a so-called pot pump. It can for instance be connected when placed, subsequently the length of the adjustment parts 30 is set so that an existing structure is properly supported. During removal of an existing façade part of the building, if so desired the length can be further adjusted to keep supporting the existing structure adequately. When the connection with the building is adequate the length of the adjustment parts 30 can be secured. The bearing device 36 is in this case furthermore provided with two lifting eyes 29.

[0060] In figures 6 and 7 an upper support part 22 and a lower support part 21, respectively, are shown in more detail. The upper support parts 22 and the lower support parts 21 are almost equal to make an as high as possible standardisation possible. For instance the support parts 21, 22 are provided with an attachment member, in this case a plate 23, 26 provided with two slotted holes 24, 27 to make the support parts 21, 22 adjustable transverse to the beam. Furthermore the support parts 21 are provided with a wall support member 28, also support section, having a support surface 38 suitable to engage onto a brick of the exterior wall for bearing the exterior wall of the building. During use of the bearing device 36 the wall support member 28 extends inside at least the outer leaf of the exterior wall. In case of the upper support part 22 the wall support member 25 has a length to have the wall support member with its outer end 37 abut the exterior wall of the building to prevent the bearing device from tilting about the longitudinal axis of the bearing device.

[0061] Possibly, tilting of the bearing device 36 is furthermore prevented by an adjustable support shore in its entirety indicated with 39, as shown in figure 8. The support shore 39 is in this case connected to the upper side of the interior wall 9 and the adjustment part 30. The support shore 39 can be connected to the concrete floor 3 and the adjustment part 30. Usually the upper support part projects approximately 5-15 cm from or with respect to the beam 20. In case of the lower support part 21 the wall support member 28 has a larger length than wall support member 25, in order to be able to bear the lower side of the wall of the building. Usually the upper support part projects a length d1 of approximately 10-20 cm with respect to or from the beam. Both support parts can in general be adjusted approximately over 5 cm transverse to the beam 20. In addition it may be desirable to be able to adjust the support parts 21, 22 approximately 5-10 cm along the longitudinal direction of the beam 20 in order to adapt to an existing situation and dimensions (or deviations therein) of a building to make a proper support and connection possible. The distance between the upper support parts 22 on the one hand and the lower support parts 21 on the other hand, is the beam height d2 and usually is 10-20 cm.

[0062] In figure 8 the façade 18 is single-brick. Figures 8A and 8B show other frequently seen façade structures, wherein the advantage of the bearing device 3 becomes even clearer.

[0063] In figure 8A the façade 18 is a cavity wall having an inner leaf 13 and an outer leaf 14. In that case the bearing device 36 in addition to supporting the outer leaf 14 also supports the inner leaf 13. In figure 8B the inner leaf rests on a storey floor.

[0064] Figures 9A-9J show the method for building an extension in several steps. In figure 9A a house 1 having a façade 18 is schematically shown. In figure 9B the façade 18 is provided with two vertical grooves 19. Usually said grooves run through the entire façade 18. In figure 9C a foundation is arranged outside of the house 1, in this case schematically shown by means of a number of piles 5. This may be any foundation known per se to an expert. An example are cased piles or piles 5 that can be screwed in. On the foundation 5 the extension floor 3 already discussed rests. The extension floor will in general connect to the residence floor. The grooves 19 are not indicated here. The steps of figures 9B and 9C can in fact also take place in reverse order. In figure 9D a first wall, left wall 7, 8, 9 is placed. The reference numbers 7, 8, 9 are an indication that the structure may be any wall structure, as long as it is/can be bearing. In figure 9E the right wall 7, 8, 9 is also placed in groove 19.

[0065] In figure 9F it is schematically shown by means of shores that the walls are moment-fixedly connected to the extension floor 3. In figure 9 it is shown that the temporary bearing device 36 is placed on the walls 7, 8, 9. In figure 9H the façade is broken through. Residence floor 16 is visible. Now the bearing device 26 bears the façade, and transfers the weight through to the founda-

tion 5 via the walls 7, 8, 9. The construction is stable. In figure 9I a ceiling plate 11 is arranged and connected to the walls. A supporting beam (cannot be seen, behind the ceiling plate 11) now bears the façade 18 and the temporary bearing device 36 is removed. In figure 9J the extension is provided with a skylight.

[0066] It will be clear that the above description is included to illustrate the operation of preferred embodiments of the invention and not to limit the scope of the invention. Starting from the above description many variations that fall within the spirit and the scope of the present invention will be evident to an expert.

Overview of the figure numbers

[0067]

- 1 = house
- 2 = extension
- 3 = extension floor
- 4 = extension insulation
- 5 = foundation piles
- 6 = finishing floor extension
- 7 = outer leaf extension side wall
- 8 = insulation extension side wall
- 9 = inner leaf extension side wall
- 10 = permanent girder
- 11 = extension roof
- 12 = façade element or casing assembly extension
- 13 = interior wall façade
- 14 = exterior wall façade
- 15 = storey floor house
- 16 = residence floor
- 17 = residence foundation
- 18 = façade
- 19 = grooves
- 20 = beam
- 21 = lower support parts at lower side beam
- 22 = upper support parts at upper side beam
- 23 = plate
- 24 = slotted hole
- 25 = wall support member
- 26 = plate
- 27 = slotted hole
- 28 = wall support member
- 29 = lifting eyes
- 30 = adjustment parts
- 31 = attachment members for attaching the adjustment parts on walls
- 32 = adjustment means
- 33 = slotted hole in beam
- 34 = connection profile for girder or supporting element
- 35 = connection profile for girder or supporting element
- 36 = temporary bearing device
- 37 = support surface
- 38 = support surface

39 = support shore

Claims

1. Method for building an extension (2) to a façade of a building (1), particularly a house such as a terrace house, comprising the steps of:
 - placing a left wall and a right wall (9) for the extension in connection to the building (1);
 - providing a temporary bearing device (36) outside the house, which temporary bearing device (36) engages onto the façade for bearing the façade above the extension, and wherein the temporary bearing device (36) extends along the façade over at least a full width of the extension (2) for spanning at least the full width of the extension, and which supports on the left and right wall (9) of the extension (2) by means of adjustment parts (30), and
 - tightening the adjustment parts (30) of the temporary bearing device (36) for bearing the façade prior to removing the part of at least the façade over the width of the extension (2) in order to realise a breakthrough between the building (1) and the extension (2).
2. Method according to claim 1, wherein the left and right walls (9) are placed on a foundation (5), particularly on a floor that rests on a foundation.
3. Method according to claim 1 or 2, comprising the steps of:
 - arranging a substantially vertical left groove and right groove in the exterior wall for the left wall and the right wall, respectively, of the extension (2),
 - placing the left wall and the right wall (9) in the left groove and the right groove.
4. Method according to claim 3, further comprising the step of moment-fixedly connecting the left wall and the right wall to a bottom section of the extension, which bottom section is suitable for connection to a floor of the building, wherein particularly the left wall and the right wall at their lower sides are connected to the bottom section for providing the extension with a bond.
5. Method according to claim 3 or 4, further comprising the step of providing a girder for durably bearing the façade, wherein the girder supports on the left wall and right wall of the extension, specifically on an inner leaf of the left wall and the right wall, and then removing the temporary bearing device (36).
6. Method according to claim 5, wherein the supporting element is provided in assembly with a prefab roof element of the extension for connection to a storey floor of the building, wherein the supporting element and the roof element of the extension are connected in a force-transmitting manner.
7. Method according to any one of the preceding claims 4-6, further comprising the steps of:
 - extending the foundation near the house for placing the extension thereon;
 - manufacturing or placing the bottom section thereon;
 - moment-fixedly connecting the left wall and the right wall of the extension to the bottom section for providing the extension and the building with a bond;
 - supporting the girder on the left wall and right wall for supporting the façade and depending on the situation directly or indirectly the inner leaf of the façade of the house and for providing the extension and the building with a bond.
8. Bearing device (36), particularly as the temporary bearing device in the method according to any one of the preceding claims, comprising
 - a supporting beam (20) having a longitudinal axis provided with a number of support parts (21, 22) connected to the supporting beam in a force-transmitting manner, for engagement onto the façade, wherein the bearing device comprises series of upper support parts (22) that in an operational position of the supporting beam are connected at the upper side of the supporting beam and extend from the supporting beam, and a series of lower support parts (21) that in operational position of the supporting beam, are connected at the lower side of the supporting beam and extend from the supporting beam in the same direction as the upper support parts (22);
 - at least one adjustment part (30), connected to the supporting beam in a force-transmitting manner for tightening the bearing device (36) for, when used, bearing at least the façade.
9. Bearing device (36) according to claim 8, wherein the support parts (21, 22) are adjustably connected to the supporting beam (20) for evenly bearing the façade.
10. Bearing device (36) according to claim 8 or 9, wherein the support parts (21, 22) are provided with, in the operational position of the supporting beam, a support section (28, 25) facing the façade, which support section (28, 25), when used, extends in at least an outer leaf (14) and depending on the situation directly

or indirectly an inner leaf (13) of the façade (18), and which support section (28, 25) has a support surface (38, 37) for engagement onto a lower side of a brick in order to bear the façade (18).

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11. Bearing device according to any one of the preceding claims, wherein the supporting beam (20) is provided with a first series of slotted holes (33), which slotted holes (33) extend substantially along the longitudinal direction of the supporting beam (20) for along the longitudinal direction of the supporting beam (20) adjustably connecting the number of support parts (21, 22) to the supporting beam. 10
12. Bearing device according to any one of the preceding claims, wherein the support parts (21, 22) are provided with at least one slotted hole (27, 24), which slotted hole (27, 24), when used, extends substantially transverse to the longitudinal direction of the supporting beam (20) for adjusting the support parts (21, 22) from and towards the façade. 15 20
13. Building (1) with an extension (2), wherein at least a façade (18) of the building (1) situated above the extension (2) is supported by the foundation (5) of the extension (2), is specifically only supported by the foundation (5) of the extension (2). 25
14. Building (1) with an extension (2) according to claim 13, wherein at least a wall (9) of the extension (2) is connected in a force-transmitting manner to the façade (18) of the building (1) situated above the extension (2) for supporting the façade (18) and contributing substantively to the bond of the building (1). 30 35

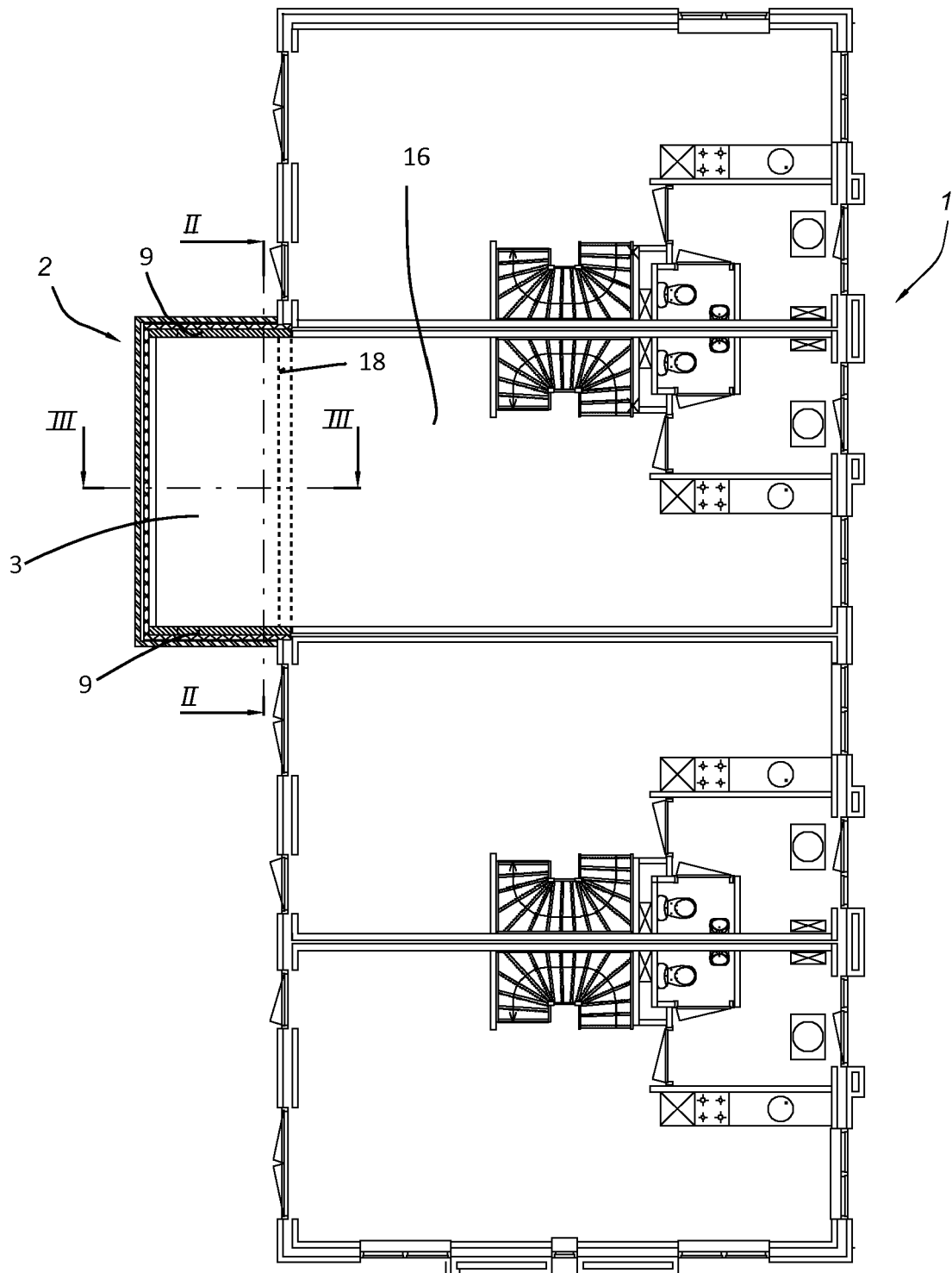
40

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50

55

Fig 1



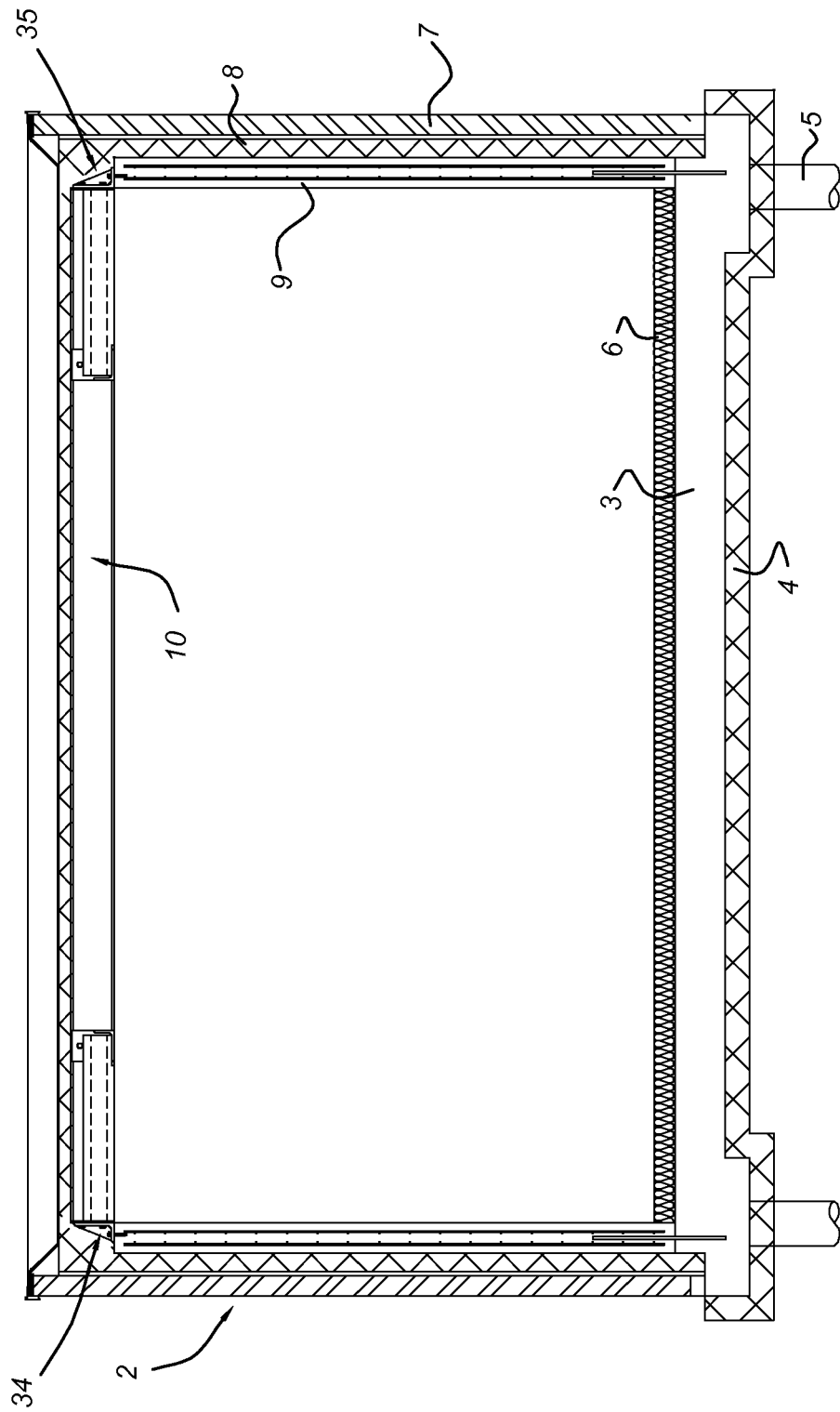


Fig 2

Fig 3

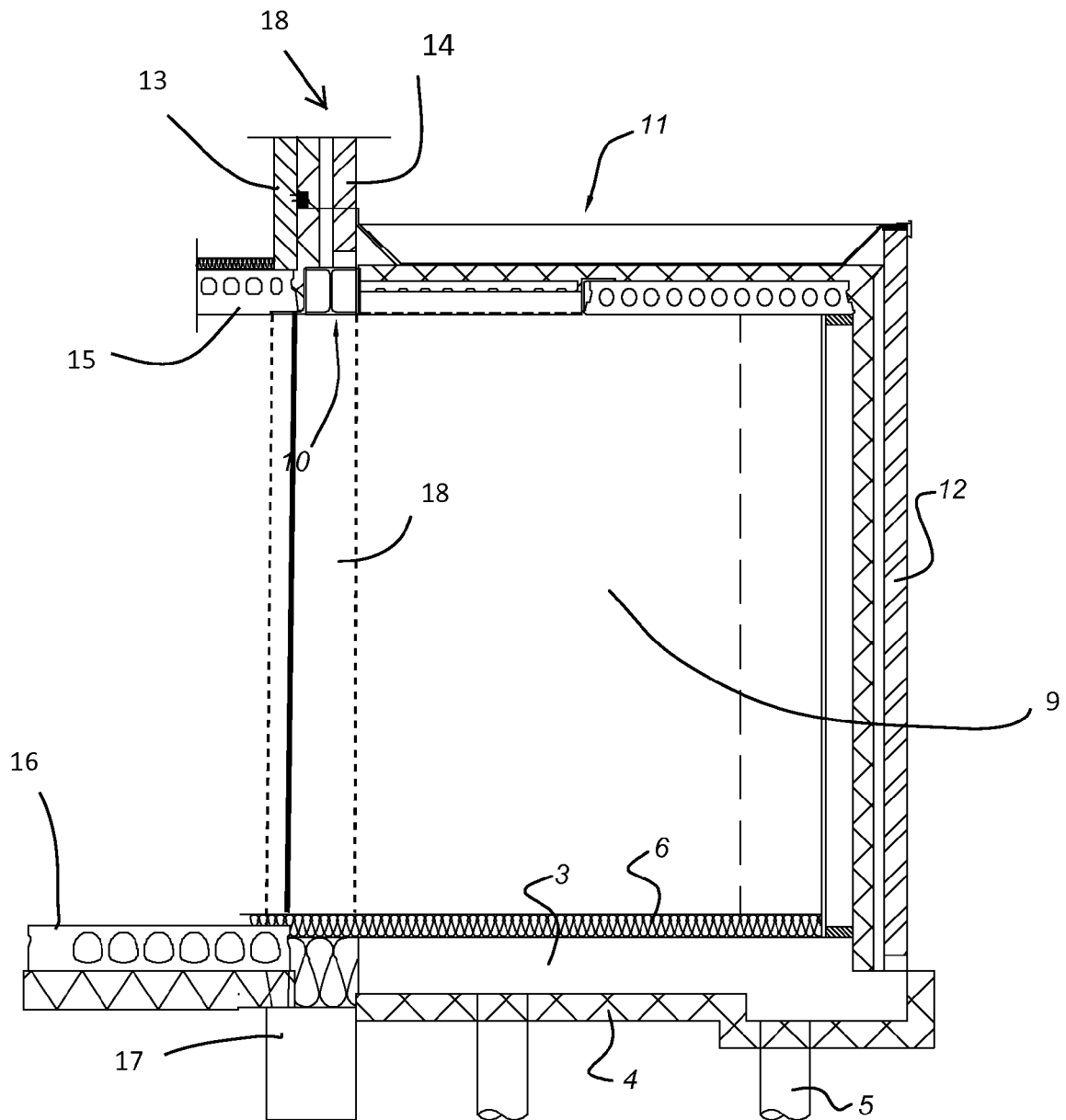


Fig 4

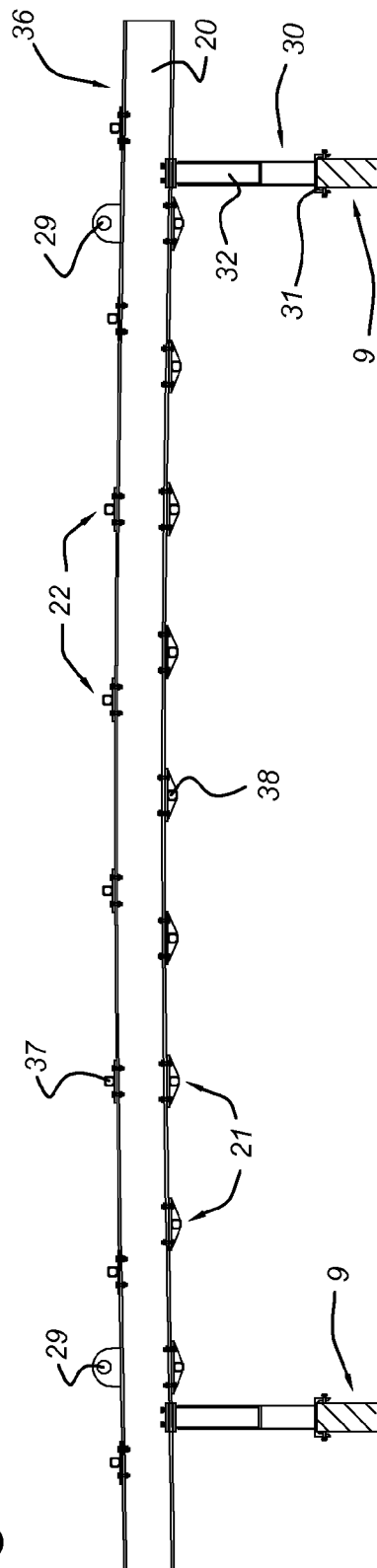


Fig 5

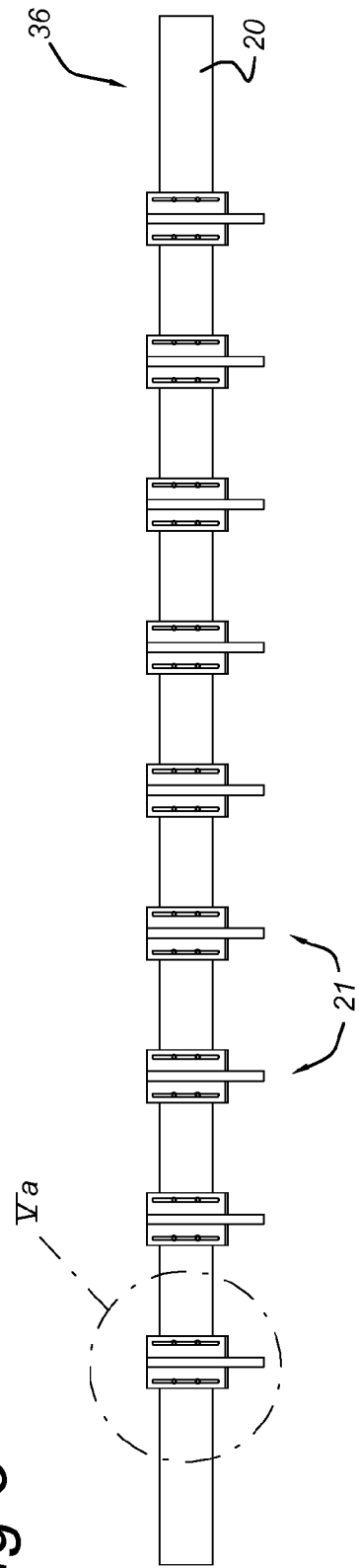


Fig 5a

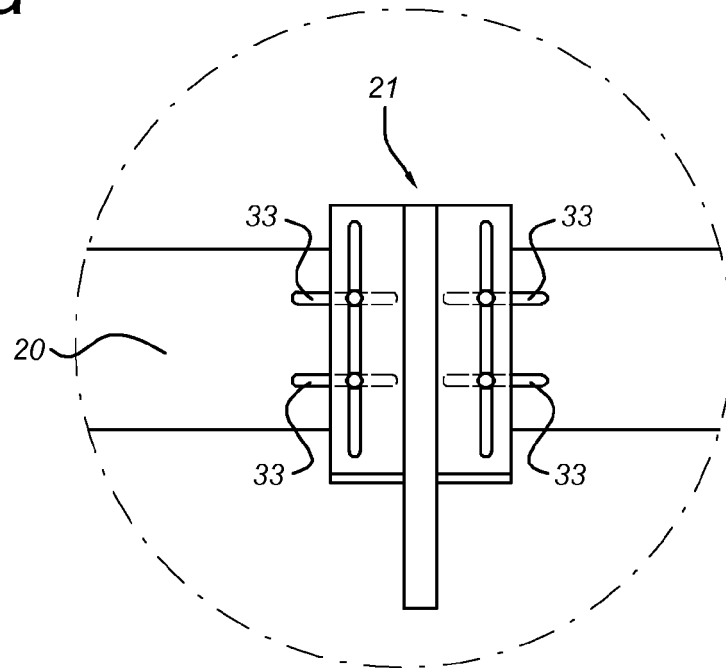


Fig 6

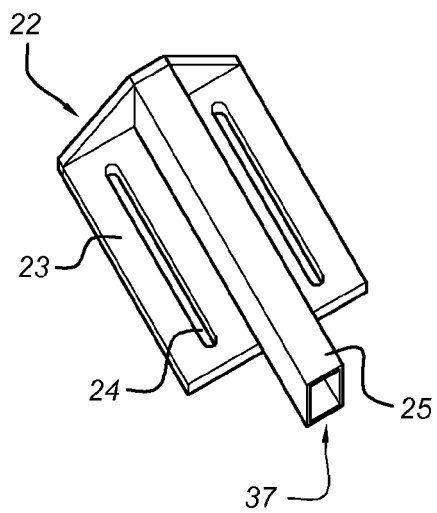


Fig 7

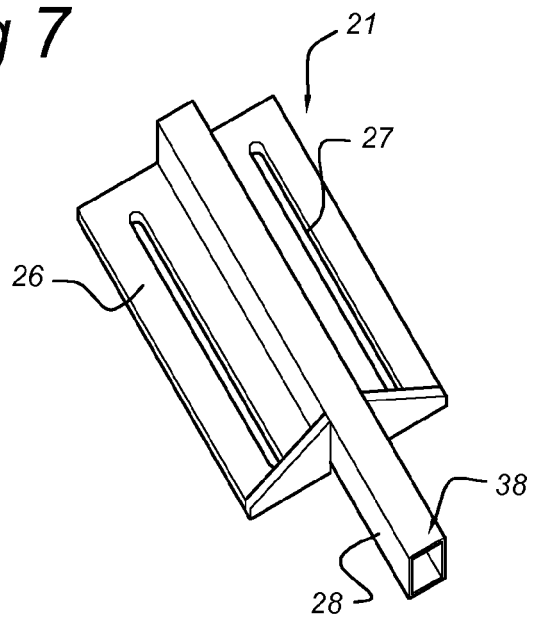


Fig 8

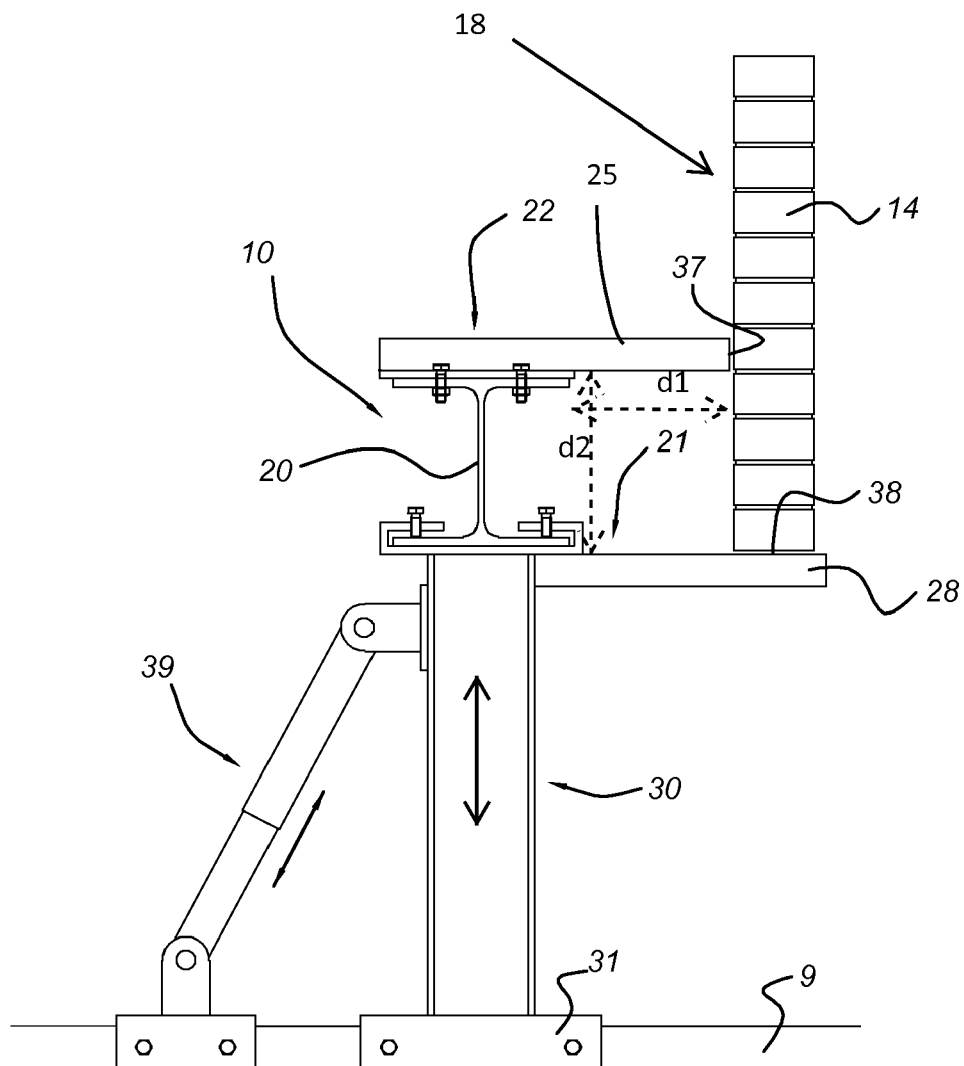


Fig 8 A

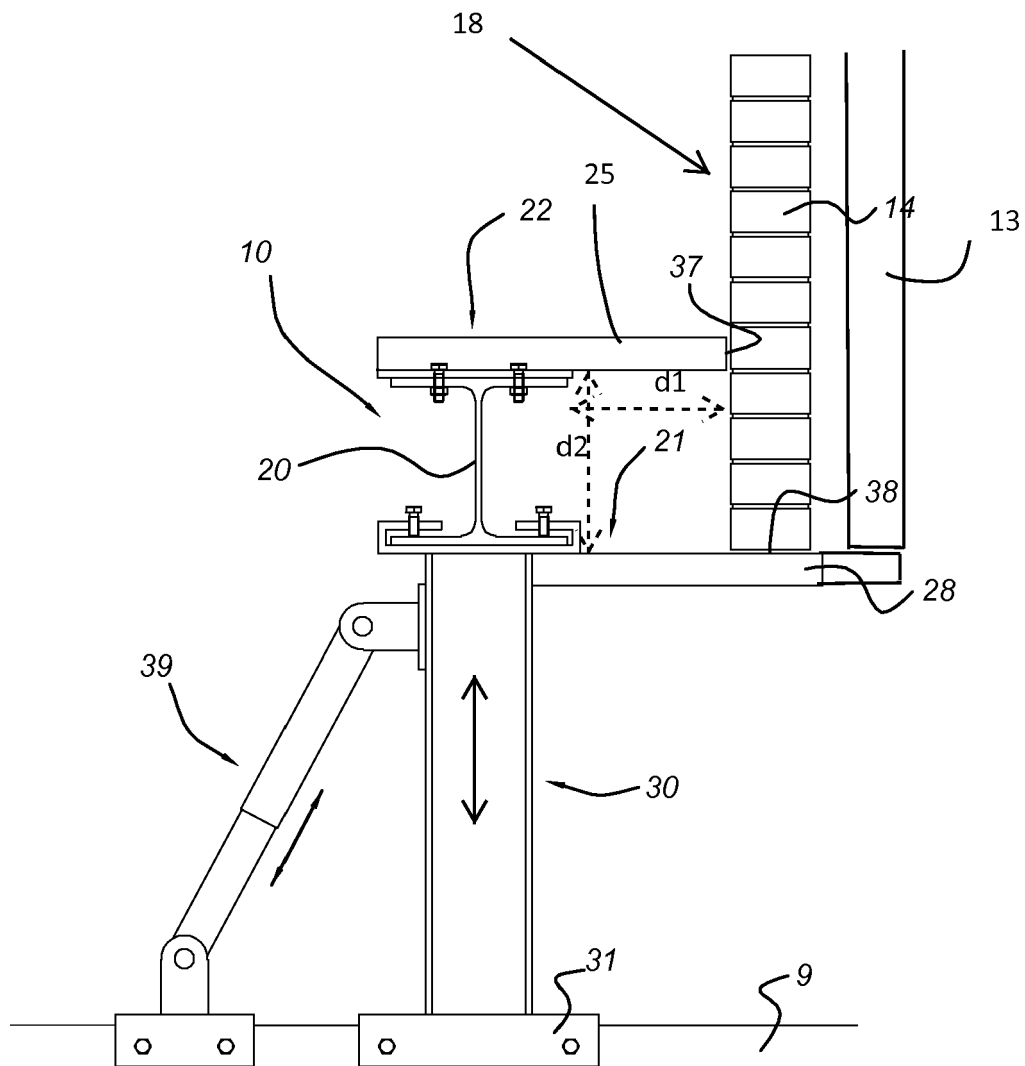
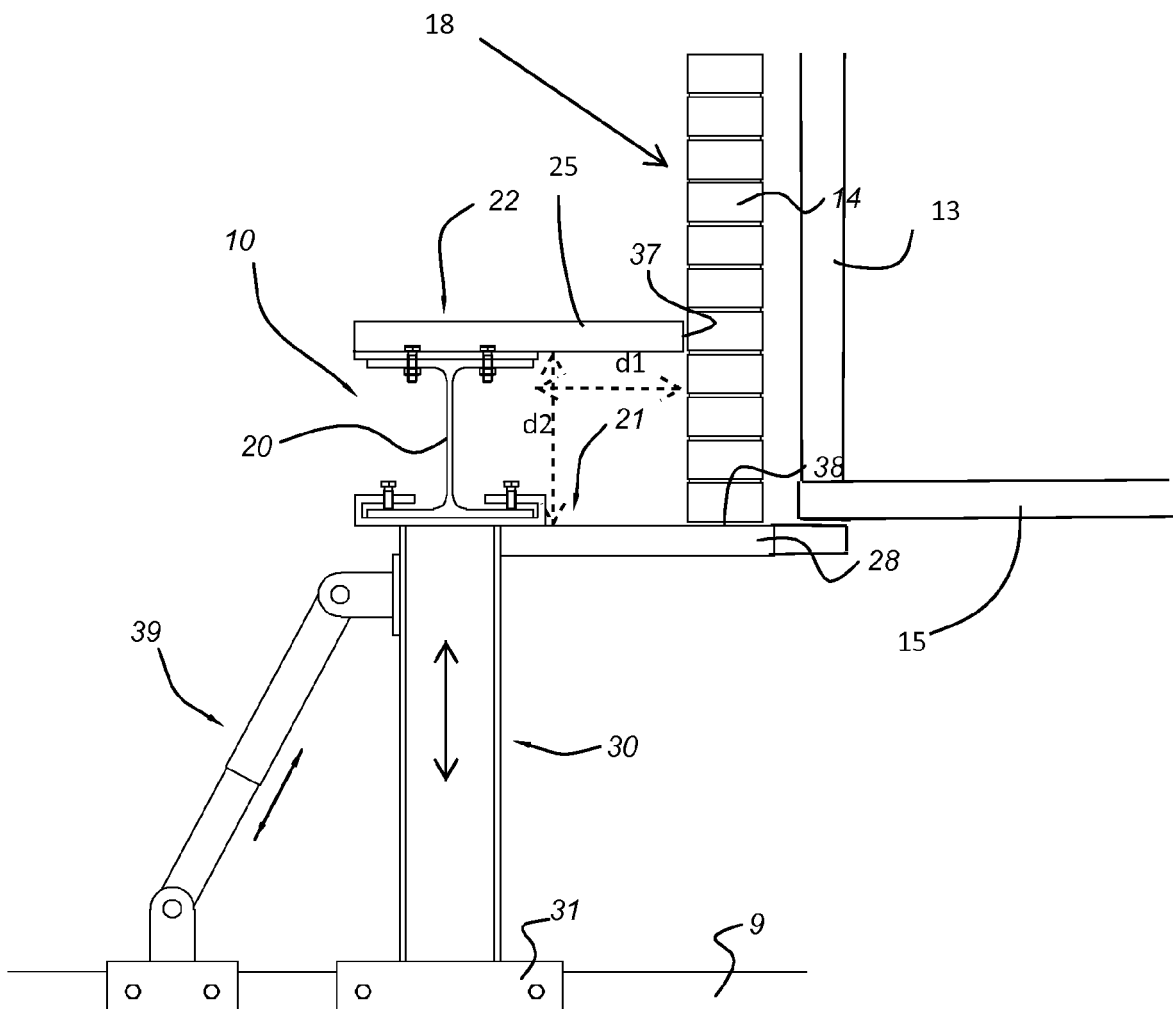


Fig 8 B



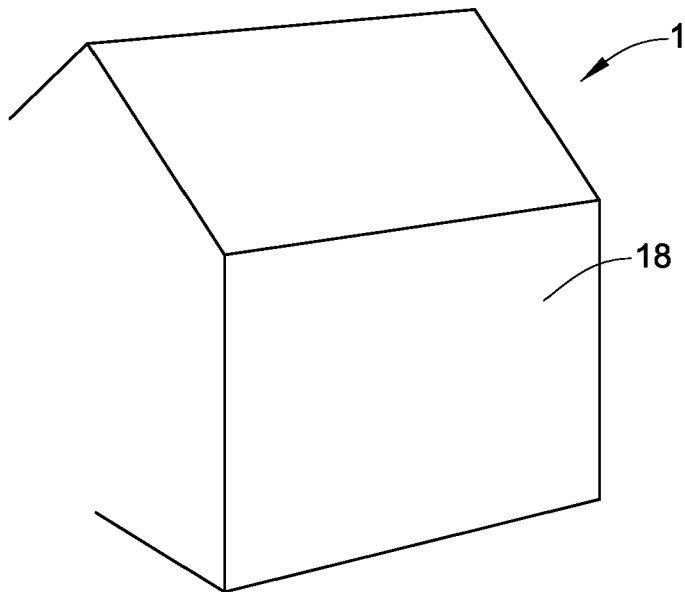


FIG. 9A

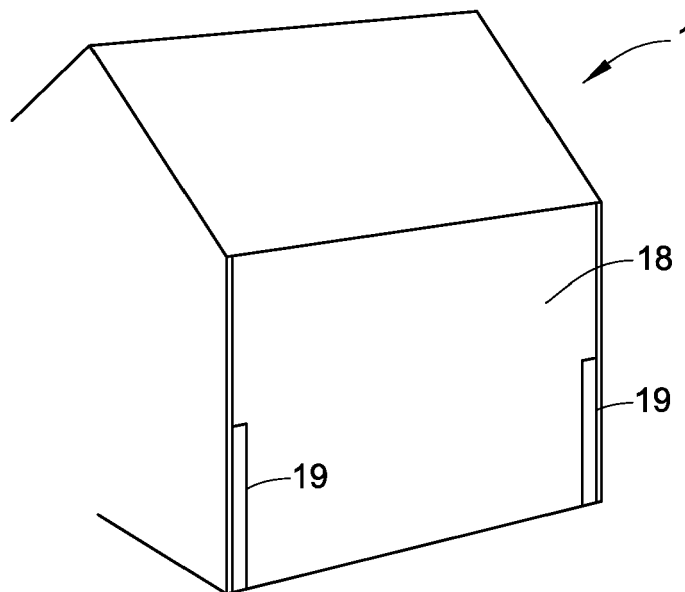


FIG. 9B

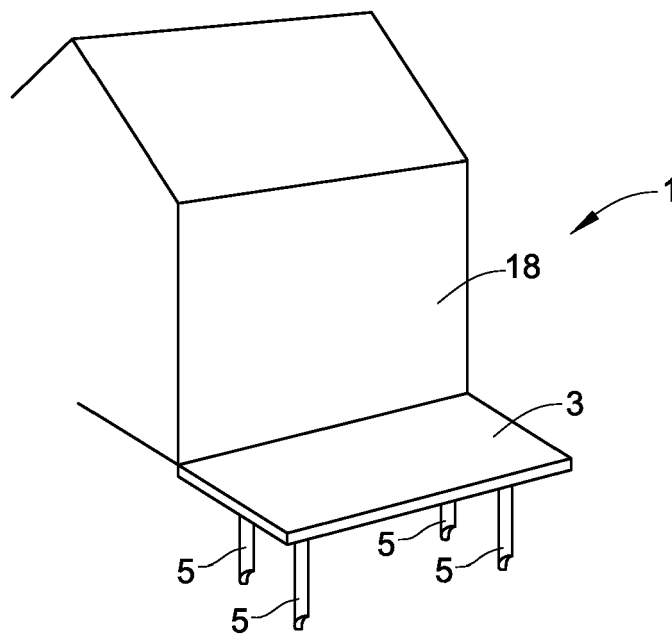


FIG. 9C

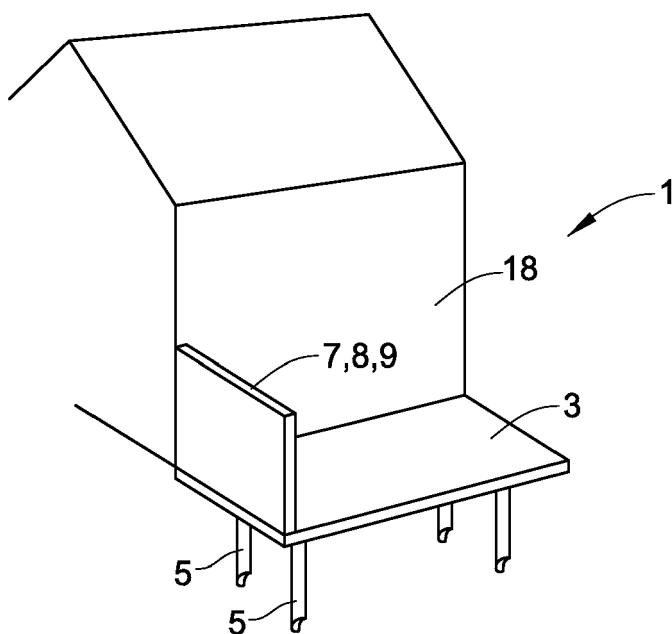


FIG. 9D

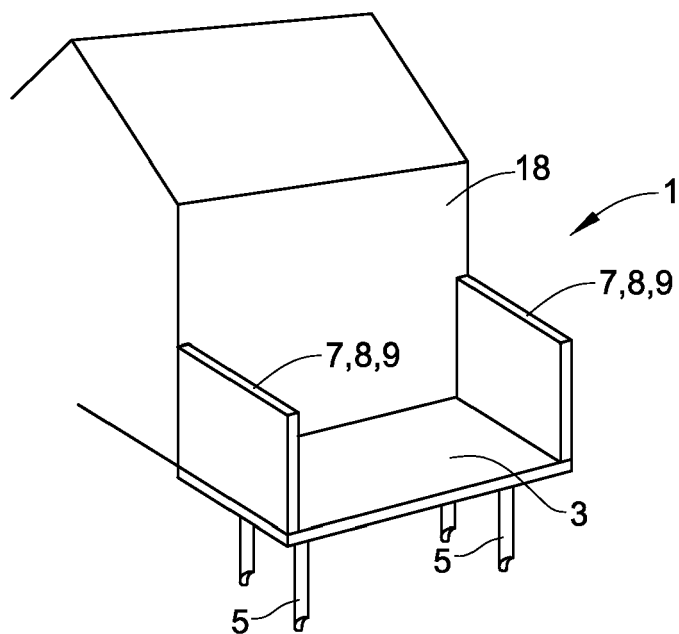


FIG. 9E

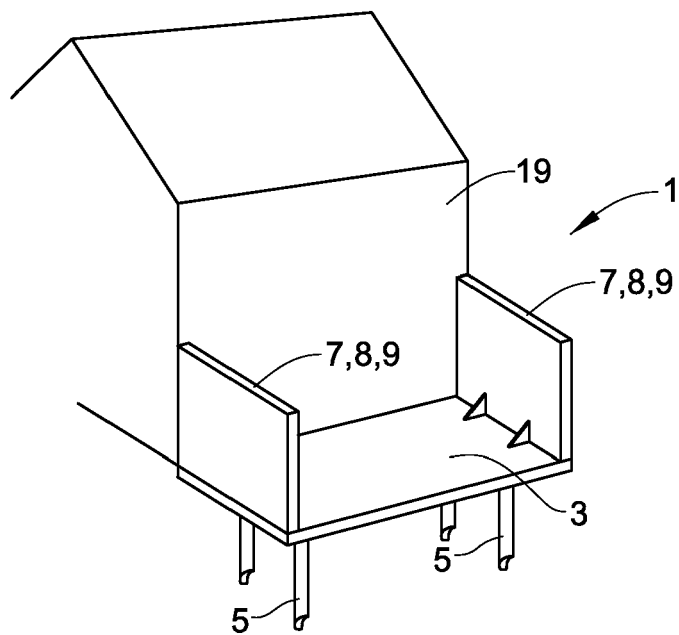


FIG. 9F

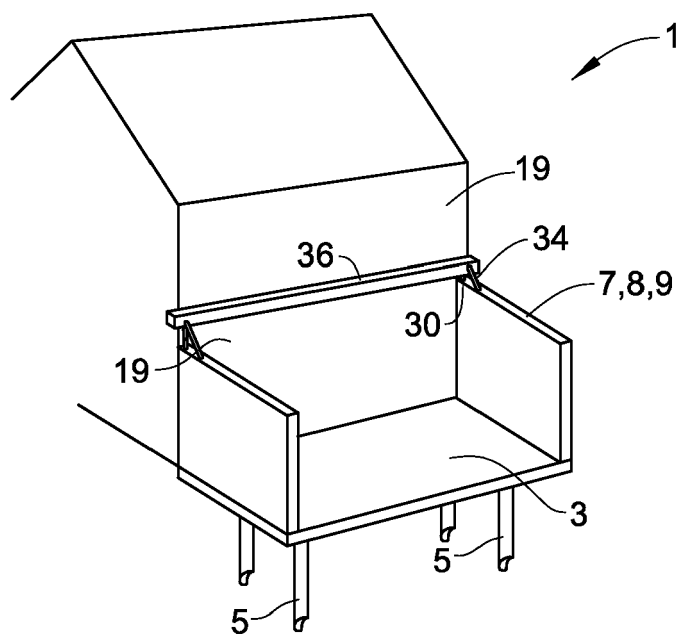


FIG. 9G

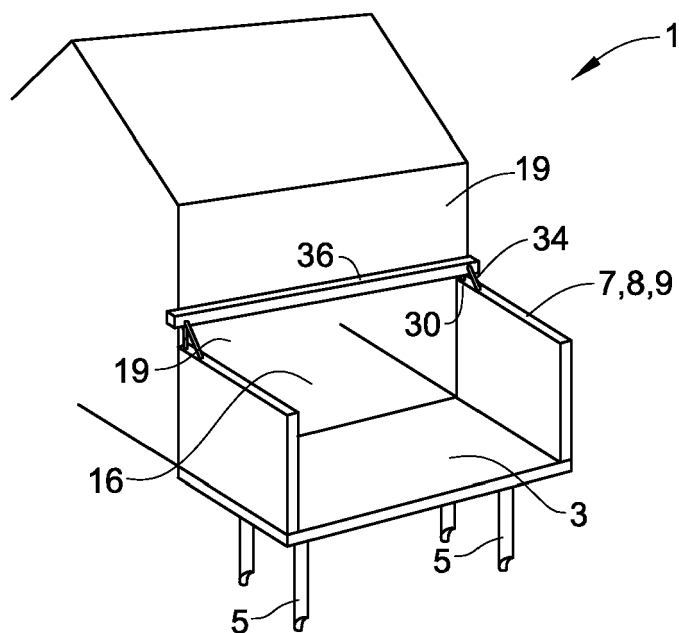


FIG. 9H

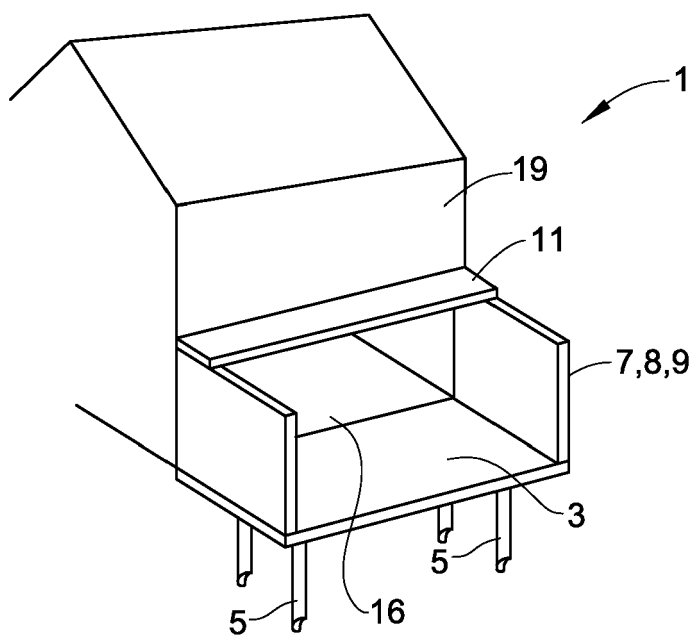


FIG. 9I

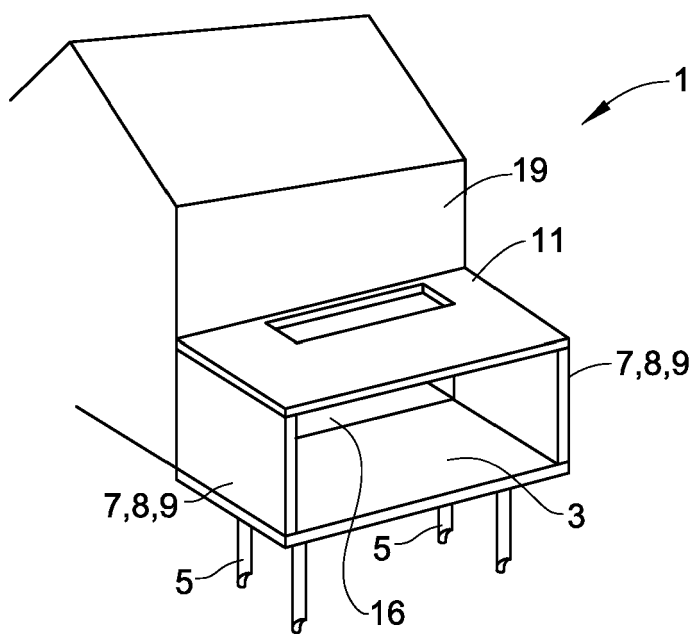


FIG. 9J

REFERENCES CITED IN THE DESCRIPTION

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