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(54) Modular unit for the formation of display units

(57) The invention relates a modular and self-bearing unit (1), with functions of upright, realised by means of aluminium alloy extrusion, having a transversal profile with the shape of an isosceles trapezoid and on the major base of which there is opened in the centre line a rectilinear and longitudinal channel (2) with a cross-profile, in which can be inserted in a suitable rear position, a bar provided with slots (3, 4), suitable for the coupling, at a required height, of completion or finishing means of the display unit. On the oblique sides of said trapezoidal shape of the upright (1), there are opened rectilinear and longitudinal channels (6, 6') for the coupling of backs, panels, sides, covers and lighting components in track form, while on the minor base (C) of the of the same structural unit (1) there is opened a rectilinear and longitudinal channel (5), suitable for fixing the upright structural to the wall or to other equal structurals. This modular unit, provided at the lower end, if required, with a flat pedestal (11, 12) having a shape which is preferably triangular, may be used alone for dedicated display units and for wall dressings, may be coupled to an opposed and specular element for the formation of linear dressings, of perimeter structures or of a single centre area display unit or may be used by bundle-coupling of three or four units for end solutions and for each type of linear or single display. The modular unit above mentioned, is provided with bearing accessories realised for example with steel tube, pre-arranged for the coupling to the bar provided with slots (3, 4) of the same units (1), or to a so-called load bar (24) or to a staved back (27), by means of an universal base (19, 19', 19") realised for example in nylon charged with glass fibres.

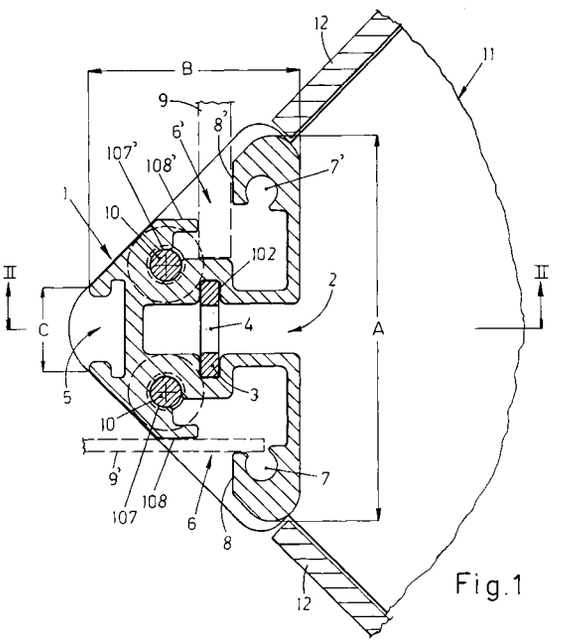

Fig.1

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Description

[0001] The invention relates a modular unit for the formation of display units and of dressing units forming yards and corridors, suitable to be adapted to the architecture of the different rooms in which they must be installed and especially suitable for the shops and the points of sale of products which are not food products, for example in the underwear, outerwear and footwear sector, for which there are requested structures with an aesthetical value and finished, provided with bases made with care, having a flexible use with regards to the display, customizable in various and easy way, having ample capacity, self-bearing, solid and at the same time having a slight figure and such to allow the best optimization of the ratio between the useful display surface and the overall plant dimensions, features which are not all to be found in the display and dressing structures of the known type.

[0002] The give an answer to these market demands, the invention proposes a modular unit, modular and self-bearing, with functions of upright, obtained by extrusion in aluminium alloy, having a transversal profile like a isosceles trapezoid, on the major basis of which there is opened in the centre line a longitudinal channel with a cross-profile, in which can be inserted, in rear position, a bar provided with slots for the coupling at the required height, completion and/or finishing components of the display unit. On the oblique sides of said trapezoidal profile there are opened longitudinal channels for the coupling of backs, divider panels, sides, covers and lighting components in track form, while in the centre line of the minor base of the same profile, there is opened a longitudinal channel, suitable to fix the upright unit to the wall or to other equal units. This modular unit, provided on its lower end with a flat pedestal having a shape which is preferably triangular, may be used alone for dedicated display units and for wall dressings, may be coupled to an opposed and specular unit for the formation of linear dressings, of perimeter structures or of a single centre area display unit and may be used for the bundle-assembly of three or four units for solutions of extremities and for each type of linear or single display. The modular unit above mentioned, is provided with fittings realised for example with steel tube with a suitable diameter, prearranged for the coupling to the internal bar provided with slots of the same units, or to a so-called load bar or to a staved back, by means of an universal base realised for example in nylon charged with fibres which improve its mechanical resistance, said tubular units being closed at the end with a suitable cap. With bases of such kind, there are preferably fixed to the upright units of a display structure and/or dressing structure, also the backs, the load bars or other frames and finishing means of said display structure, in such a manner that these same means may, in every moment, be removed, without previous modification the relative disposition of said upright units. The above mentioned units, which all can be painted and which constitute the base of the system, may be provided with a plurality of metallic, wood or plastic accessories, suitable for the realisation of a variously personalised system and presenting the qualitative level each time requested.

[0003] Further features of the invention, and the advantages deriving therefrom, will appear better evident from the following description of a preferred embodiment of same made, by way of non-limiting example, with reference to the figures of the attached sheets of drawings, in which:

- Figure 1 shows from above and transversally sectioned one of the modular units of the upright referred to, inferiorly provided with its relative pedestal;
- Figure 2 shows further details of the modular unit of Figure 1, sectioned along the line II-II;
- Figure 3 shows in perspective the modular unit of Figures 1 and 2 alone and bundle-coupled together with other identical modules;
- Figure 4 shows laterally and partially sectioned, a base for the removable anchoring to the bar provided with slots of one of the upright modular units, of an arm or other finishing means of the display unit;
- Figure 5 shows in side elevation a base of the type which is referred to in the preceding Figure, but prearranged for the removable anchoring of an arm or other finishing means of the display unit, to a so-called load bar;
- Figures 6, 7 and 8 show laterally and with portions in section, an universal base which performs the same function of the bases of the preceding figures, but differently from these may be intended to different uses with the single substitution of a rear coupling component;
- Figure 9 shows transversally sectioned an upright made from the bundle-fixing of the four modular elements referred to;
- Figure 10 shows details of means for reciprocal fixing of the elements of the upright, taken according to section X-X of Figure 9;
- Figure 11 shows from above and with portions in section, a display unit made by modular elements of an upright fixed to a vertical support wall;
- Figures 12 and 13 show from above and with portions in section, other possible display units provided with uprights made by the union of two or more modular elements referred to, oriented in a different manner.

[0004] From Figures 1 and 2 it is noted that the fundamental component of the new display structure which is referred to, is a self-supporting section-bar, having the function of upright, obtained by extrusion in aluminium alloy, made in a different range of lengths comprised for example between 800 and 3000 mm and having an isosceles trapezoid section, with angles suitably rounded.

According to a preferred embodiment of the invention, the oblique sides of the profile of the upright 1 have an inclination which is smaller or equal to forty-five degrees, in such a manner that up to four of the same uprights may be cross-fixed between them, with junction of the minor bases, to form a composite upright having a square section, as shown in Figure 9 and as better defined hereafter. Good results have been obtained, for example, by making the profile of the upright 1 with a major base A of about 60 mm, with an altitude B of about 33 mm and with a minor base C of about 10-11 mm. Always from the detail of Figure 1 it is noted that on the center line of the major base A of the section of the upright 1, there is perpendicularly opened a rectilinear groove 2 which interests the same upright for the whole of its length, which has a cross-section, which has for example a width of about 8 mm, a depth of about 24-25 mm and the transversal channel 102 of which, having a width of about 3-4 mm, has a distance of about 12-13 mm from the major base of the same upright. In the transversal channel 102 of the groove 2, is inserted for the whole height a flat and rectilinear steel bar 3, provided on the whole length with rectangular and with equispaced slots 4, having for example a width of about 7 mm, a height of about 24 and with a distance between them of about 12, said bar being retained in seat by the resting of its lower end against a closing cap or against the support pedestal of the upright 1, which will be discussed later. Thanks to the particular dimensioning above mentioned of the groove 2, the bar 3 results visible only when one person is positioned nearly perpendicularly to the same and in close position, while at some distance the same bar results to be concealed in the escape line of the groove 2, with improvement of the aesthetical value of the whole exhibiting structure.

[0005] To avoid the formation of contact galvanic currents and the consequent oxidation between the aluminium of the upright 1 and other portions of different metal connected to this, especially if these latter are of ferrous kind, these same latter portions will be suitably painted or treated and where possible, will be substituted with portions in aluminium or in stainless steel.

[0006] On the minor base C of the profile of the upright 1, opposed to the groove 2, there is opened a perpendicular rectilinear groove 5 which interests the same upright 1 for the whole length and which has a "U" shape or a "C" or a "T" section as shown, or an equivalent section, for example trapezoid. The groove 5 has for example a base width of about 15-16 mm and a depth of about 5-6 mm.

[0007] On the oblique sides of the section of the upright 1, there are opened longitudinal, rectilinear and equal grooves 6, 6' each of which communicates with a pair of parallel and equal holes 7, 107, and 7', 107' of the diameter of about 5-6 mm, which interest the upright 1 for the whole length and of which those are indicated with 7, 7' are placed at the level of the vertex of the major base A of the profile of the same upright 1, while the other holes 107, 107' are laterally placed with respect to the more internal portion of the groove 2. The grooves 6, 6' open on the oblique walls of the upright 1, with a respective pair of walls 8, 108 and 8', 108', cross-placed and one of which is parallel and the other perpendicular to the basis of the trapezoidal section of the same upright 1. These same cross-walls are suitably spaced between them, in the sense that the ideal prosecution of one of said walls falls outside of the other wall, in such a manner that in the grooves 6, 6' can be inserted portions which are perpendicular or parallel to the basis of the trapezoid shape of the upright 1, as shown for example with reference 9 or 9' or inclined portions, as later described.

[0008] At least the holes 107, 107' are threaded at least on the end which is in the lower position when the upright 1 is set in place, in such a manner so as to fix with screws 10 on the lower end of the said upright, a closure cap (not shown) with an adjustable foot the screw of which may partially engage the groove 2, or to fix the vertex of a bearing flat pedestal 11 for the direct bearing, having preferably an isosceles right triangle shape as from Figure 3, with the angle zones suitably rounded. The pedestal 11 has for example an height or a width of about 300 mm and a side 111 of about 400-500 mm. From Figure 1 it appears that the pedestal 11, coming out from the overall of the upright 1, has a tapered course in such a manner to be surmounted by a cover 12 made of thermoformed plastics, which circumscribes the same pedestal 11 without projecting from the 90° degrees corner portion engaged from the upright 1, said cover 12 being characterised by a course progressively raised toward the upright 1, as appears from Figure 2 and being movably fixed to the same pedestal, by means of a magnetic or adhesive strip 13 or by means of screws. Alternatively to the cover 12, in the lower slits 4 of the bar 3, there couple the hooks 114 of a flat diagonal brace 14, made for example with a flat plate of suitable thickness, which simply rests on the base or which is firmly fixed to this with one or more end appendices 214 which are housed in corresponding slots of the base 11. It is to be understood that according to another embodiment, the flat diagonal brace 14 may be pre-arranged in place in combination with the cover 12 which in this case will be provided with a suitable median slot for the passing of the said flat diagonal brace 14. It is understood that the pedestal 11 and the flat diagonal brace 14 may be provided with suitable stiffening ribs.

[0009] The pedestal 11 may be differently realised with rectangular shape and pre-arranged for the support of uprights 1 on the opposite ends, said pedestal in such case being provided at the level of the vertexes, with wheels, all or partially of the castor type, to permit the mobility of the exhibitor formed with the said elements.

[0010] The superior end of each section bar of upright 1, is closed by a cover 17, for example of plastics, visible in Figure 11 which leaves uncovered at least the groove 5 and the portion of the groove 2 opposite the bar 3 pro-

vided with slots and which is blocked in situ by means of a steel fork 18 which superiorly embraces the same cover and which with its wings is friction-inserted in the said grooves 5 and 2. It is to be understood that, according to another embodiment, the cap 17 may be integrally provided with appendices for the friction anchoring of the top of the upright 1, without the utilisation of said steel fork, the whole in a conceivable manner and easily realisable by persons skilled in the art.

[0011] Another important component which is provided as equipment of the modular element which is referred to, is constituted by a base 19 as from Figure 4, which has frontally an elliptical shape and laterally an semi-elliptical shape, realised for example in nylon reinforced with glass fibres, provided on its flat posterior portion with two or more hook-like appendices 119 which when the same flat portion of the base rests on the major base of the section of the upright 1, are anchored to the slots 4 of the bar 3 internally associated to said upright. The base 19 carries anteriorly, in middle-lower position, a seat upwardly opened, delimited by of a convex surface 219 and by ribs 319 integral inside of said convex surface, the whole being shaped in such a manner that seat results to be with a flat portion 20, placed at the back and parallelly to the plane of the base and with an upper portion 120 having a half-cylindrical shape and perpendicular to said portion 20. The seat portion 120 is engaged by the end of a tubular and metallic arm 21 provided at the end with a flat appendix 121 which engages said portion 20 of said seat, in such a manner to firmly anchor said arm to the base. The upper portion of the base, not engaged by the seat 20, 120, is provided with perimetrical edges 22 having a dovetail shape, which are in friction coupling with the corresponding profiled edges of a covering element 419 which is connected with the convex portion 219, which closely matches the curved profile of the arm 21 and which is complementary joined to the portion 120 of the inferior portion. As illustrated in Figure 4 with dotted line, the base may be provided on the flat portion placed over of the arm 21 and suitable to be concealed by the cover 419, with a median hole in which can be pressure inserted and fixed in a removable manner or be screwed, a pin 100 which with its projecting head it is arranged over the arm 21 to maintain the same firmly connected to the seat 20, 120, and to the unit of the base 19.

[0012] The arm 21 may be used as a hanging element of the goods to be exhibited, like in the example of Figure 3 and in this case it will be provided at the end with a cover 23 for the closing and for the exterior and functional finishing.

[0013] Figure 5 shows a base 19' of the type of Figure 4, integrally provided, posteriorly, with a wide and single hook-shaped appendix 119', which allows the hanging of the same base to an horizontal and flat bar 24, the so called load or torsion bar, which constitutes an usual components of the display units. In the display units of the known type it is also provided the possibility of hooking the hanging elements of the goods, in the horizontal grooves of so-called staved backs, fixed to the adjoining uprights of the exhibitor. For the connection to these grooves, the connection appendix of the bases 19 should be made with so reduced dimensions which could be difficult to make in plastics, also if it is charged with reinforcement fibres. To solve this problem and also to allow that one base may be used both for the requirement of Figure 4 and of Figure 5, it is provided that the same base 19" is posteriorly provided of a seat 25 with a C shaped plan profile (Fig. 6), superiorly closed and open in the lower portion, in which it is possible to insert each time a metallic insert 26 provided with one or more appendices 126 for the connection to the slots of the bar 3, as in the embodiment of Figure 6, or a metallic insert 26' as from Figure 7, provided with a downwardly bent appendix 126' for the connection to a load bar 24, or a metallic insert 26" as from Figure 8, provided with a short bent appendix 126", for the connection in one of the horizontal grooves 127 of a so-called staved back 27.

[0014] The upright 1 according to the invention, provided with the pedestal 11, may be used alone as shown with continuous line in Figure 3, for example if placed attached to a wall or if placed in a corner zone of a store or can be bundle fixed with two, three or four equal uprights, as shown also with dotted line in the same Figure 3, to make display spaces. The reciprocal conjunction of the uprights 1 is performed with means now described with reference to the Figures 9 and 10. Each upright 1 is provided, at a short distance from its ends, with pair of holes 28 placed in the centreline of the wall which divides between them the grooves 2 and 5, in such a manner to fix in the said grooves 5 of two opposed uprights 1, with one or two screws 29 inserted in said holes through the grooves 2, the vertical branches of an insert 30 "U" shaped. If required, the insert 30 may be cross-coupled with an equal U shaped insert 130, which, at its turn, may be fixed, with one or more screws 129, to another couple of opposed uprights 1 or with its (if required) projecting ends, may be used to anchor means more later mentioned. It is understood that instead of the single inserts 30 and 130, may be used a single cross-insert, of monolithic type, also because the portions not used by said support, would be in any case destined to b concealed by means of finishing cover panels of the upright obtained with the bundle union of several modular elements of the type which is referred to.

[0015] With reference to Figure 11 it is illustrated the realisation of a wall display unit, placed attached to a wall P. In this case the uprights 1 can be provided or not with the pedestal 11 and are fixed to the wall P using the holes 28 above mentioned and with suitable spacing elements from the same wall. It is understood that the spacing elements 31 or other portions destined to the co-operation with the rear groove 5 of the uprights 1, in the one of Figure 11 or in other display structures, may be shaped for a sliding insertion in said groove. In the

lateral grooves 6, 6' of the uprights 1, may be inserted cover panels 32 which may have the only aesthetical scope or also functional, useful for example for the illumination of the display surface or which may be made with staved elements of the type shown in Figure 8, in the visible grooves of which may be hung the exhibitor arms of the type shown in Figure 3. If the cover panels have only aesthetical purposes, the display of the goods will be made using the grooves 2 of the single uprights 1, anchoring to the slots of the bars 3, the bases 19, 19" of the type shown in Figures 4 and 6, which can carry arms 21 having the direct function of exhibitor or which are supporting a frame which is arranged in front of the cover panels 32, for example to support exposition shelves or which are carrying a load bar for the hanging of bases with arms 21, as from Figures 5 and 7.

[0016] Figure 12 shows a display structure formed principally by opposed pairs of uprights 1 the principal grooves 2 which lie on a single ideal plane which is parallel to the opposed display surfaces. In this case, in the grooves 6, 6' of the following pairs of uprights 1, may be inserted finishing cover panels 33 or can be part of technical illumination components. The uprights 1 rest on the ground with the relative pedestals 11 and if the display structure is very long, it is advised to place in preestablished points units obtained by four uprights assembled between them as from Figure 9, in such a manner to enlarge also laterally the bearing to the ground of the whole structure, with an advantage for stability and the safety. In the bars provided with slots 3, 4 of the uprights 1 will be connected bases 19, 19" as from Figures 4 and 6, which can carry load bars 24 to which it is possible to hang, on one side and on the other, bases 19', 19" with relative arms as from Figures 5 or 7, or that can be carry frames 34 useful to support on one side and on the other of the display shelves for the display of the goods. It is clear how, also in the solution of Figure 12, thanks to the use of the bases of Figures 4 and 6, it is possible to assembly and to disassembly the frames or the hanging bars 34 or the load bars 24 or equivalent display structures, without modification of the relative position of the columns of the upright 1 which support said structures.

[0017] Finally, Figure 13 shows a display structure made principally by couples of opposed uprights 1, with the grooves 2 opened toward the opposed display surfaces. In the grooves 6, 6' of the uprights 1 may be inserted cover panels 32 or 33 as in the Figures 11 and 12, while to the racks 3 of the same uprights, through the main grooves 2, can be anchored bases 19, 19", as from Figures 4 or 6 which can support load bars 24 for bases as from Figures 5, 8, or hanging bars 34 or frames for the support of display shelves, as mentioned for the solution of Figure 12. It is also possible to arrange in the grooves 6, 6' of two following pairs of uprights 1, fixed between them with crossed inserts 30, 130, the end appendices 227, integral or applied, of a staved back 27 as from the example of Figures 7 and 13, but of the bifacial type, with coupling ribs 127 opened on each of the opposite faces and formed by a single piece or by several superimposed pieces, being provided that said structure bears for example onto spacing inserts aligned to the anchoring appendices 227 and that is retained in situ by means of equal upper spacing inserts, locked in operative position by means of the upper caps of the uprights 1, the whole in such a manner that also the application and the removal of the staved back can be made without modifications of the relative position of the columns of the upright 1 of the displaying structure.

Claims

1. Modular unit for the formation of display units or display and/or dressing structures, **characterised by** the fact of comprising a self-bearing upright (1) with a plan shape or profile which is substantially triangular or having the shape of an isosceles trapezoid, realised in a range of lengths suitable to satisfy the different market needs, provided on the whole length and at least on the face corresponding to the major base (A) of said trapezoidal profile, with a rectilinear and median groove (2), with a cross-profile and in the transversal channel of which (102) can be inserted parallelly to said base, in suitably rear position from this and on its whole length, a bar provided with slots (3, 4) suitable to connect finishing components of the display unit, the wall of the upright corresponding to the minor base (C) of said trapezoid profile being pre-arranged to be fixed to a wall or to other vertical support wall (P) or to be fixed to the analogous wall of equal uprights (1), by means which allow the bundle-grouping of two, three or four of the said uprights, to form in this latter case a composite upright with a plan section which is substantially square, each upright being pre-arranged to be fixed with its lower end onto the vertex of a flat pedestal (11) for the bearing on the ground, having shape and dimensions which allow the composition with the bases of the other upright elements bundle-fixed between them, to form a composite pedestal, adapted to confer stability to the elements of the upright, even if they are used singularly or in groups of two, three or four.

2. Modular unit according to claim 1), **characterised by** the fact that is provided, on the minor base (C) of its trapezoidal profile, and in centred position, with a rectilinear groove (5) which interests the same unit of upright (1) for the whole of its length and in which are housed means for the reciprocal bundle-fixing of several uprights or of spacers (31) when the same upright unit is fixed to a vertical support wall (P).

3. Modular unit according to claim 1) **characterised by** the fact that it is provided on the oblique sides

of its trapezoidal profile, with respective rectilinear grooves (6, 6') which interest the same upright unit (1) for the whole length and which are useful for hooking backs, dividing panels, side walls, finishing covers or other aesthetical or functional finishing elements of a display and/or dressing unit.

4. Modular unit according to the preceding claims, **characterised by** the fact that it is realised with an extruded aluminium alloy.

5. Modular unit according to the preceding claims, **characterised by** the fact that it is realised in a range of lengths which are comprised between 800 and 3000 mm.

6. Modular unit according to the preceding claims, **characterised by** the fact that its trapezoidal profile has a major base (A) of about 60 mm, a minor base (C) of about 10-11 mm, and a height (B) of about 33 mm.

7. Modular unit according to claim 1), in which the main groove (2) placed in the centre line of the major base of the trapezoidal profile of the said upright unit (1), has a width of about 8 mm, a depth of about 24-25 mm and the transversal portion (102) of said groove, suitable to house the bar provided with slots (3, 4), has a distance of about 12-13 mm from the said major base.

8. Modular unit according to the preceding claims, in which the groove (5) opened on the minor base of the trapezoidal profile of the said upright unit (1) has a C, T or equivalent section, with a base width of about 15-16 mm and a depth of about 5-6 mm.

9. Modular unit according to the preceding claims, in which the rectilinear grooves (6, 6') opened on the oblique sides of the trapezoidal section of the said upright unit (1), are each communicating with a pair of parallel and equal holes, having for example a diameter of about 5-6 mm, two of which (7, 7') are placed at the level of the vertex of the major base (A) of the trapezoidal profile of the same unit (1), while the other holes (107, 107') are placed laterally at the most inner end of the main groove (2), said holes being entirely or partially threaded at the ends, in order to fix with screws (10) to each upright (1) a ground bearing pedestal (11), or other finishing units, such as for example feet of closing caps.

10. Modular unit according to the preceding claims, in which the grooves (6, 6') opened on the oblique sides of the trapezoidal profile of the same upright unit (1), open on said oblique sides with respective couples of walls (8, 108, 8', 108') square-placed between them and of which one is parallel to the basis of the said trapezoidal profile, being provided that said wall are opportunely spaced between them, so that the ideal prosecution of one of the same falls outside of the other, in such a manner that inside said grooves (6, 6') can be inserted components (9, 9') which are also parallel or perpendicular to the bases of said trapezoidal shape.

11. Modular unit according to the preceding claims, in which the pedestal (11) for the rest on the ground is formed by a flat plate having the shape of an isosceles triangle, with the rounded corner zones, fixed to the upright with its right angle and having a depth of about 300 mm and a bases side (111) of about 400-500 mm.

12. Modular unit according to the preceding claims, in which the pedestal (11) coming out of the plan overall of the same upright unit (1) assumes a tapered conformation in such a manner to be surrounded, without anti-aesthetical projections, by the perimetrical and downwardly oriented edges, of a cover (12), made for example in plastics and **characterised by** the fact that it presents a shape which is progressively raised toward said upright (1), said cover being pre-arranged for the removable fixing on the pedestal, for example for the joint fixing or with internal and additional means (13) or by means of screws.

13. Modular unit according to the preceding claims, **characterised by** the fact that it comprises a flat and, if required, ribbed diagonal brace (14) which with its hook-like appendices (14) is connected to the lower slots of the bar (3, 4) provided with slots housed in the cross-like main groove (2) of the same upright unit (1), being provided that the same diagonal be fixed with any suitable means to the pedestal (11).

14. Modular unit according to claim 13) in which the flat and, if required, ribbed diagonal (14) is inferiorly provided with at least an appendix (214) which is inserted or coupled in corresponding slots provided on the pedestal (11).

15. Modular unit according to the preceding claims, in which the pedestal (11) may be provided with strengthening ribs.

16. Modular unit according to claim 15), in which the pedestal (11) may be realised with a rectangular shape, may be pre-arranged to support uprights columns (1) at the opposed ends and may be inferiorly provided, for example in the corner zones, with wheels for the support on the ground, all or partially of the castor type.

17. Modular unit according to the preceding claims, in which the means for the reciprocal bundle-connection of several units of the same upright (1) comprise inserts (30, 130) U shaped, which may be reciprocally inserted to form a composite insert having a cross section and the appendices of which have such dimensions which engage with sufficient precision the ribs (5) of the minor base of the trapezoidal profile of the upright units (1) which are reciprocally fixed by means of screws (29, 129) which screw in threaded holes of said inserts and which are passing through holes (28) pre-arranged on the bottom wall of the main groove (2) of each unit (1), at a short distance from the opposed ends of the same upright unit (1).

18. Modular unit according to claim 17), in which the inserts (30, 130) for the reciprocal bundle-fixing of several upright units (1) have such a dimension which when are reciprocally coupled, present end portions of their appendices which are free and projecting, in such a manner to be used if required as anchoring points of parts for the completion of the display structure which uses units of the type which is referred to.

19. Modular unit according to claim 17), in which the inserts (30, 130) for the reciprocal bundle fixing of several upright units (1), may be substituted by monolithic inserts with a rectangular section and a cross plan.

20. Modular unit according to the preceding claims, in which the inserts (30, 130) for the reciprocal bundle-fixing of the same upright units (1), or the equivalent monolithic insert with cross plan, or the spacing elements (31) for the fixing to the wall (P) of the same uprights (1), may be T profiled to be slidingly inserted in the rear grooves (5) of said units (1).

21. Modular unit according to the preceding claims, **characterised by** the fact that in the slots (4) of the bar (3) inserted in the cross-shaped main groove (2) of each upright unit (1), there are hooked appendices (119) of a base (19) made for example in nylon charged with glass fibre, or with other suitable material, which rests on the wall (A) of the unit on which opens said main groove and which with lower portions (219, 319) realises a seat which is opened upwardly, with an "L" profile, provided with a vertical portion (20) and with a following horizontal portion (120) in which may be housed the flat end appendix (121) of an arm (21) with round section, the base being provided over said seat, with a portion (22) with a dove tail or "C" plan profile, in which may be inserted a cover element (419) which aesthetically completes the base and which conceals the conjunction zone of said arm (21) to this, which arm may be directly used for hooking the goods to be displayed or as component of a support structure (34) of a plane and as end component of a flat torsion or load bar (24), to which it is possible to hook in overhanging manner hanging arms.

22. Modular unit according to claim 21), **characterised by** the fact that it comprises, in its equipment, bases (19') similar to those (19) for the hook to the bar provided with slots (3, 4) but posteriorly provided of a wide hook-like appendix (119') for the coupling to a torsion or load bar.

23. Modular unit according to claim 21), **characterised by** the fact that it comprises, in its equipment, bases (19") which instead of to be posteriorly provided with integral appendices (119, 119') for the coupling to the bar provided with slots (3, 4) or to a load bar (24), are provided, on the posterior front with a vertical seat (25) with a C profile or similar, upwardly closed and downwardly open, in which may be inserted, from time to time, strong metallic inserts (26, 26', 26") which are respectively carrying projecting one or more hook-like appendices (126), for the coupling to said bar provided with slots (3, 4) or a strong appendix (126') for the coupling to a load bar (24) or which is carrying an appendix (126") for the coupling to one of the horizontal grooves (127) of a staved back (27).

24. Modular unit according to the preceding claims, in which the flat portion of the base (19, 19', 19") which is intended to be concealed by the removable cover (419), may be provided with a hole in which may be inserted a pin (100) which is placed superiorly to said arm (21) coupled with its appendix (121) in the seats (20, 120) of the same base, in such a manner to prevent undesired movements of said arm with respect to the same base.

25. Modular unit according to the preceding claims, **characterised by** the fact that it may be used alone or in two, three, four equal element in bundle-union, with relative bearing pedestals (11), to realise display spaces.

26. Modular unit according to one or more of the preceding claims, **characterised by** the fact that it is fixed with the minor base (C) of its trapezoidal profile and with the utilization of posterior spacing units (31), to a vertical bearing wall (P) and by the fact that more equal units (1), provided or not with the lower pedestal (11), are placed parallelly between them, at the required distance, in such a manner to show the main grooves (2), with inside the bars provided with slots (3, 4) to which there may be coupled the bases (19, 19") which carries the displaying arms or the ends of frames or the load bars which

are extended between following pairs of uprights (1), being provided that possible cover panels (32) or staved backs (37) may be coupled with the ends in the lateral grooves (6, 6') of the consecutive uprights (1).

27. Modular unit according to one or more of the preceding claims, **characterised by** the fact that it is bundle - and couple-fixed with another equal upright unit (1) and that the composite uprights obtained in this manner, provided with the relative pedestals (11), are placed parallelly between them and in such a manner that in the main grooves (2) carrying at their interior the bars provided with slots (3, 4) are arranged on an ideal plane parallel to the opposite display surfaces, the lateral grooves (6, 6') of each pair of uprights, being coupled cover panels (33) or with functional features, and to the bars provided with slots (3, 4) of the same upright there being anchored bases (19, 19") which support the end of hang-bars or frames (34) or torsion or load bars (24) which extend between each pair of the same uprights.

28. Modular unit according to one or more of the preceding claims, **characterised by** the fact that it is bundle - and couple fixed with another equal upright unit (1) and that the composite uprights obtained in this manner, provided with the relative pedestals (11) are placed parallelly between them in such a manner that the main grooves (2) having inside the bars provided with slots (3, 4) are oriented toward the opposed displaying surfaces, in the lateral grooves (6, 6') of each following pair of upright, there being coupled the ends of cover panels (32) or the end appendices (227) of staved backs (27), while to the bars provided with slots (3, 4) of the several uprights (1) can be anchored the bases (19, 19") which carry displaying arms (21) or the ends of hooking bars or frames (34) or of load or strengthening bars (24) which extend between each pair of the same uprights.

29. Modular unit according to claims 27) and 28), in which the displaying structures which use opposed pairs of the same upright units (1), can use in head or middle position, instead of a pair of uprights, a composite upright made of three or four of the same units, with relative pedestal.

30. Modular unit according to one or more of the preceding claims, **characterised by** the fact that it is superiorly closed by a cover (17) of any suitable material, which is blocked by means of a steel fork (18) or by means of appendices inserted in the opposed grooves (2, 5) of the upright (1).

31. Modular unit according to one or more of the preceding claims, **characterised by** the fact that when it is fixed to other bearing structures and it is not provided with the lower pedestal (11), the same upright unit (1) can be inferiorly closed by a cover which rests on the ground preferably with an adjustable foot, the screw of which may partially engage the main groove (2) carrying inside the bar provided with slots (3, 4).

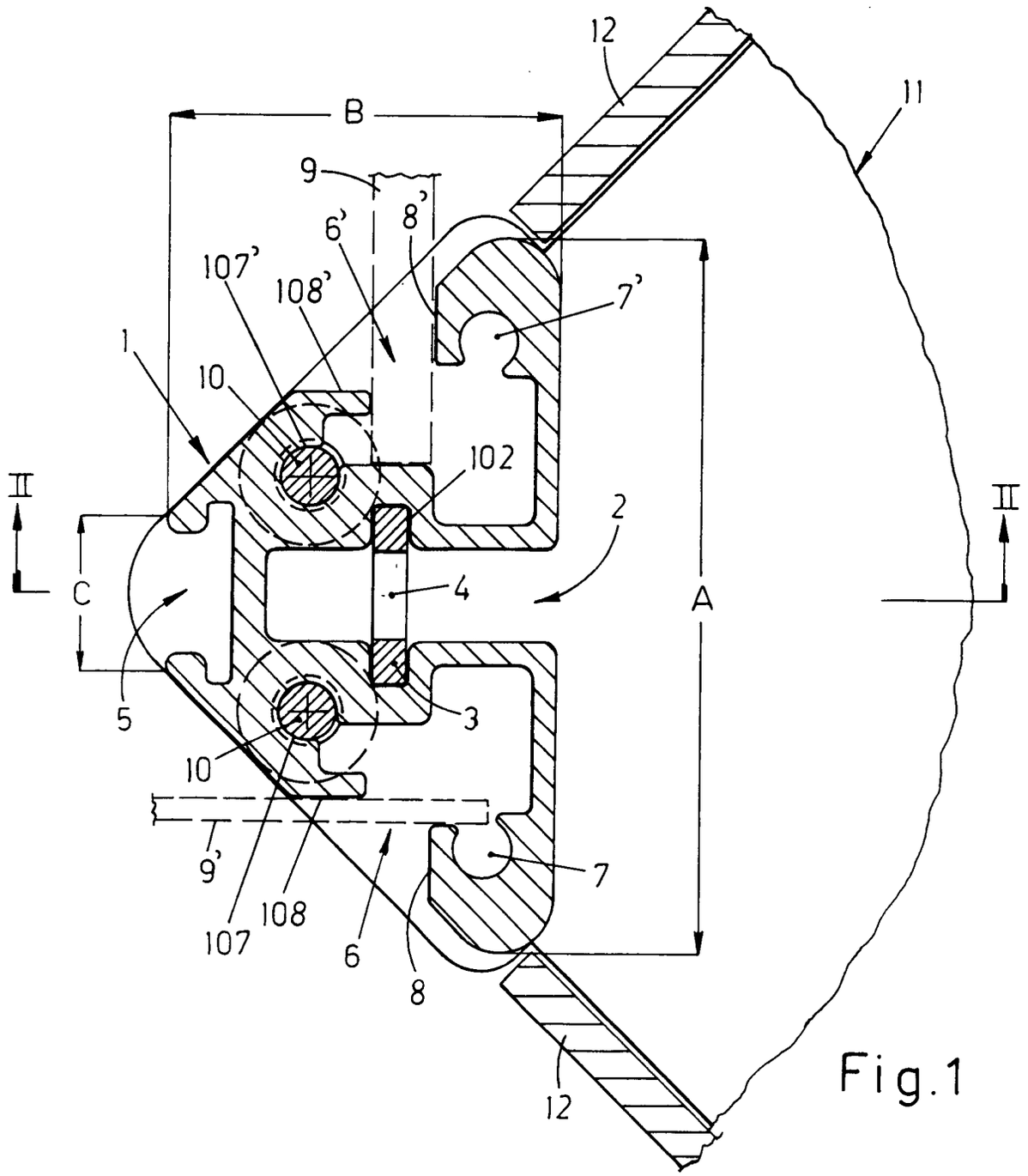


Fig.1

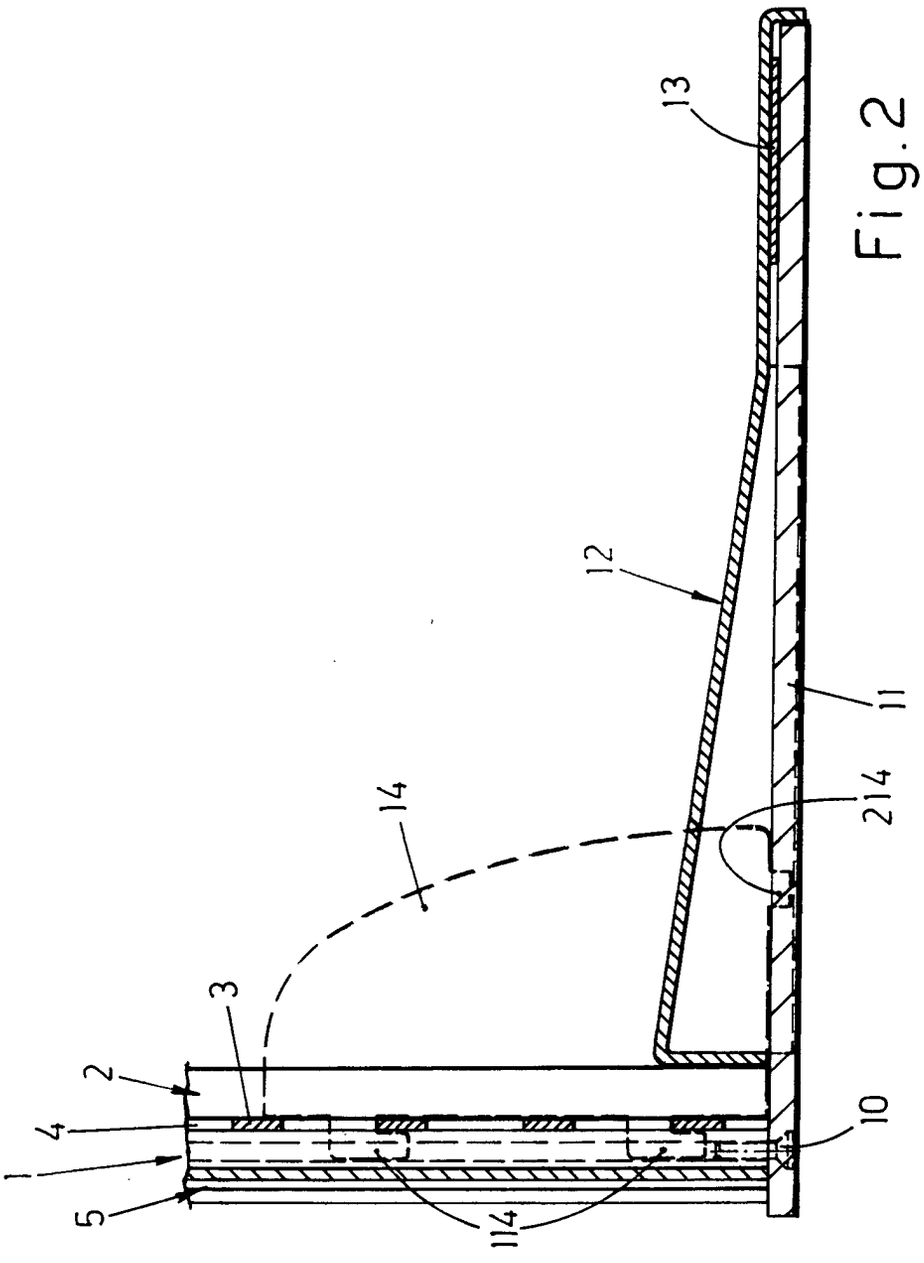
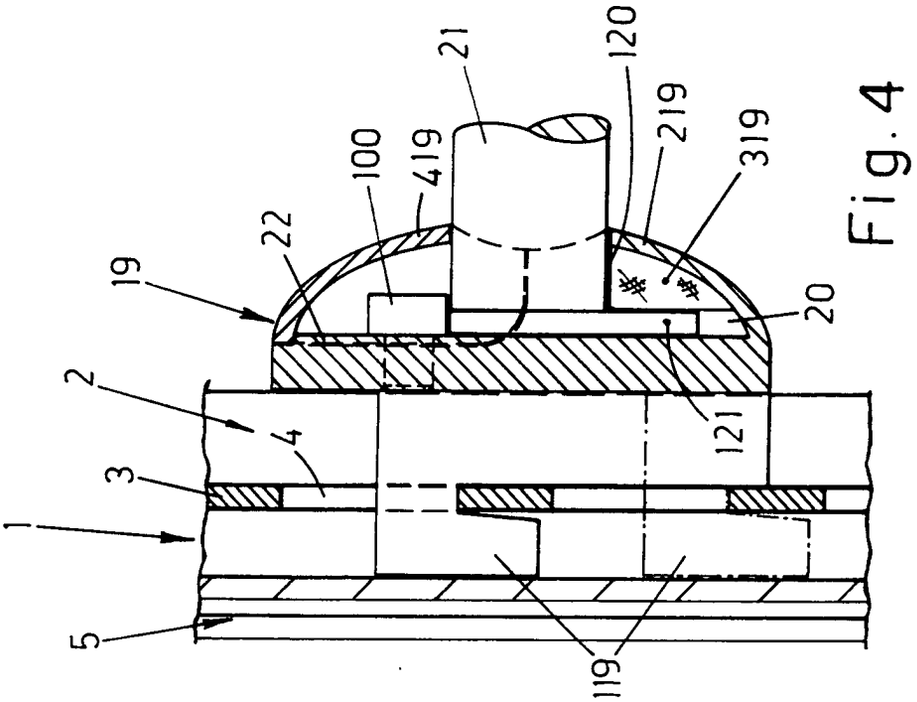


Fig.2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120
219
319
100
419
22
19
20
2
4
121
3
1
5
119

Fig.4

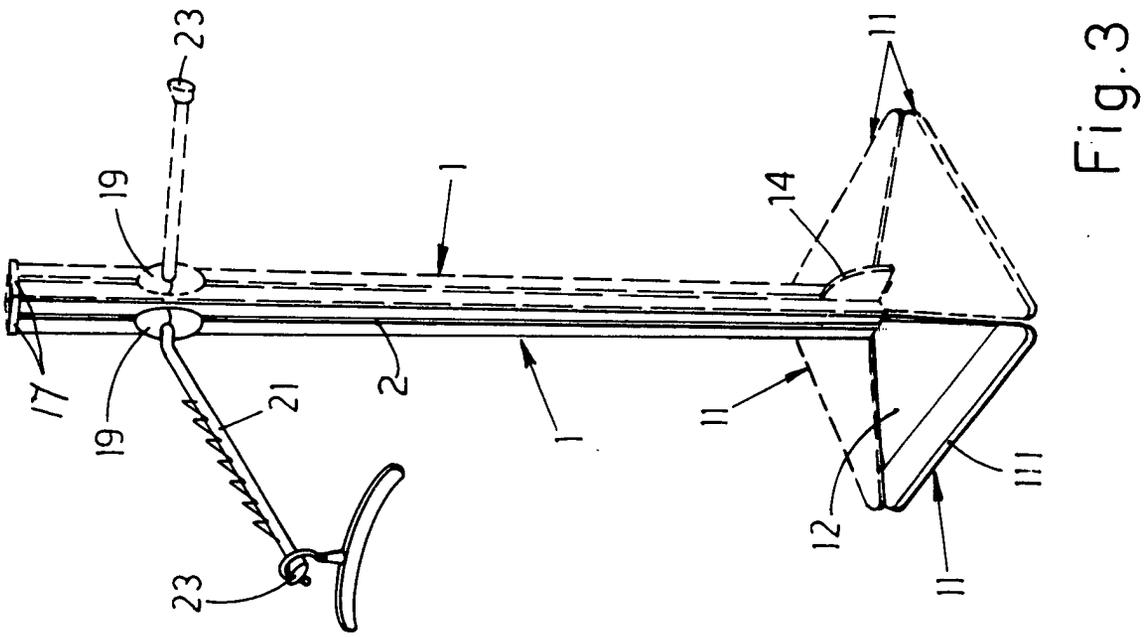

23
19
1
14
11
17
19
21
2
1
11
12
111
11
23

Fig.3

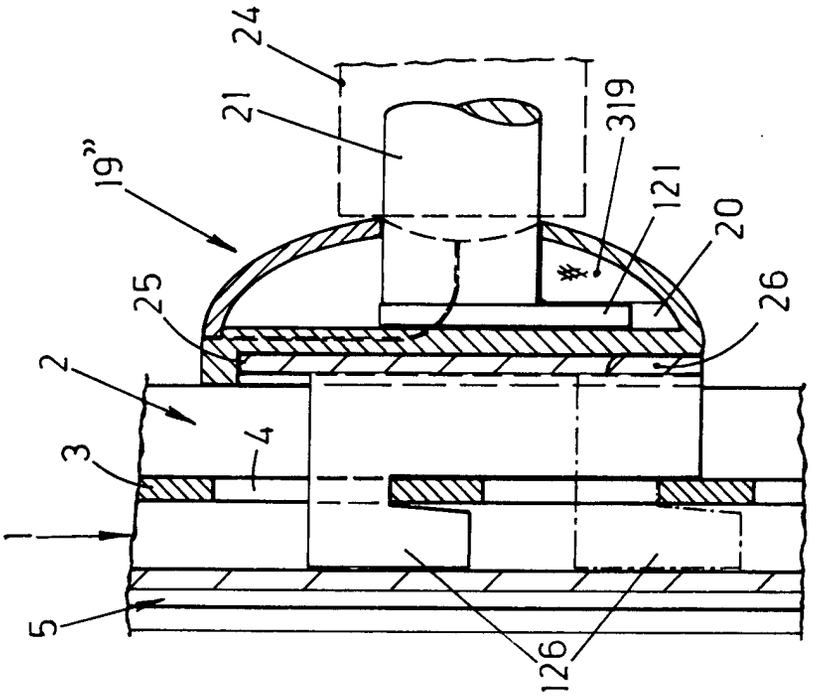


Fig.6

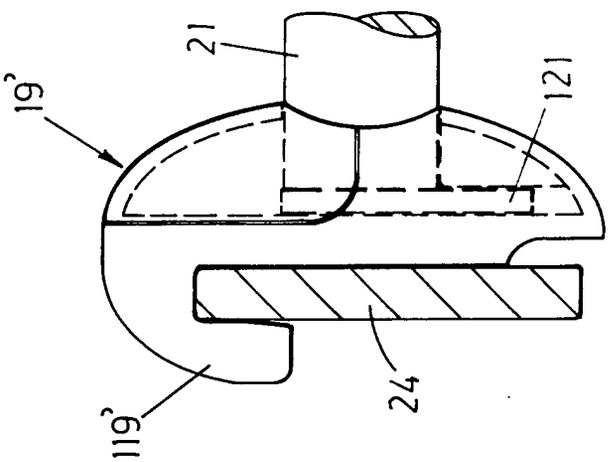


Fig.5

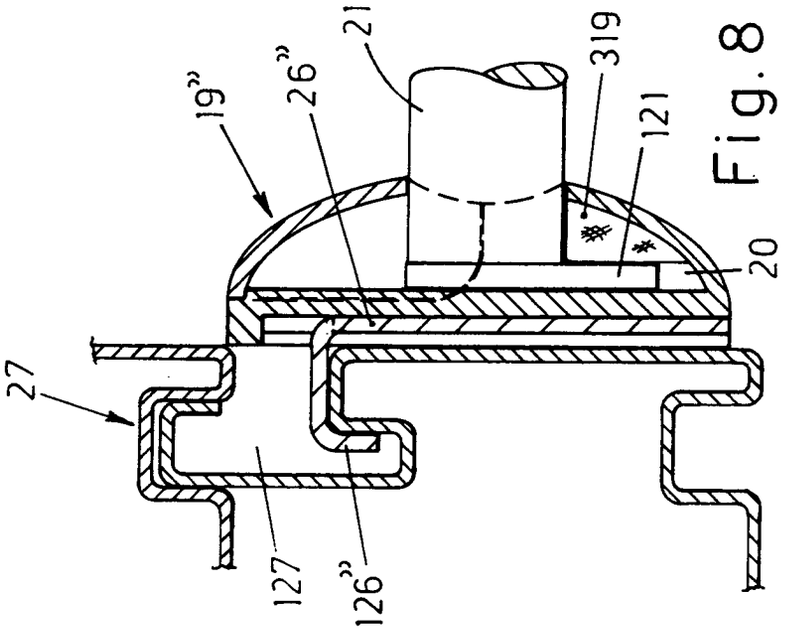


Fig. 8

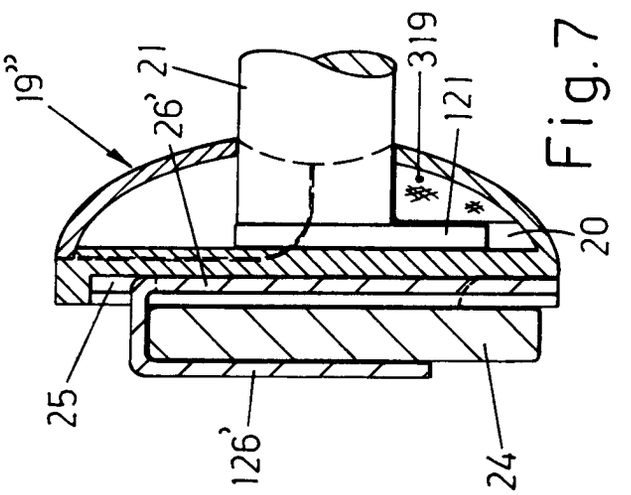


Fig. 7

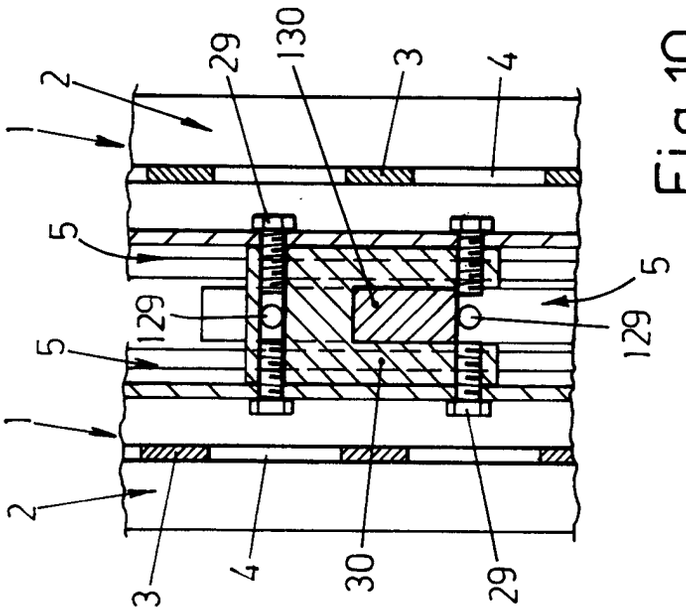


Fig.10

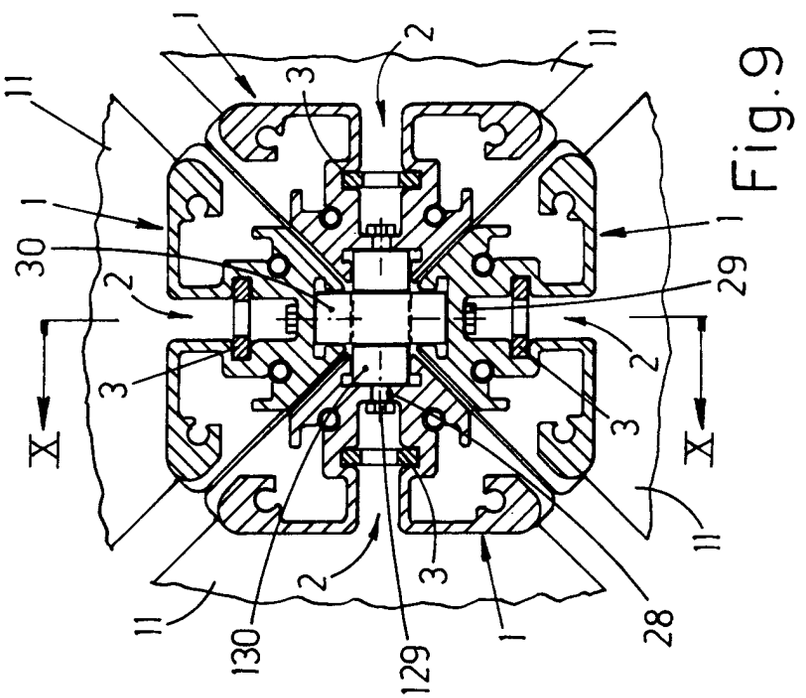


Fig.9

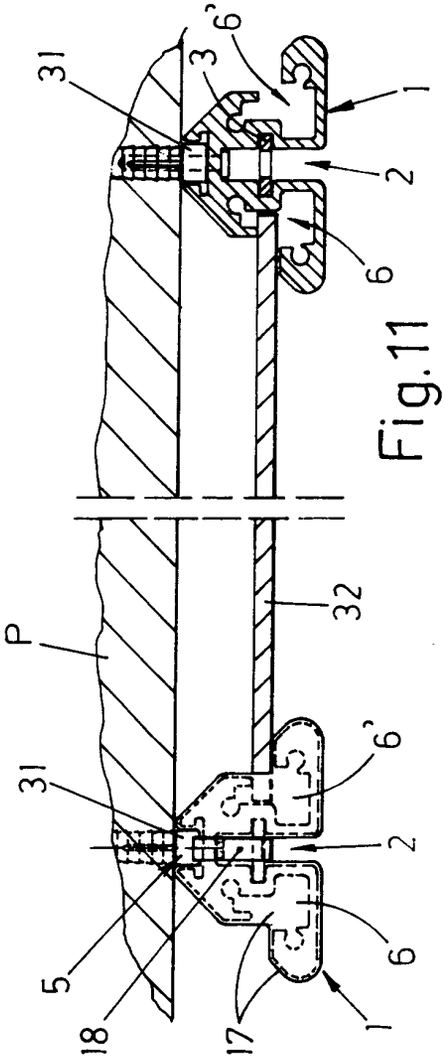
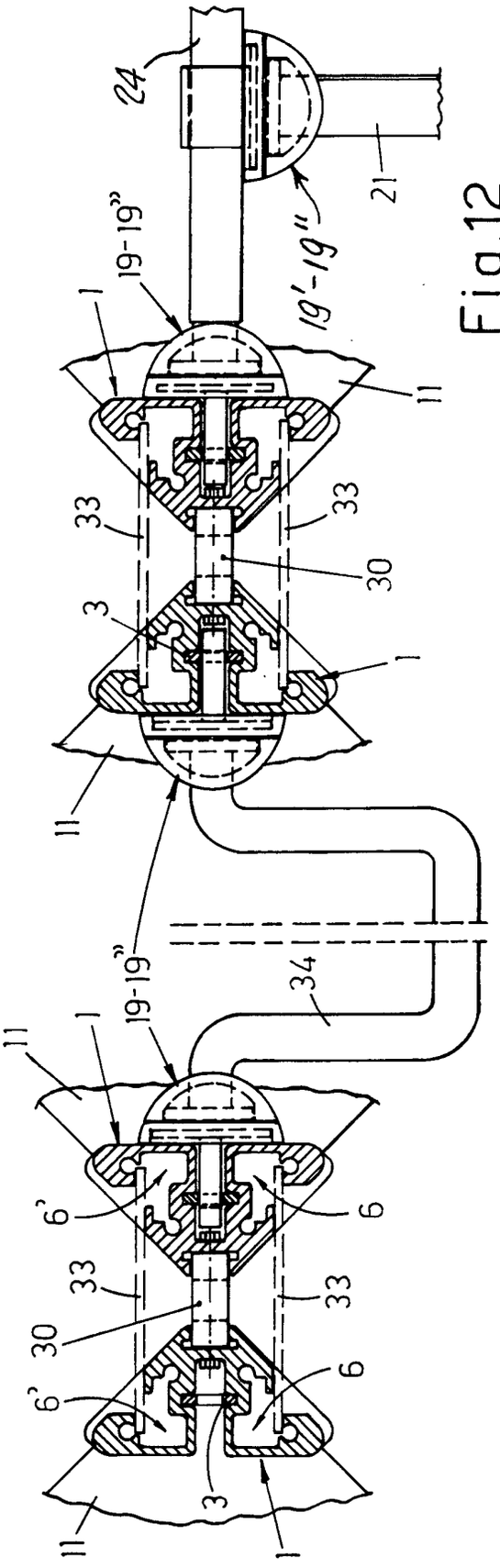

31
3
6'
1
2
6
P
32
31
6'
2
5
18
17
6
1

Fig.11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19'-19"
19-19"
1
11
33
33
30
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1
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19-19"
34
11
1
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33
33
30
6'
6
3
11
1

Fig.12

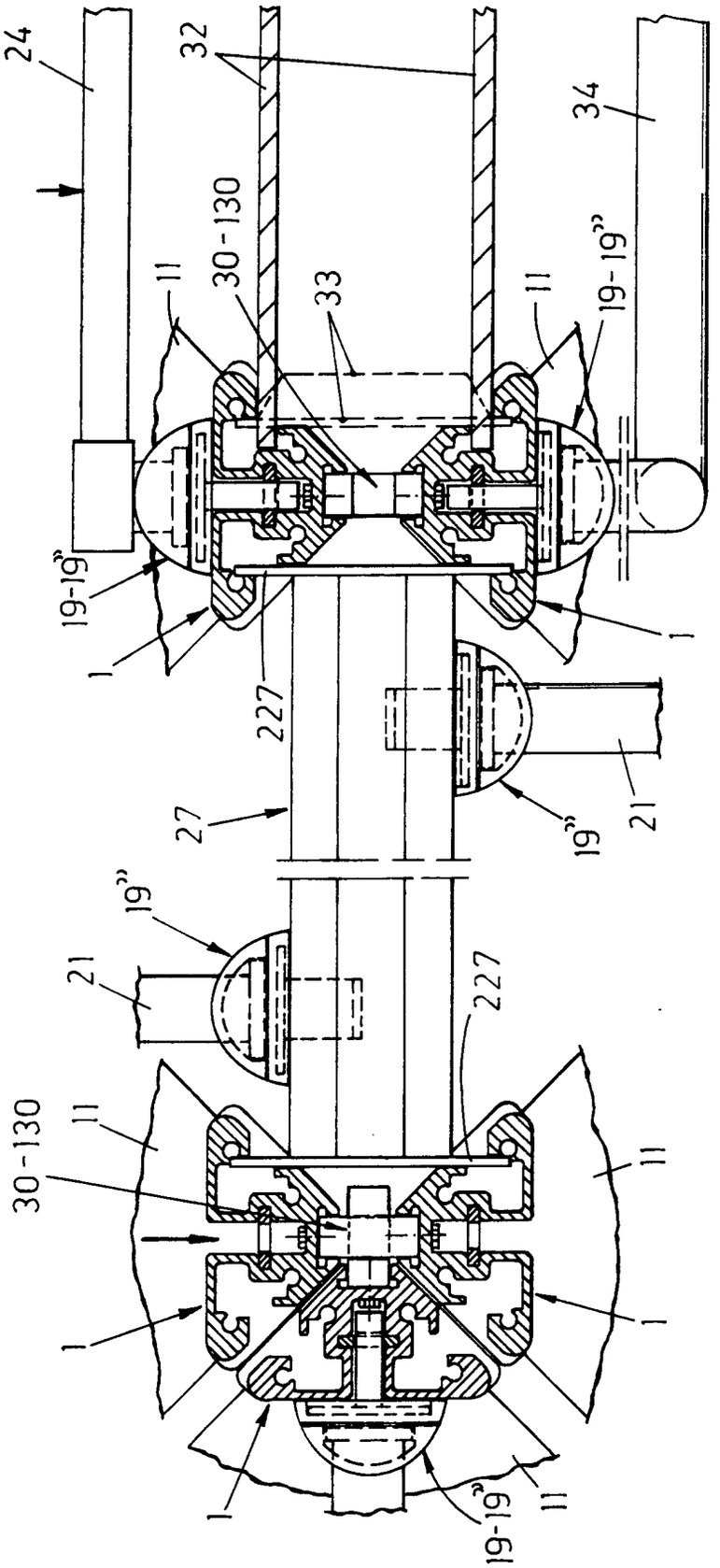

Fig.13