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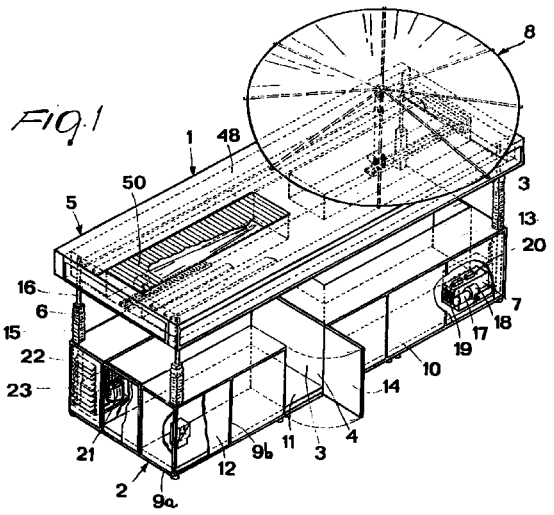
(54) Mobile booth or stand for the display and sale of goods

(57) A booth for the display and sale of goods comprising a base (2) having a number of delimited spaces arranged to locate goods and at least one walking path (3) and means for removable connection to at least one outer power or water supply source, a roof (5) above said base (2), and is characterized in that the said roof (5) is movable between a lowered closed position at a short distance from the said base (2) and a raised open position well above the said base (2), thereby allowing at least one person to move along said at least one walking path (3), and driving means for moving said roof (5) between said lowered and raised positions.



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Description

[0001] The present invention relates to a mobile booth to be used as a stall, kiosk or newsstand for the open-air display and sale of goods in squares, streets and the like.

[0002] Recent trends and statutory provisions relating to protection and enhancement of artistic and monumental heritage require squares or in any case public sites of particular historical and/or artistic interest to be as much as possible free or clearable of any street furniture or equipment used for trade, so as to avoid defacing or disturbing the viewing of a given architectural and natural environment.

[0003] Compliance with these provisions understandably causes considerable resistance on the part of operators of stationary kiosks.

[0004] At present there are various types of mobile booth, stall and newsstand, also mounted on a vehicle, but their overall dimensions both in width and height are hardly ever proper for use in a square, e.g. in an old center of a town without altering the aesthetics of the place or environment in which they are located.

[0005] The main object of the present invention is to provide a booth for use as a stall, kiosk or newsstand of changeable configuration arranged to avoid affecting the look of the site where it is located.

[0006] Another object of the present invention is to provide a mobile booth, stall or newsstand which has the same function and practical use as a fixed kiosk.

[0007] Another object of the present invention is to provide a movable booth, stall or newsstand which can be transported and moved easily.

[0008] Another object of the present invention is to provide a mobile booth or stall which is modular in structure, so that it can be combined together with others in order to constitute one compact and functional complex.

[0009] These and other objects which will become better apparent hereinafter, are achieved by a booth for the display and sale of goods comprising a base having a number of delimited spaces arranged to locate goods and at least one walking path and means for removable connection to at least one outer power or water supply source, a roof above said base, and is characterized in that the said roof is movable between a lowered closed position at a short distance from the said base and a raised open position well above the said base, thereby allowing at least one person to move along said at least one walking path, and driving means for moving said roof between said lowered and raised positions.

[0010] Advantageously, said roof comprises retractable partly covering means.

[0011] Further aspects and advantages of the present invention will become better apparent from the following detailed description of some currently preferred embodiments thereof, given merely by way of non-limiting example with reference to the accompanying drawings, wherein:

Figure 1 is a perspective view slightly from above of a booth or stall according to the invention;

Figure 2 is a plan view of a base square frame;

Figure 3 is a partial sectional view taken along the line III-III of Figure 2;

Figure 4 is a side view of the frame of Figure 2;

Figure 5 is a partial side elevation view on an enlarged scale of Figure 4;

Figure 6 is a bottom view of multiple assembled stalls;

Figures 7 to 9 are reduced-scale plan views of bases joined to one another to form booths or stalls or newsstands of various configurations;

Figures 10 to 13, 13A, 13B and 14 to 21 are perspective views slightly from above of a number of embodiments of bases with passageways and accesses having different configurations;

Figure 22 is a section view on an enlarged scale of a box-like seat provided in a roof of a booth or stall or newsstand according to the invention;

Figure 23 is a section view taken along the line XXIII-XXIII of Figure 22;

Figure 24 is a side elevation view of a roof of a booth or stall or newsstand, surmounted by two open sunshades;

Figure 25 is a front elevation view on an enlarged scale of a sunshade in its opened position and its respective driving means;

Figure 26 is a partly sectional view on an enlarged scale of the inside of a box-like seat in the roof;

Figure 27 is a sectional view taken along the line XXVII-XXVII of Figure 26; and

Figure 28 is a front cross-sectional view on an enlarged scale of the inside of a box-like seat according to another embodiment thereof.

[0012] In the accompanying drawings, identical or similar parts or components have been designated by the same reference numerals.

[0013] With reference first to Figures 1 to 5 of the drawings, the numeral 1 generally designates a booth or stall according to the invention, which comprises a base 2 provided with predefined passageways 3 and accesses 4, a movable roof 5 supported above the base 2, and driving means 6 for guiding and moving the roof 5 with respect to the base 2. The driving means 6 comprises a source of motion 7 and preferably one or more covering sunshades 8 arranged on the roof 5.

[0014] The base 2 is parallelepipedic in shape and comprises a grid-like flat supporting frame 9a constituted by metal bars, e.g. of steel, and a surrounding frame 9b, also made of metal bars, to which bottom panels 11, side panels 12 and upper panels 13 can be fixed. If desired, the bottom panels 11 are thicker and sturdier than the panels 12 and 13 since they are designed to act as flooring elements and are thus fully or partly intended for being trampled.

[0015] The accesses 4 can be controlled by hinged

doors 14, preferably flush with the panels 13.

[0016] The roof 5 can be lowered or raised by driving means comprising linear actuators of the cylinder-and-piston type 6 whose fixed cylinder 15 is rigidly secured to the base 2, while the outer end of its respective stem 16 is rigidly secured to the roof 5. Each cylinder 15 and each stem 16 is anchored to the base or, respectively, to the roof 5 by any suitable securing means. For reasons of balance and stress distribution, actuators 6 preferably engage with the corner regions of the base 2 and of the roof 5.

[0017] The actuators 6 are operatively connected to a source of motion which can be an oleodynamic unit 7 arranged within a space delimited by panels 11, 12 and 13 and comprises a motor 17, e.g. an electric motor, which is arranged to supply mechanical energy to a pump 18 suitable for converting mechanical energy into pressure energy for oil being supplied from a tank 19 and distributed to a hydraulic circuit through electric valves 20. Such a hydraulic circuit is preferably in common with all the actuators 6 of the base 2. A source of motion 7 for each actuator 6 can be provided, but such a solution would be disadvantageous from the economic point of view. The hydraulic circuit includes, as it is well known in the art, pressure transducers close to each actuator 6, whereas each stem 16 is provided with position transducers. The various transducers and the oleodynamic unit 7 are electrically connected to an electronic control unit which, depending upon input signals, controls operation times for the electric motor 17 and switching of the electric valves 20 in order to keep the roof 5 in a stable and well aligned trim with respect to the base 2 at all times.

[0018] The base 2 can also locate a refrigeration device 21, e.g. secured to a lower panel 11 at the corner region that lies diagonally opposite to that occupied by the oleodynamic unit 7. The refrigeration device 21 can be designed both to cool the oleodynamic circuit during the operation of the actuators 6 and to preserve food to be sold. More particularly, the refrigeration device can transfer heat to the outside by discharging hot air through a plurality of slots 22 having respective flaps 23 provided on a lateral panel 12 which is located in the vicinity of the refrigeration device 21.

[0019] As shown in Figures 2 and 6, a base 2 preferably has a modular configuration to make it possible to easily connect together a number of bases 2 so as to constitute a single unit 24. The lower panels 11 are supported by a grid-like frame 25 which can be supported by wheels, e.g. castors 26, fixed wheels 27 or steerable wheels 28. Both castors 26 and steerable wheels 28 have each a fork and pivot arrangement that is pivoted to the grid-like structure 25. In particular, the steerable wheels 28 are aligned along a common axle 29 which is connected by means of a joint 30 to a drawbar 31. Each wheel 26, 27 and 28 can be mounted for rotation on a respective pivot carried by a fork attached to the outer end of a stem of a jack or any other suitable linear actuator, whose cylinder is fixed to the base 2, so that the base 2 and thus the entire booth or stall 1 can be raised for being moved along or lowered for parking according to requirements, as also described hereinafter. The jacks can be fluid-driven and arranged to receive pressurized fluid from the same source provided for operation of the actuators 6 for lifting the roof 5. Again in order to achieve a correct stress distribution and a permanent horizontal trim for the base 2, the jacks are provided with pressure and position transducers (not shown in the drawings) which are electrically connected to the electronic control unit.

[0020] Each base 2 has at least one retractable support device or leg (Figure 3) for resting on the ground which comprises an oleodynamic jack actuator 32 extending substantially at right angles to the lower panel 11 and protrudes below it. The oleodynamic actuator 32 comprises a cylinder 33 having a flange 34 fixed by means of bolts 35 to a plate 36 which is rigid with the grid-like structure 25. A stem 37 extends from the cylinder 32 and its free end carries a plate 38 for resting on the ground 39. Advantageously, the oleodynamic circuit that controls the retractable support device 32 can be same as that used for the linear actuators 6 designed to move the roof 5.

[0021] Figures 2 to 5 in particular illustrate an embodiment which includes a square base 2 with a pair of steerable wheels 28 operatively connected to the drawbar 31 and aligned with a pair of fixed wheels 27. Advantageously, the drawbar has an eyelet-shaped handle 40 at its free end. As shown more clearly in Figure 5, it is possible to fix to the drawbar 31 a plate 41 which has a pair of opposite rings 42 which are rigid therewith to locate a respective locking lever 43 for the drawbar.

[0022] Figures 7 to 9 illustrate square bases 2a, and thus their respective booths or stalls can be arranged in a row in modular fashion with their adjacent sides in mutual contact (Figure 7), with adjacent corners (Figure 8), or with adjacent non-aligned sides (Figure 9).

[0023] The arrangement of the passageways 3 and of the accesses 4 of a base 2 can take various configurations, such as those shown in the embodiments shown in Figures 10 to 21. A rectangular base 2b (Figure 10) can have passageways 3 which extend parallel to short sides 44 and thus have accesses 4 arranged at the long sides 45.

[0024] In the example shown in Figure 11, a rectangular base 2b has L-shaped passageways 3 arranged according to a central symmetry, each passageway having its own access both on a long side 45 and a short side 44.

[0025] As shown in Figures 12, 13A and 13B, a rectangular base 2b has a single passageway 3 which is parallel to its longer sides 45 with accesses 4 at its short sides 44.

[0026] According to the embodiment shown in Fig-

ures 14 and 15, a rectangular base 2b has paths 3 arranged in a cross-like pattern with accesses 4 only on the long sides 45. The example of Figure 16 is similar to the example of Figure 15, but with accesses 4 both on the long sides 45 and the short sides 44.

[0027] In Figure 17 a base 2b has a single blind passageway 3 with an access at a short side 44 thereof.

[0028] The example of Figure 18 relates to a base 2b with a blind L-shaped passageway 3 with one access 4 at a short side 44 thereof.

[0029] In Figure 19 a base 2b has two mutually opposite blind passageways 3, each of which has an access 4 on a short side 44, whereas in Figure 20 a base 2b has two blind passageways 3 which are arranged according to a central symmetry with respective accesses 4 at a long side 45 thereof.

[0030] Figure 21 illustrates a base 2b which has an annular passageway 3 with accesses 4 along its long sides 45.

[0031] A square base 2a or rectangular base 2b can of course have any suitable configuration and/or arrangement of the passageways 3.

[0032] With reference to Figures 22 to 24, it will be noted that the roof 5 can have one or more box-like bodies or seats 46.

[0033] One or more sunshades 8 for further covering and/or aesthetical purposes is provided on the roof 5 and can be operated between an inoperative or collapsed position, in which they are located in a compartment 47 of the box-like seat 46 (Figures 22 and 23) and an upright working position (Figure 24), in which they stand open above the roof 5. At the upper surface 48 of the roof 5, the or each compartment 47 has sliding guides 49 for a closing roll-up shutter or blind 50 which is co-planar with the upper surface 48 of the box-like body 46. Inside the compartment 47 there is a gearmotor 51 which is designed to wind/unwind cables 52 or the like secured to the blind 50 and to cause the blind to slide along guides 49 in order to open or close the compartment 47.

[0034] As shown in Figure 25, each sunshade 8 comprises a base frame 53 to which a rod 54 constituted by a plurality of modular sections 55 is pivoted. A sleeve or knob 56 is slidingly mounted on the rod 54 for supporting a multiplicity of radially arranged linking rods 57 which are articulated to a respective rib 58 for fixing and supporting a canopy 59. The rod 54 carries an upper pulley 60 near to the top thereof which is designed to guide a cable 61 having one end secured to the knob 56 and its other end wound on a winch 62 which is operatively connected to a respective gearmotor 62a, both fixed to the base frame 53. The cable 61 is designed to pull the knob 56 from a lower closed position for canopy 59 in which it is close to the base frame 53 to an upper position which is away from the base frame 53, in which the canopy 59 is spread open.

[0035] The base frame 53 can be constituted by a plate 63 which rests on idle rollers 64 rotatably supported by the bottom of the compartment 47 of the box-like body 46 (Figures 26 and 27) to act as a carriage for the movement of the sunshade 8.

[0036] The base frame 53 can be moved inside the compartment 47 between a lateral position suitable for causing the sunshade 8 to collapse and a central position where the sunshade can be lifted and opened by means of a telescopic actuator (Figure 26), e.g. of oleodynamic type. A cylinder 66 of actuator 65 is fixed to a lateral surface of the compartment 47 in the box-like body 46, whereas the end of the last and outermost stem 67 is connected, e.g. by means of a fork 68, to the base frame 53 so as to pull it on the rollers 64.

[0037] The base frame 53 has, between an articulation hinge 69 of the base of the pole 54 and the fork 68 of the stem 67 of the telescopic actuator 65, a small linear actuator 70 whose cylinder 71 is pivoted to the base frame 53, while the free end of its stem 72 is hinged to a fork 73 which is fixed to the pole 54 of the sunshade 8. The actuator 70 is designed to move the sunshade 8 to the collapsing position for the pole 54 once the stem 72 has reached its outward stroke limit or to push it into its working position with the pole 54 being in its upright position and the stem 72 at the end of its retracting stroke in the cylinder 71.

[0038] According to the embodiment shown in Figure 28, the telescopic actuator 65 is replaced by a gear 74 driven by a gearmotor 75 which is fixed to, and supported by, the base frame 53 and is in meshing engagement with a rack 76 rigid with an upper edge of the compartment 47.

[0039] As shown in Figure 23, the edges of the box-like body 46 in the roof 5 can have internal spaces 77 for receiving covering panels or canopies 78. Access to the spaces 77 is controlled by suitably provided tilting doors 79 which, in their opened position, make it possible to extend outwards panels 78 so as to increase the area covered by the stall 1. Extension and retraction of the panels or canopies 78 is controlled by a winding/unwinding roller 80 which is mounted for rotation on the box-like body 46 and operatively connected to a gearmotor 81. Extendible arms of any suitable type are connected to the roller 80 and designed to support respective panels or rigid canopies 78.

[0040] The outer surface 82 of the box-like body 46 in the roof 5 that is facing the base 2, in use, can have lighting means, such as neon lamps 83, preferably arranged parallel to the longer side of the box-like body 46.

[0041] The stems 16 of the actuators 6 arranged to move the roof 5 can be preferably covered by suitable bellows elements 84 for protection against external agents and aesthetic purposes.

[0042] If desired, the overall dimensions of the roof 5 can be greater than those of the base 2, in which case the edges of the roof protrude with respect to the base.

[0043] In the closed or collapsed position, a booth or stall 1 has its roof 5 almost at rest on the base 2, thus

making it impossible to have access to the inside the base. Accordingly, the base 2 can act as protected good storage for the night. The modular structure of the booths or stalls 1 makes it possible to arrange a number of them side by side, e.g. in a square or marketplace in order to create one or more groups or islands 24 of booths, whose roof is at a modest level and over which, if desired, it is possible to erect scaffoldings, flight of steps for music, fashion, theatrical shows and the like.

[0044] Electric power for use in the booth or stall can be obtained either from an independent generator or an electric network, preferably underfloor.

[0045] A booth or stall as described above is susceptible to numerous modifications and variations within the scope defined by the appended claims.

[0046] The disclosures in Italian Patent Application No. VR98A000096 from which this application claims priority are incorporated herein by reference.

[0047] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A booth for the display and sale of goods comprising a base (2) having a number of delimited spaces arranged to locate goods and at least one walking path (3) and means for removable connection to at least one outer power or water supply source, a roof (5) above said base (2), and is characterized in that the said roof (5) is movable between a lowered closed position at a short distance from the said base (2) and a raised open position well above the said base (2), thereby allowing at least one person to move along said at least one walking path (3), and driving means for moving said roof (5) between said lowered and raised positions.

2. A booth according to claim 1, characterized in that said driving means (6) for said roof (5) comprises power and position transducers and an electronic control unit which is connected to said transducers and arranged to control the trim of said roof (5) during lifting and lowering operations thereof.

3. A booth according to claim 1 or 2, characterized in that said driving means (6) for said roof (5) comprises at least one linear actuator.

4. A booth according to claim 2 or 3, characterized in that the said driving means (6) for the roof (5) comprises at least one telescopic arrangement (15,16) and a source (18) of pressurized fluid which is controlled by said electronic control unit.

5. A booth according to claim 4, characterized in that the or each telescopic arrangement is at least partly covered by a bellows enclosure.

6. A booth according to any one of the preceding claims 2 to 5, characterized in that said base (2) comprises retracting supporting feet (32) and wheels (26, 27, 28) for moving its movement.

7. A booth according to claim 6, characterized in that each retracting wheel comprises at least one linear actuator (32) provided with power and position transducers controlled by said electronic control unit.

8. A booth according to any preceding claim, characterized in that said roof (5) is constituted by a box-like body (46).

9. A booth according to claim 8, characterized in that said roof comprises further top covering means (8).

10. A booth according to claim 8, characterized in that said roof (5) comprises at least one internal compartment (47) which is arranged to locate said top covering means (8).

11. A booth according to claim 10, characterized in that said roof (5) has at least one edge which has at least one internal space for accommodating a respective extendible awning.

12. A booth according to any preceding claim 8 to 11, characterized in that said further covering means comprise at least one sunshade (8).

13. A booth according to claim 12, characterized in that the or each sunshade (8) comprises a supporting base frame (53), a rod comprising a plurality of modular sections (55) and pivoted to said supporting base frame (53), a sleeve or a knob (56) slidingly mounted on said rod (54), a multiplicity of linking rods (57) articulated in a radial arrangement, to a respective rib (58) and radially linked to said knob (56), a pulley (60) arranged above said knob (56), a cable or other flexible element (61) having one end secured to said knob (56) and its other end wound on a winch (62) on which said cable can be wound and a gearmotor (62a) for actuating said winch (62) supported by said base frame (53).

14. A booth according to claim 13, characterized in that said base frame (53) comprises a plate (63) which rests on idle rollers (64) rotatably mounted in said compartment (47) of the box-like body (46) for the translatory motion of a respective sunshade (8).

15. A booth according to claim 13 or 14, characterized

in that said base frame (53) is connected to the end of a stem of a telescopic fluid-driven actuator (65), whose cylinder (66) is operatively connected to one end of said compartment (47) in said box-like body (46).

16. A booth according to claim 13 or 14, characterized in that said base frame (53) comprises a rack (76) in meshing engagement with a respective gear (75).

17. A booth according to claim 13 or 14, characterized in that it comprises a cylinder-and-piston unit (65) for driving said base frame (53).

18. A booth according to any one of the preceding claims 11 to 17, characterized in that the or each compartment (47) comprises a shutter or blind (50).

19. A booth according to any preceding claim, characterized in that said base (2) comprises a metallic structure (9a) for supporting flooring and cladding panels (11, 12, 13).

20. A booth according to claim 19, characterized in that said base (2) and said box-like roof (5) are rectangular or square in plan view.

21. A booth according to claim 20, characterized in that said base (2) comprises blind passageways (3).

22. A booth according to claim 20 or 21, characterized in that said base (2) comprises passageways (3) extending from one side to the other side thereof.

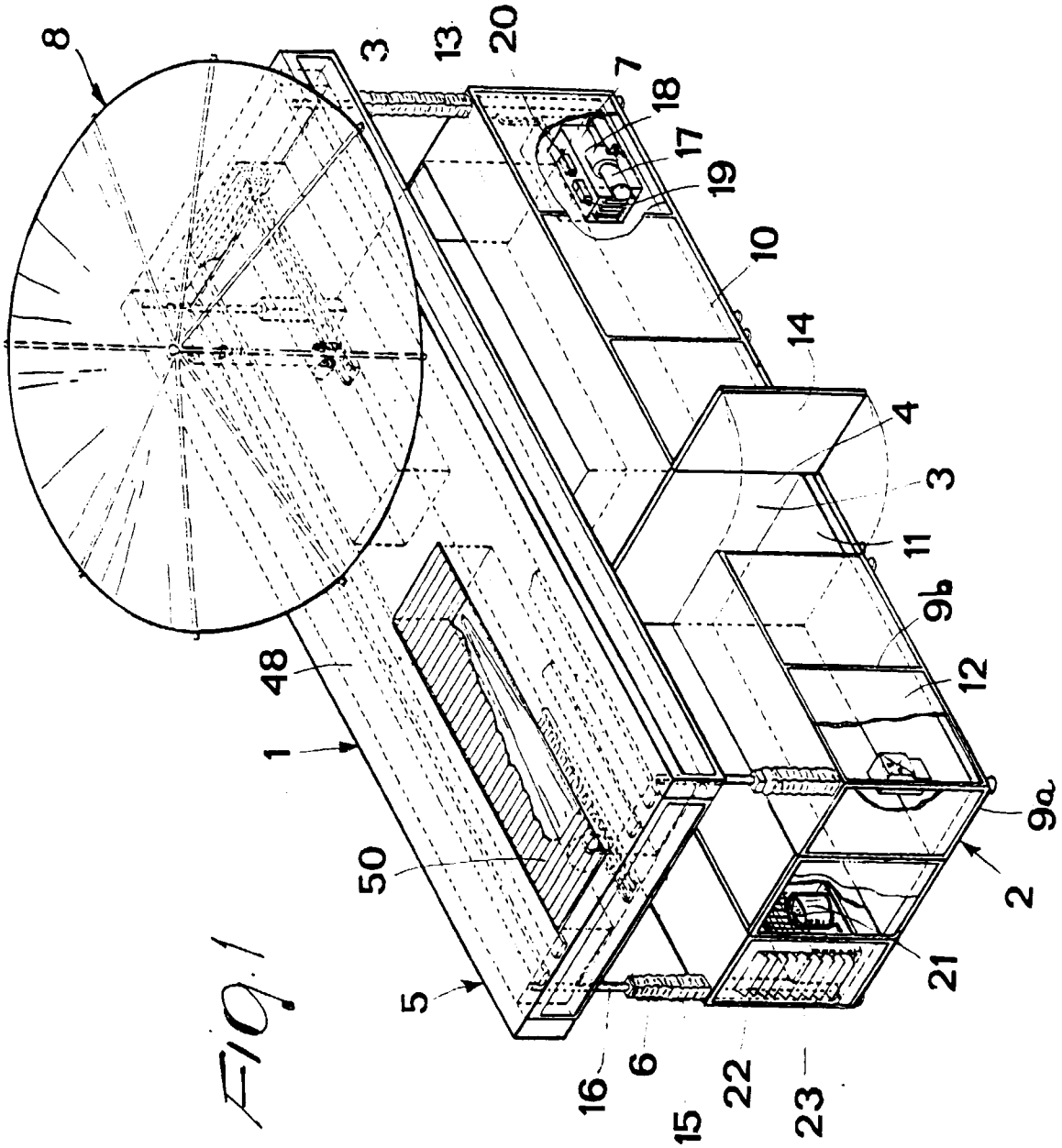

Fig. 1

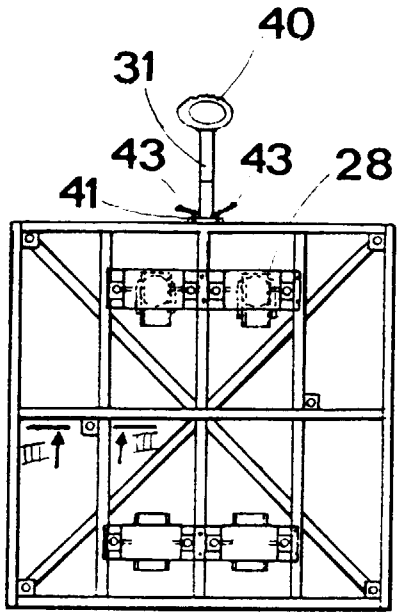

FIG. 2

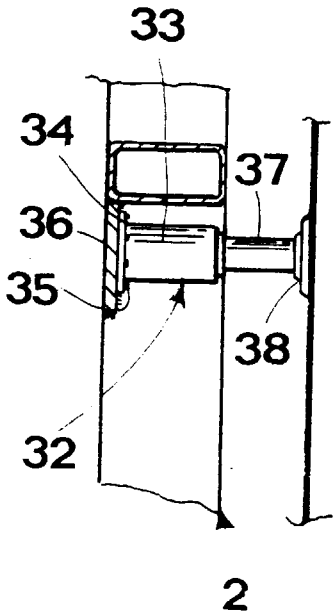

FIG. 3

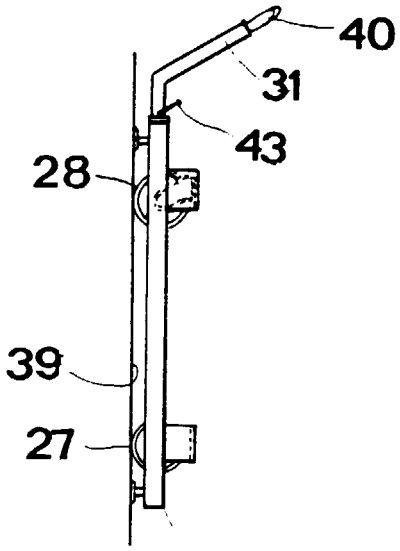

FIG. 4

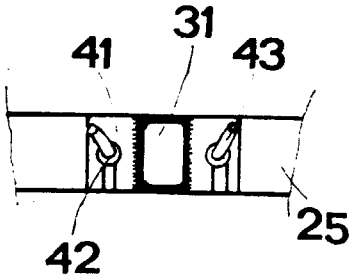

FIG. 5

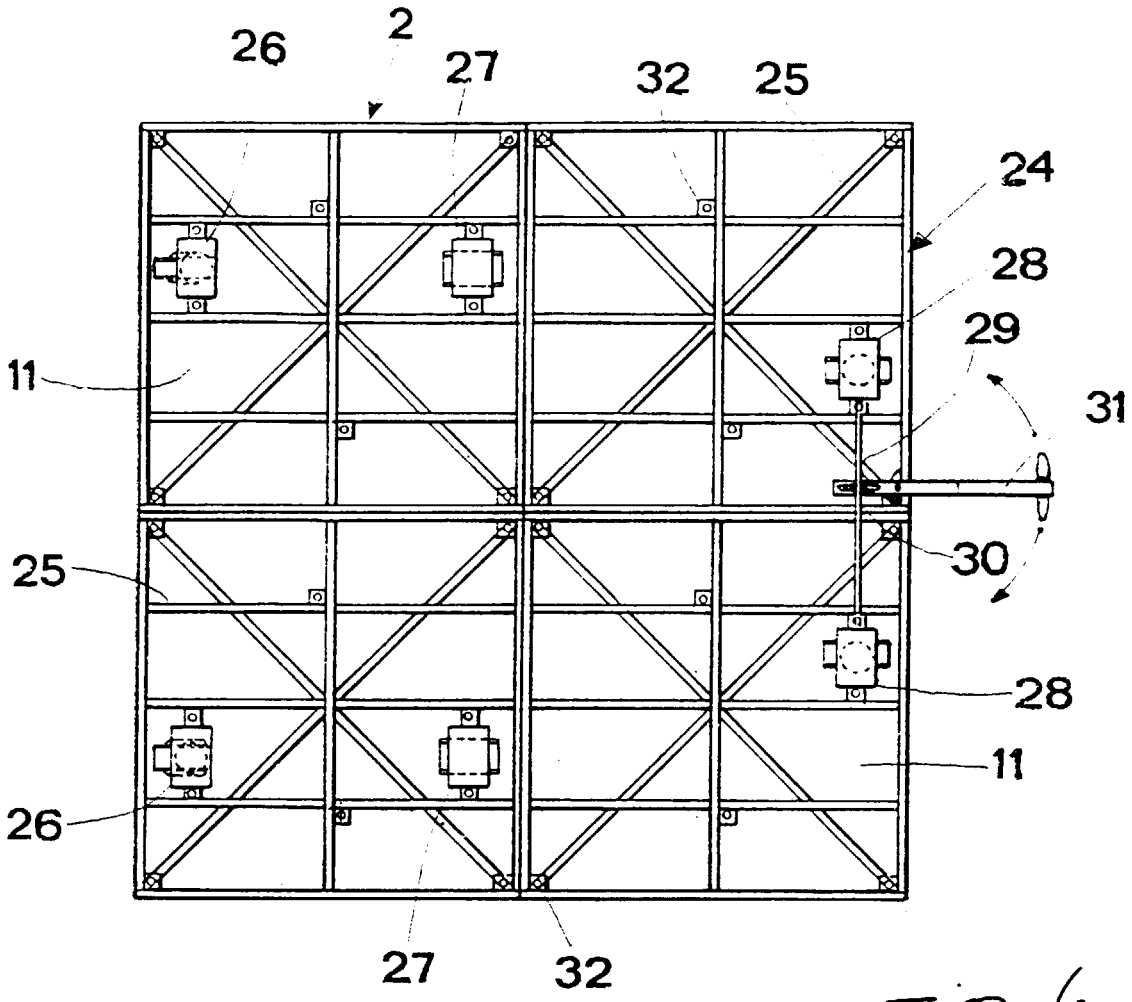

Fig. 6

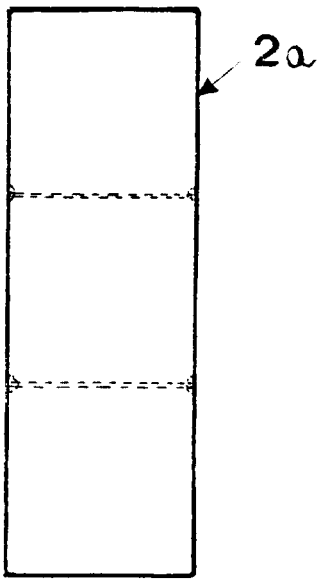

Fig. 7

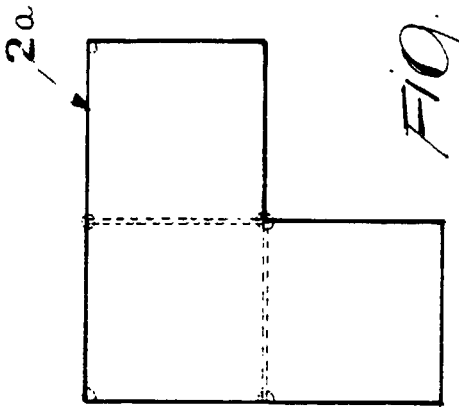

Fig. 9

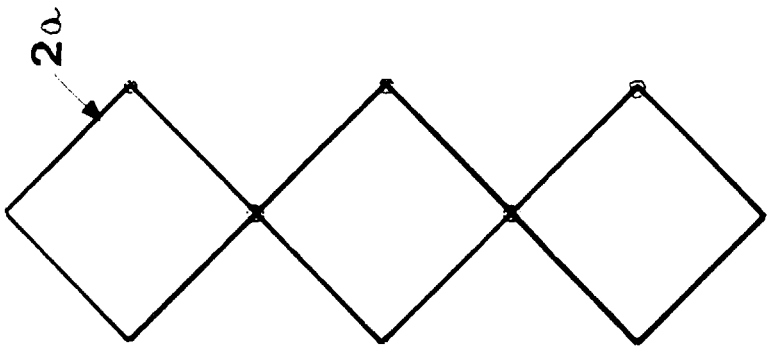

Fig. 8

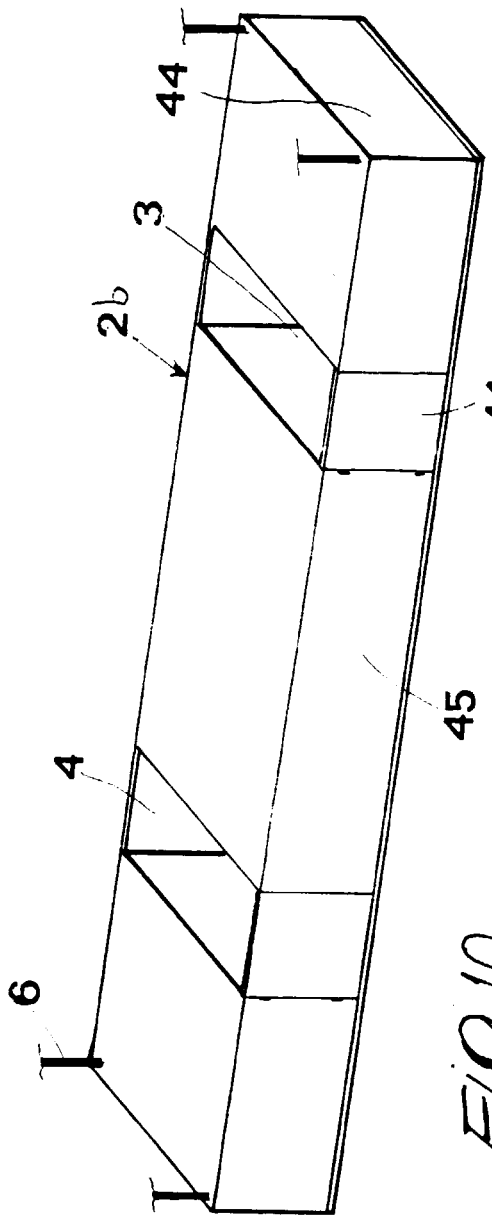

Fig. 10

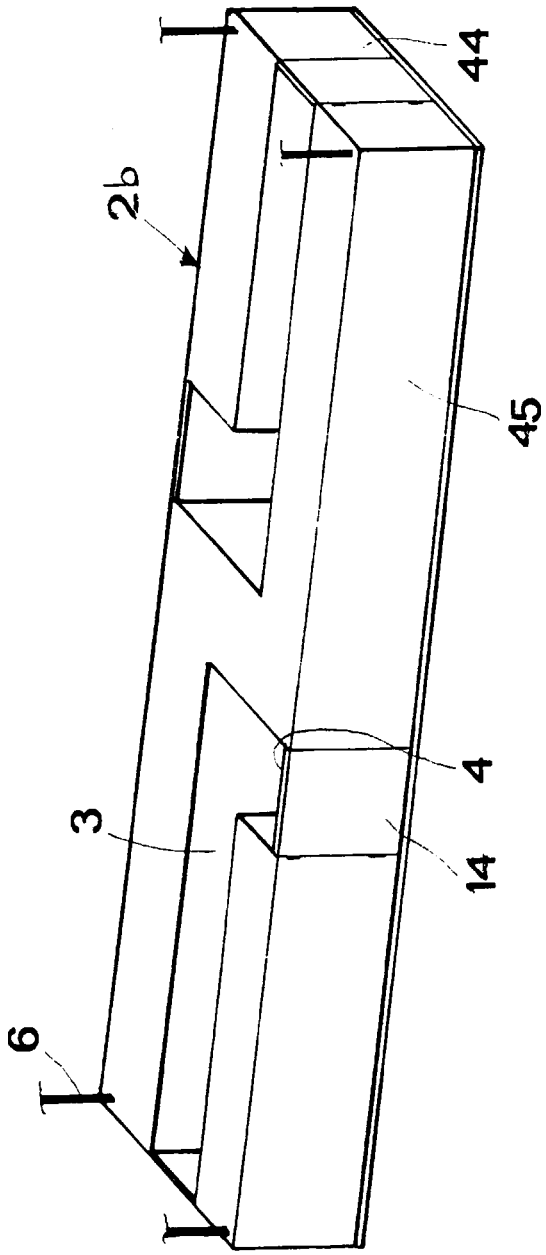

Fig. 11

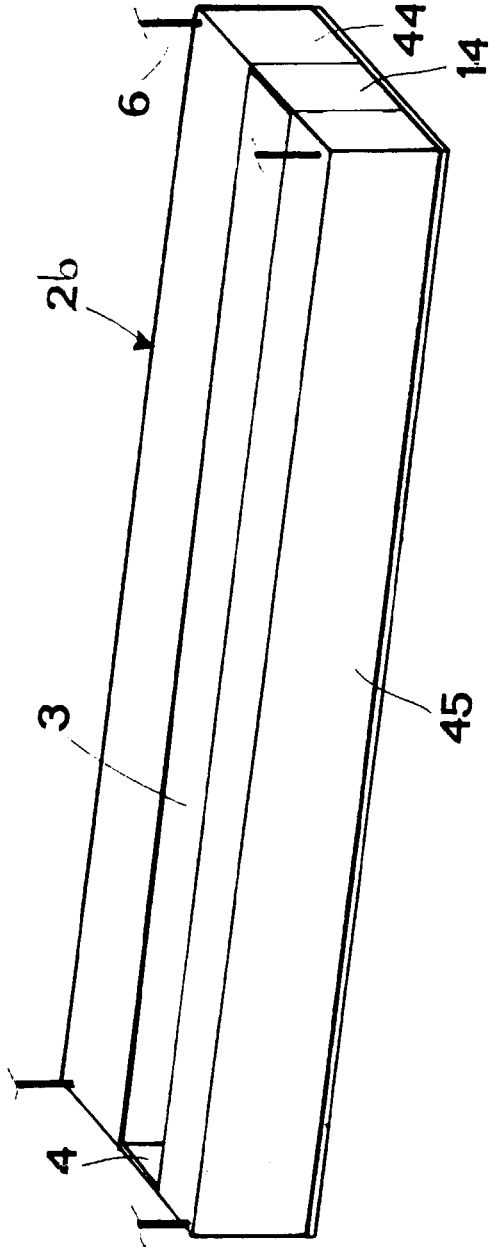

Fig. 12

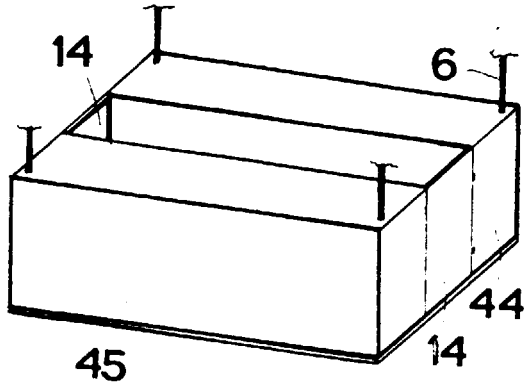

FIG. 13A

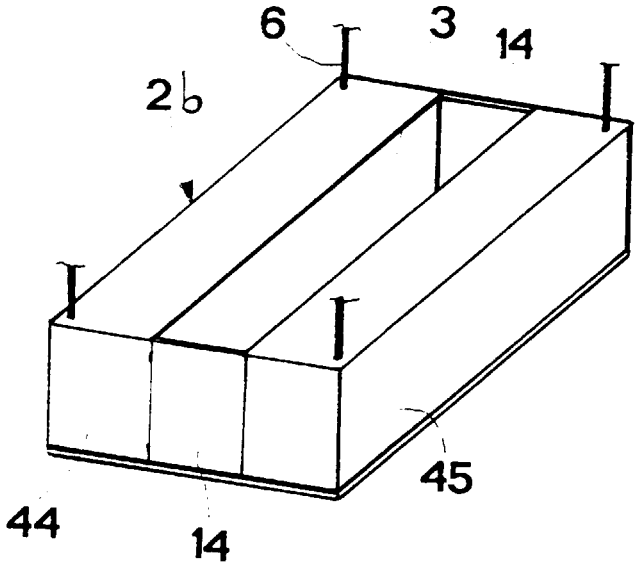

FIG. 13B

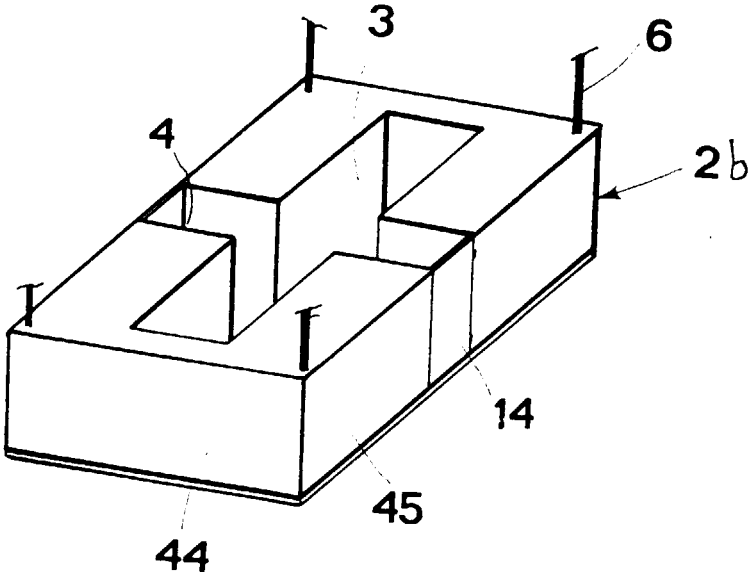

FIG. 14

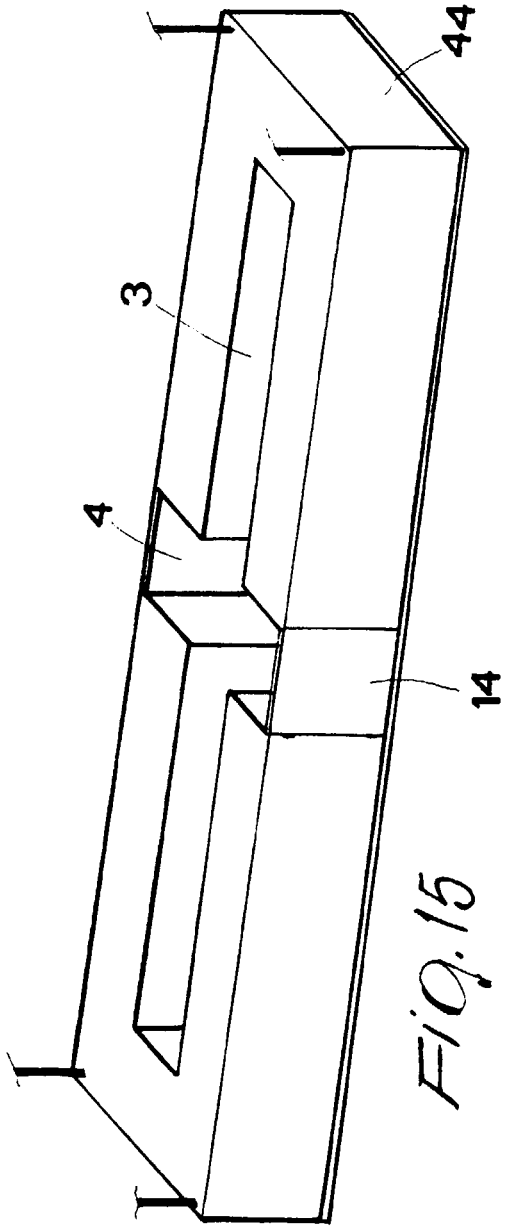

FIG. 15

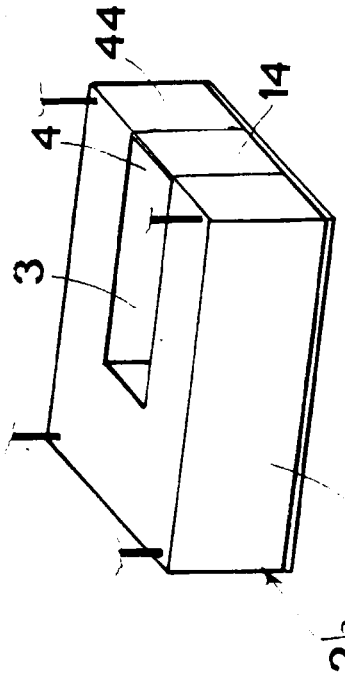

FIG. 17

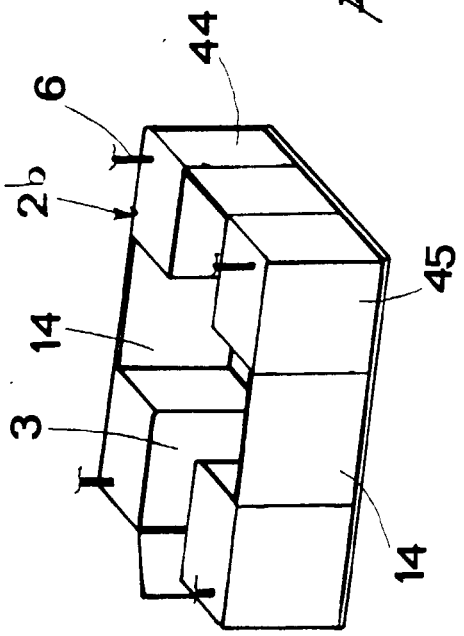

FIG. 16

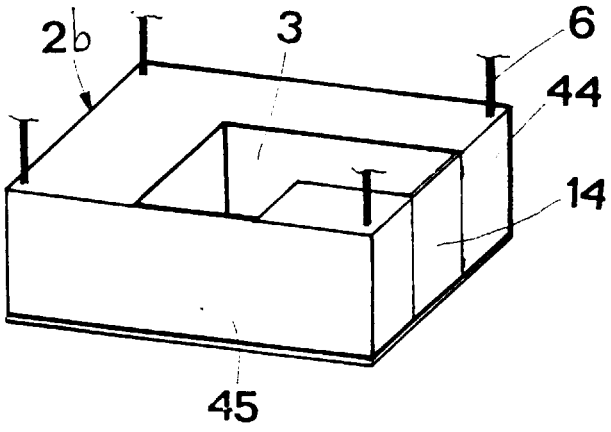

FIG. 18

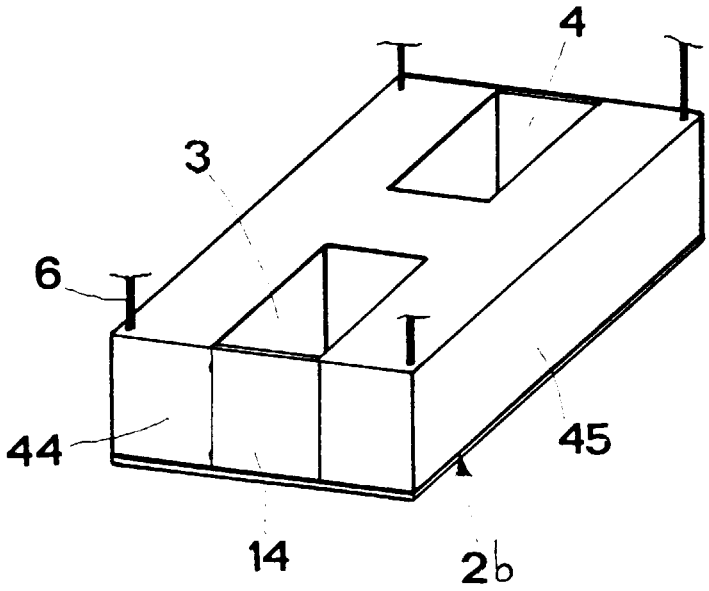

FIG. 19

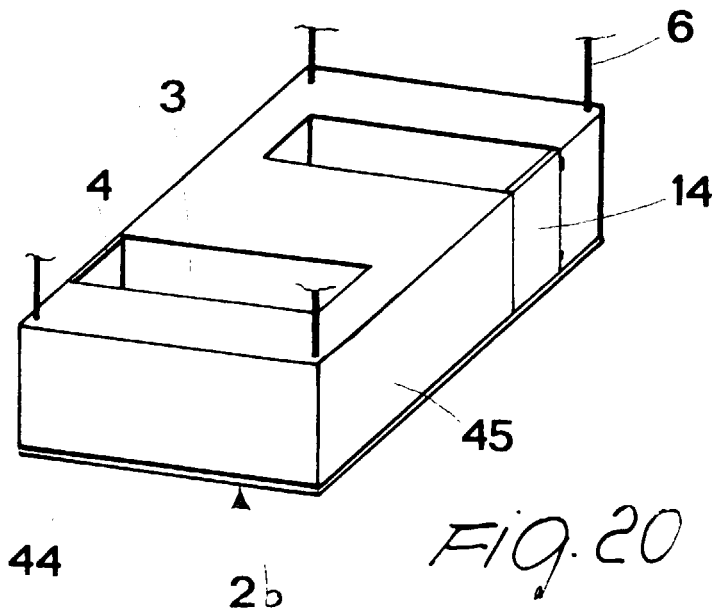

FIG. 20

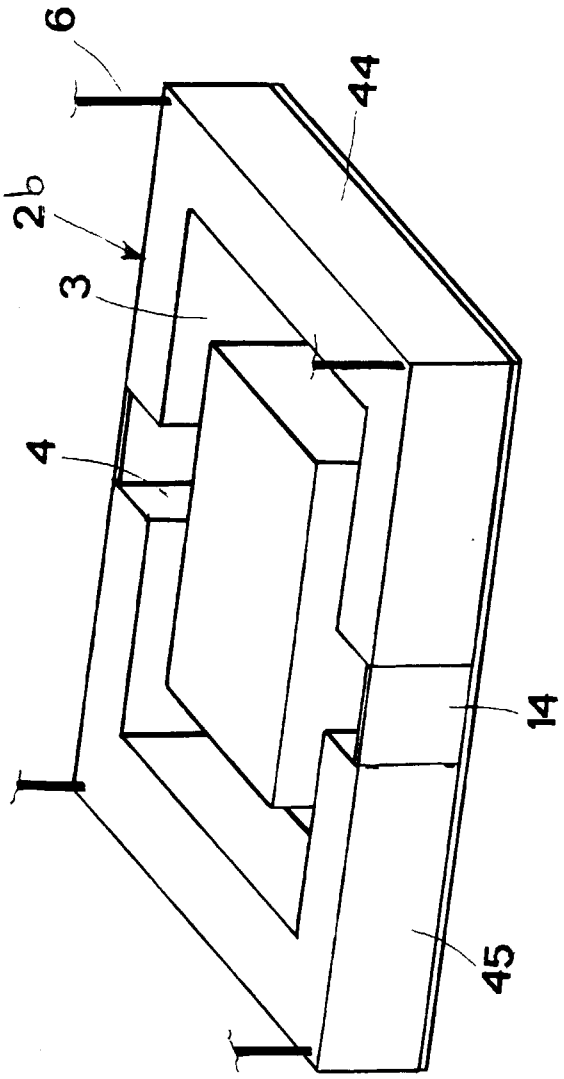

Fig. 21

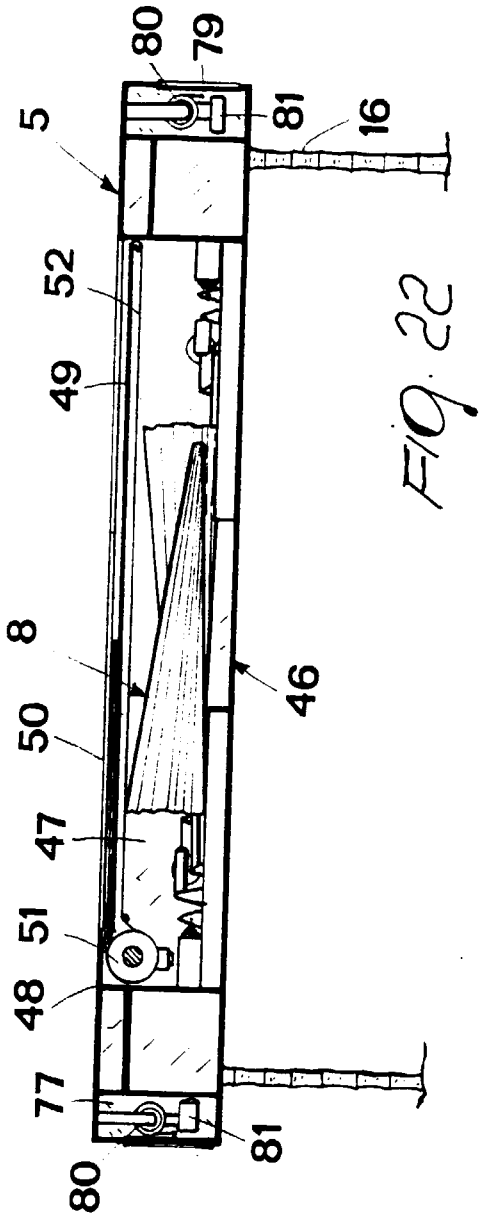

Fig. 22

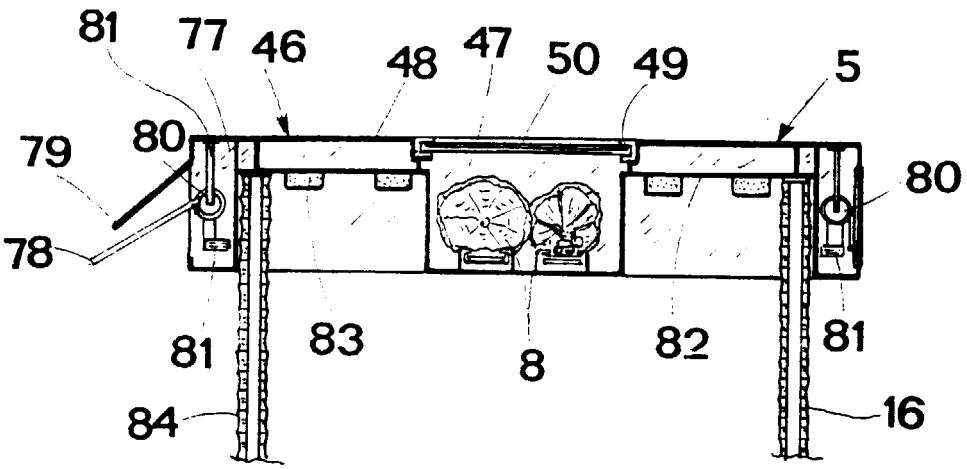

FIG. 23

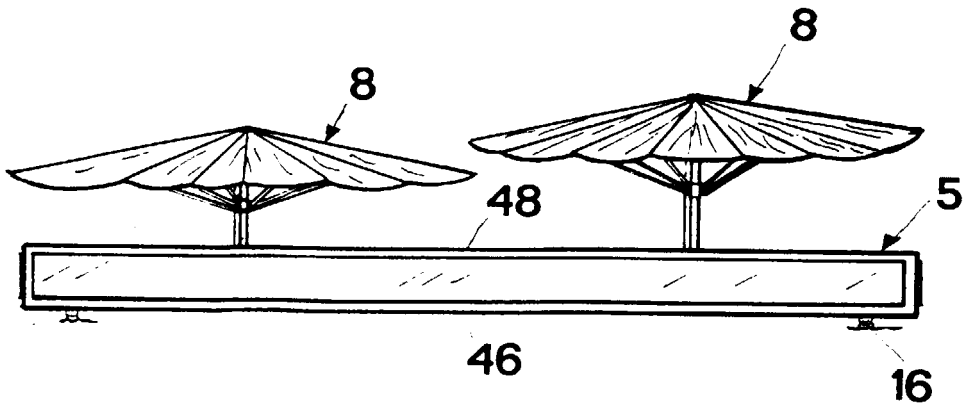

FIG. 24

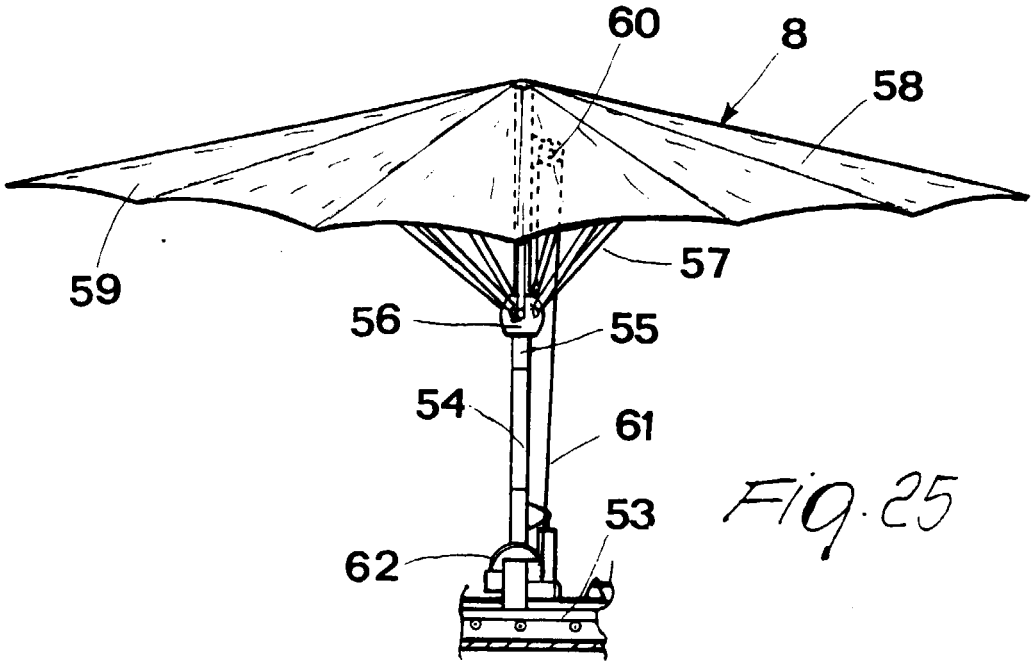

FIG. 25

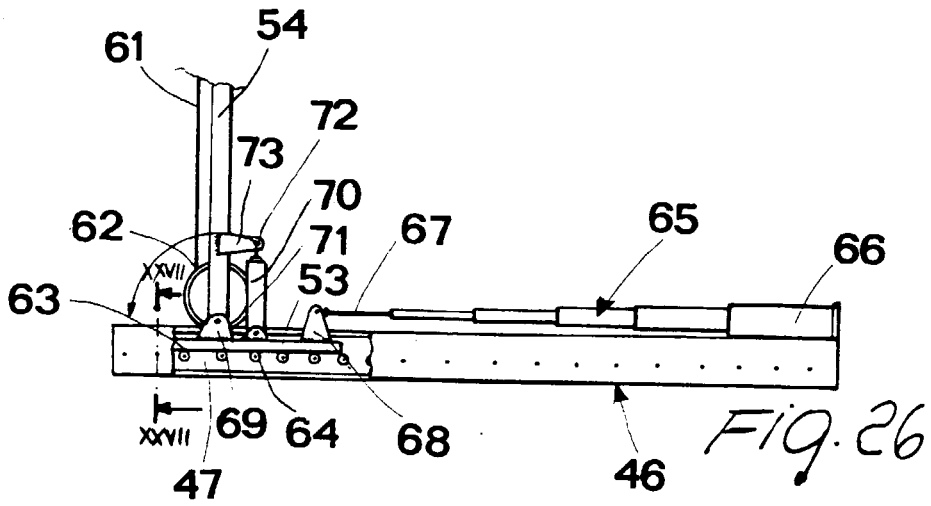

FIG. 26

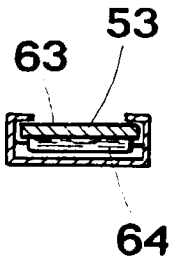

FIG. 27

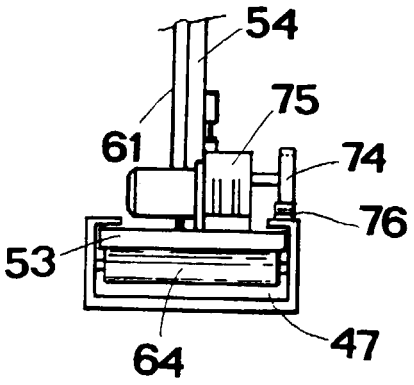

FIG. 28