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(54) **Post mount for outdoor cantilevered lighting fixtures**

(57) A post mount for outdoor cantilevered lighting fixtures having a post (2) provided with vertical grooves (5) wherein means for fixing lighting fixtures (8) or other items are associated at a chosen height.

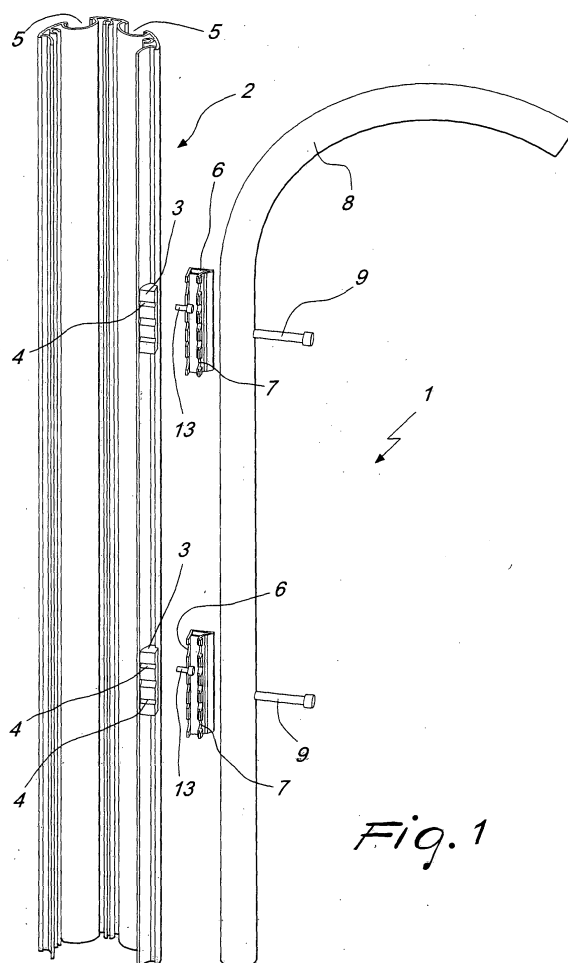


Fig. 1

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Description

[0001] The present invention relates to a post mount for outdoor cantilevered lighting fixtures.

[0002] The field of application of the post mount for lighting fixtures relates to outdoor lighting systems for squares, streets, sidewalks and urban furnishings in general and for gardens, driveways and residential furnishings in general.

[0003] Currently the state of the art of outdoor lighting fixtures mounted on posts is substantially constituted by three installation solutions.

[0004] According to a first system, the lamps are fixed to the posts by means of clamps, straps, collars et cetera.

[0005] Another commonly used system is to fix the lamps to the posts by means of holes already provided in the posts by the post manufacturer.

[0006] A third system that is known in the art comprises fixing the luminaires to the posts by means of holes provided in the posts during installation.

[0007] Fixing the lamps to the posts by means of clamps, terminals or straps is rather unbecoming from the aesthetic standpoint, because the styling of the post is not integrated with the styling of the lamp and there is also the limitation that it is not possible to position a plurality of lighting fixtures on the same level or at the same distance from the ground.

[0008] Holes in the posts are particularly inconvenient if they are produced by the installer or end user, since they force him or her to perform additional work with difficult fixing operations.

[0009] If instead the holes are provided in the posts by the manufacturer, the placement of the lamps on the posts is fixed and not adjustable.

[0010] An aim of the present invention is to provide a mount that overcomes the drawbacks of the cited prior art.

[0011] An object of the invention is to provide a mount that allows to concile the styling with installation functionality and flexibility, allowing to decide the placement of the lighting fixture on the post at the time of installation.

[0012] A further object of the invention is to provide a mount that allows to eliminate the need to supply posts that are preset for mounting the luminaires in different positions.

[0013] A further object is to provide a mount in which the post can be positioned in the holes in the ground regardless of the installation elevation with respect to the ground of the lamps that can be applied, since the fixtures are mounted in a subsequent step at the user's discretion.

[0014] A further object is to provide a mount that allows quick installation, since the system for fixing the arm of the lamps to the post by insertion and locking with screws does not require work on the post.

[0015] This aim and these and other objects that will

become better apparent hereinafter are achieved by a post mount for outdoor cantilevered lighting fixtures, as claimed in the appended claims.

[0016] Further characteristics and advantages of the invention will become better apparent from the following detailed description of preferred but not exclusive embodiments thereof, illustrated by way of non-limiting example in the accompanying drawings, wherein:

Figure 1 is a partially cutout exploded perspective view of the mount according to the invention;

Figure 2 is a view, similar to Figure 1, illustrating the passage of a cable;

Figure 3 is a side elevation view of the mount;

Figure 4 is a front view of the mount;

Figure 5 is a sectional view, taken along the sectional line V-V of Figure 3;

Figure 6 is an enlarged-scale sectional detail view of the mount;

Figure 7 is an exploded cutout perspective view of the post and of the blocks of the mount;

Figure 8 is a perspective view of the application of a lighting fixture, to the mount;

Figure 9 is a schematic view of the application of accessories to the post by means of the mount according to the invention;

Figure 10 is an exploded perspective view of a step of application of a lighting fixture;

Figure 11 is a schematic view of other applications by means of the mount according to the invention.

[0017] With reference to the figures, a mount according to the invention, generally designated by the reference numeral 1, comprises a post 2 that is preferably made of extruded aluminum and has semicircular grooves 5 provided along its entire length.

[0018] A block 3, preferably made of pressure die-cast aluminum or zinc-aluminum-magnesium alloy and provided with threaded holes 4, can be applied to the grooves 5 and acts as a supporting member for a lighting fixture.

[0019] A spacer 6, preferably made of extruded or pressure die-cast aluminum and provided with holes 7 for the insertion of screws 9, is shaped so as to accommodate a curved tube 8 provided with at least one hole for a fixing screw 9.

[0020] The curved tube 8 has an inlet 10 for an electric power supply cable 11 and acts as a member for mutually anchoring the lighting fixture 12 and the post 2.

[0021] The lighting fixture 12 is applied to the free end of the curved tube 8, and the power supply cable 11 passes from the base of the extruded post into the curved tube and then reaches the lighting fixture.

[0022] The operation of the mount according to the invention is as follows.

[0023] Initially, the extruded post 2 is fixed in the ground by burying it, for example for approximately 50 centimeters, cementing it in the appropriately provided

hole or by fitting the extruded post over a previously anchored 60-mm tube.

[0024] A number of pairs of blocks corresponding to the number of lighting fixtures to be installed is then inserted. Preferably, each lighting fixture is supported by means of two blocks, as in the illustrated examples.

[0025] After deciding the installation height, which is at the user's discretion, a first spacer 6 is fixed by means of a screw 13 to the upper block 3 and then the same operation is repeated for the pair constituted by the lower block and spacer. The center distances can be defined by a template or by a measurement.

[0026] The curved tube 8 is positioned on the upper spacer and fixed by means of the screw 9. The operation is repeated in the lower part and the power supply cable 11 is inserted in the groove of the extruded post 2 and is made to rise up to the top 22 thereof, where it accesses the internal protected part of the post through an opening provided on the cap 23 of the post.

[0027] The cable descends again inside the post to connect to the junction box in the installation hole. A snap-on cable housing 24 that conceals the power supply cable is fastened to the outside of the groove of the extruded post.

[0028] The base 14 of the lighting fixture 12 is fitted onto the curved end of the curved tube 8 and electrical connection to the lighting fixture is thus provided.

[0029] The mount according to the invention is conceived for mounting lighting fixtures with a tube that is curved upward or downward and for providing maximum installation flexibility by making the installation independent of preset heights. The compositions of the lighting fixtures on the post also are at the user's discretion.

[0030] It is possible to anchor to the extruded post not only lighting fixtures but also various other types of devices and accessories, such as poles for flags, baskets or bins, supports for road signs, for street indications, district markers, et cetera.

[0031] In practice it has been found that the invention achieves the intended aim and objects, a mount having been provided which facilitates installation and also allows a wide range of installation variations without any modification to the basic components.

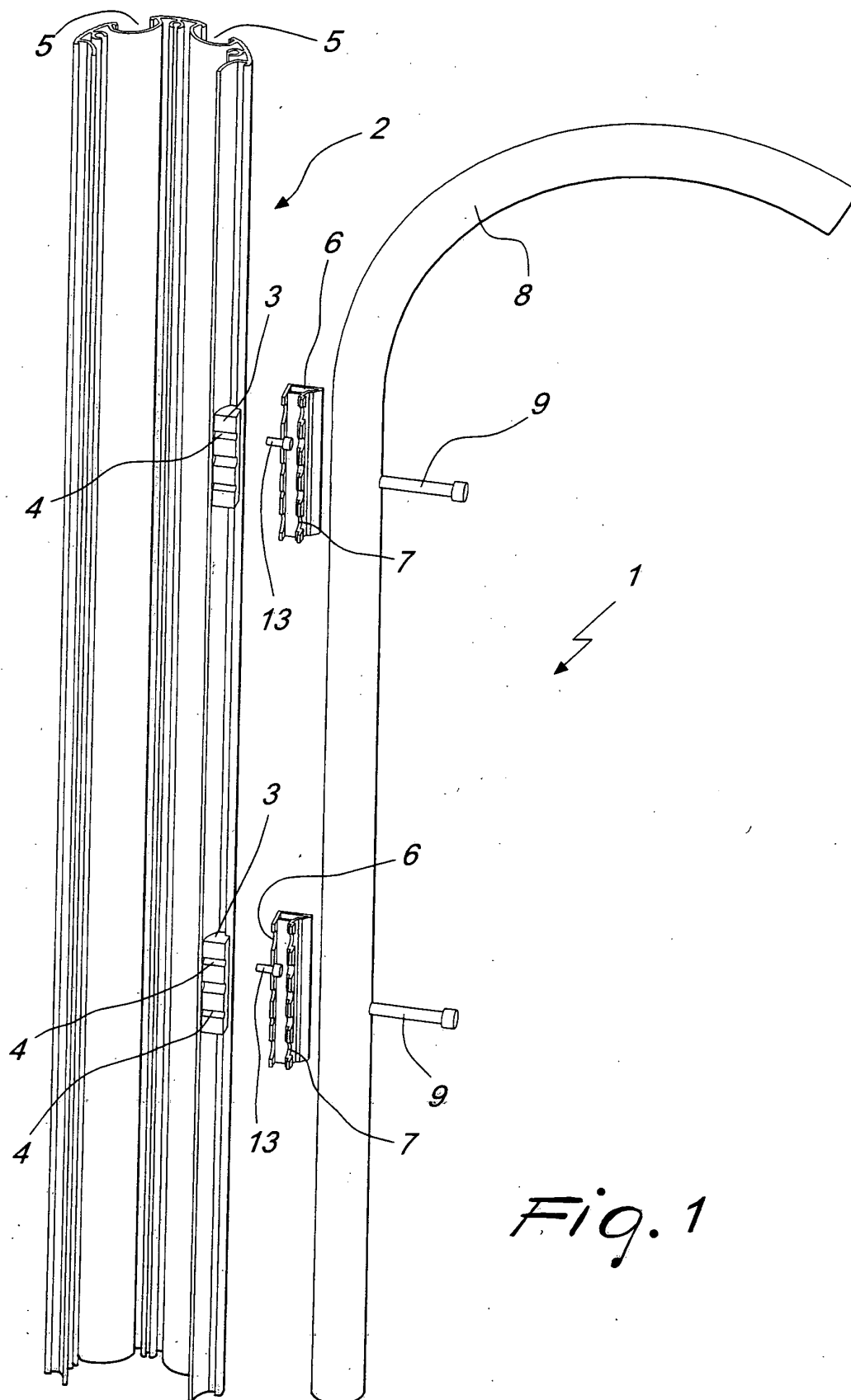
[0032] A further advantage of the invention is that the composition of the lamps on the posts in terms of number and quantity and type is decided after inserting the post in the ground and can be increased at a later time on the remaining free grooves.

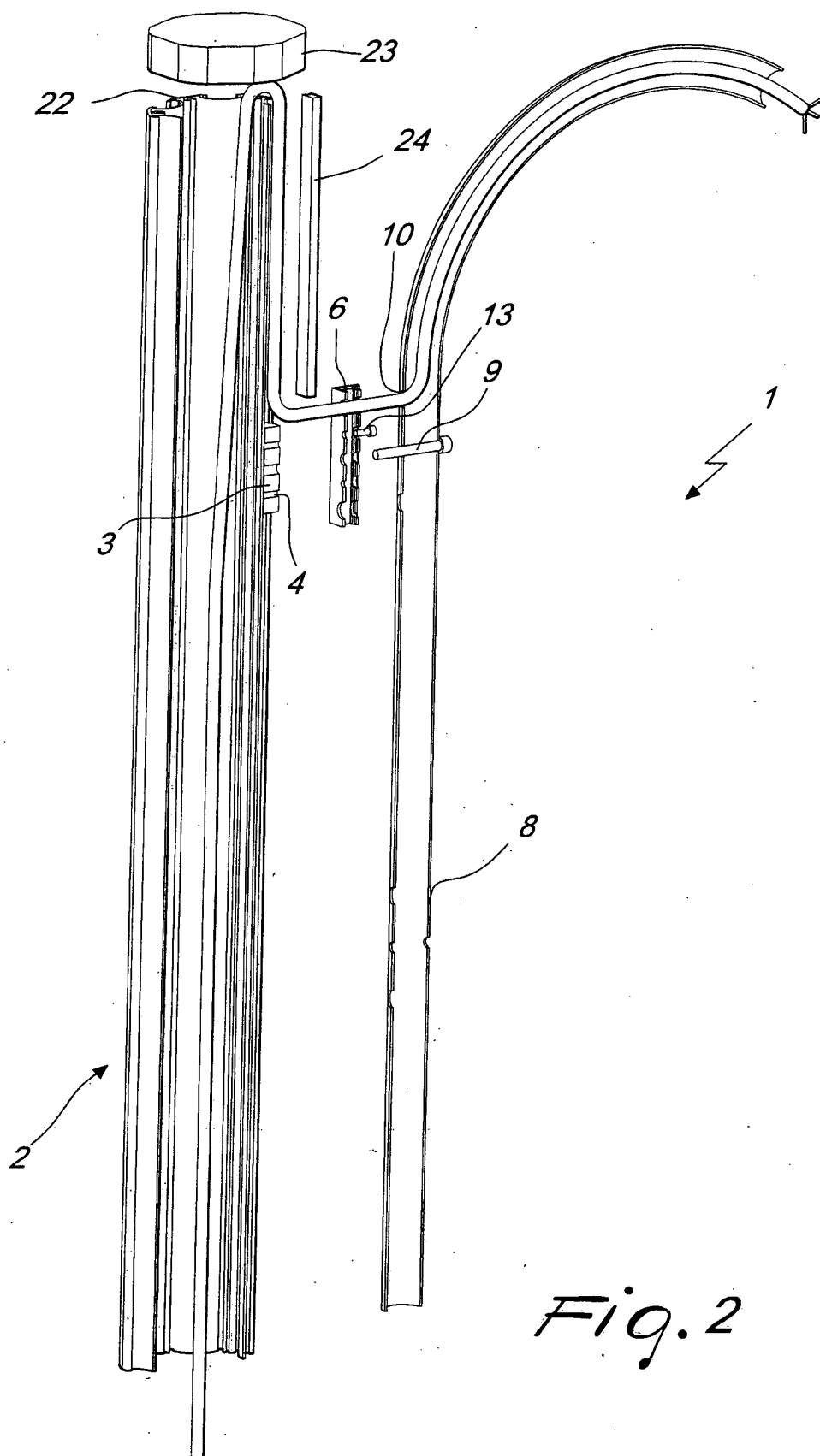
[0033] The mount according to the invention is susceptible of numerous modifications and variations, within the scope of the appended claims. All the details may be replaced with technically equivalent elements.

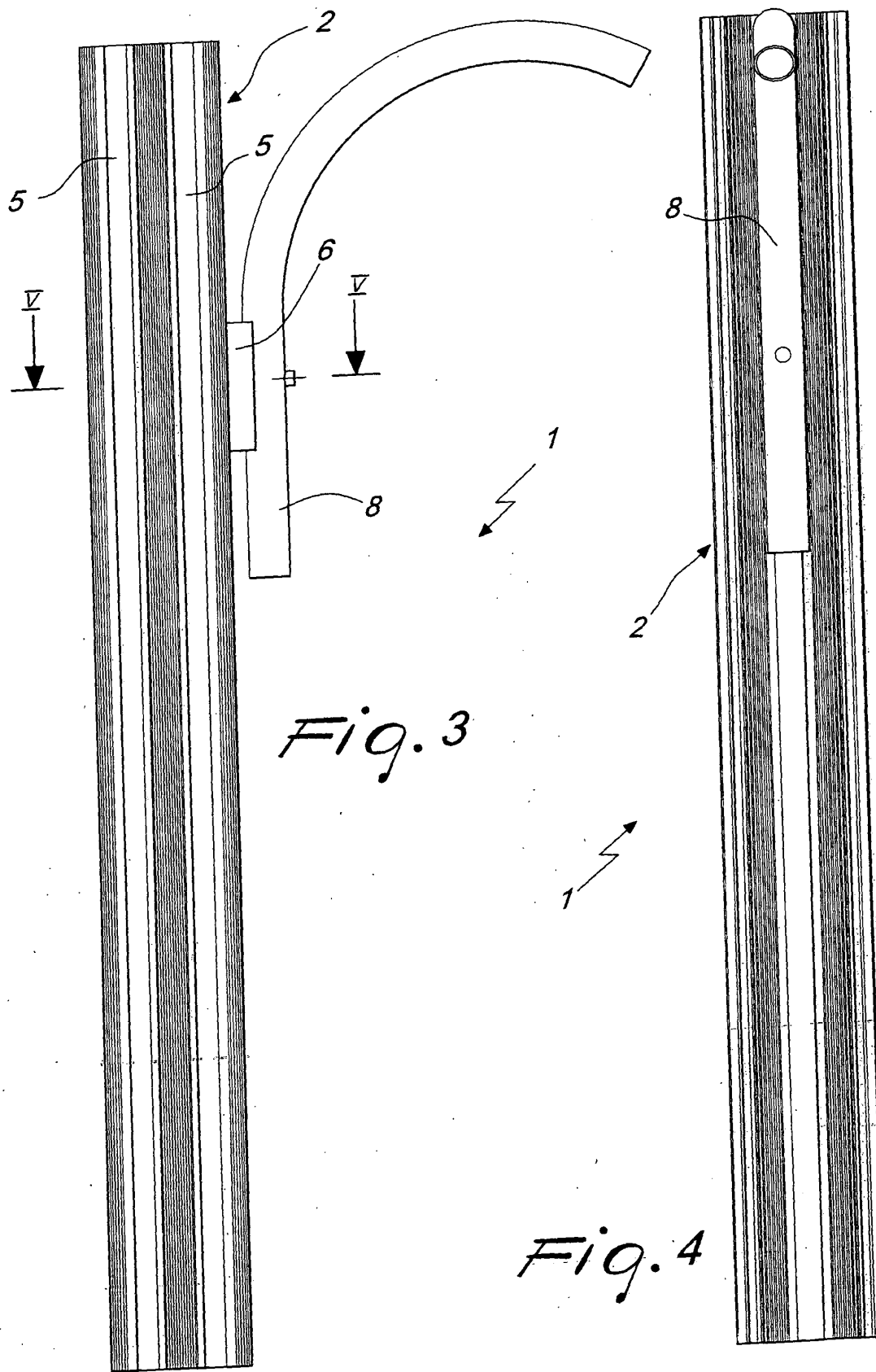
[0034] The materials used, as well as the dimensions, may of course be any according to requirements and to the state of the art.

Claims

1. A post mount for outdoor cantilevered lighting fixtures, **characterized in that** it comprises a post provided with one or more substantially vertical grooves in which one or more fixing means for fixing lighting fixtures or other items are associated at a chosen height.
2. The mount according to claim 1, **characterized in that** said post is an extruded aluminum post provided with semicircular grooves formed along its entire length.
3. The mount according to claim 1 or 2, **characterized in that** said fixing means comprises a block made of pressure die-cast aluminum or zing-aluminum-magnesium alloy, provided with threaded holes and suitable to be applied to said grooves in order to constitute a member for supporting a lighting fixture.
4. The mount according to one or more of the preceding claims, **characterized in that** it comprises an extruded or pressure die-cast aluminum spacer, provided with holes for the insertion of screws and shaped so as to accommodate a curved tube provided with at least one hole for a fixing screw.
5. The mount according to one or more of the preceding claims, **characterized in that** said curved tube has an inlet for an electric power supply cable and acts as a member for mutually anchoring the lighting fixture and said post.
6. The mount according to one or more of the preceding claims, **characterized in that** said lighting fixture is applied to the free end of said curved tube and the power supply cable passes from the base of the extruded post into the curved tube and then reaches the lighting fixture.
7. The mount according to one or more of the preceding claims, **characterized in that** the power supply cable is inserted in the groove of the extruded post and is made to rise to the top of said post where it accesses the internal protected part of the post through an opening provided on a cap of the post; the cable then descends again inside the post to connect to the junction box in the installation hole.
8. The mount according to one or more of the preceding claims, **characterized in that** it comprises a snap-on cable housing that is fastened to the outside of the groove of the extruded post in order to conceal the power supply cable.







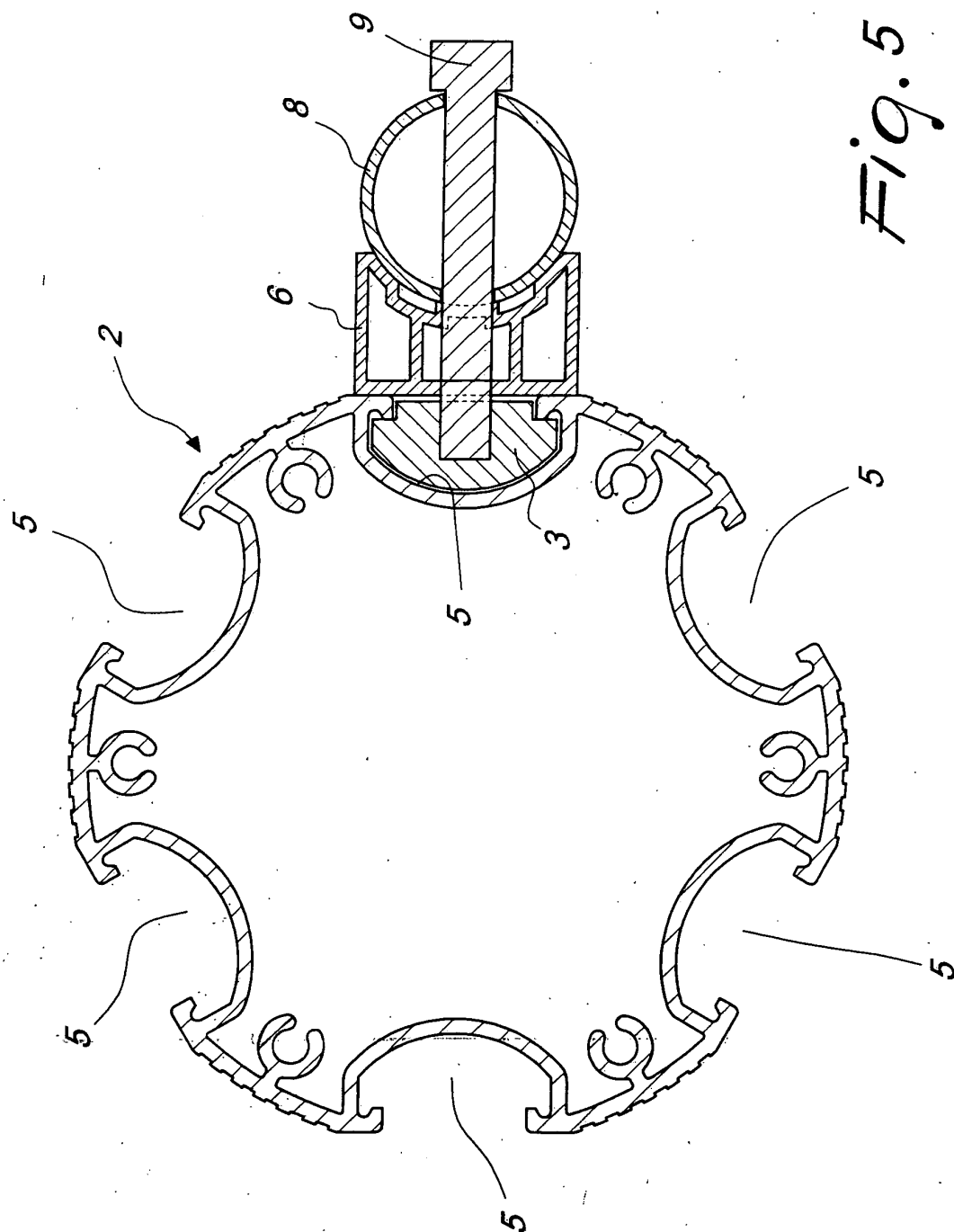


Fig. 5

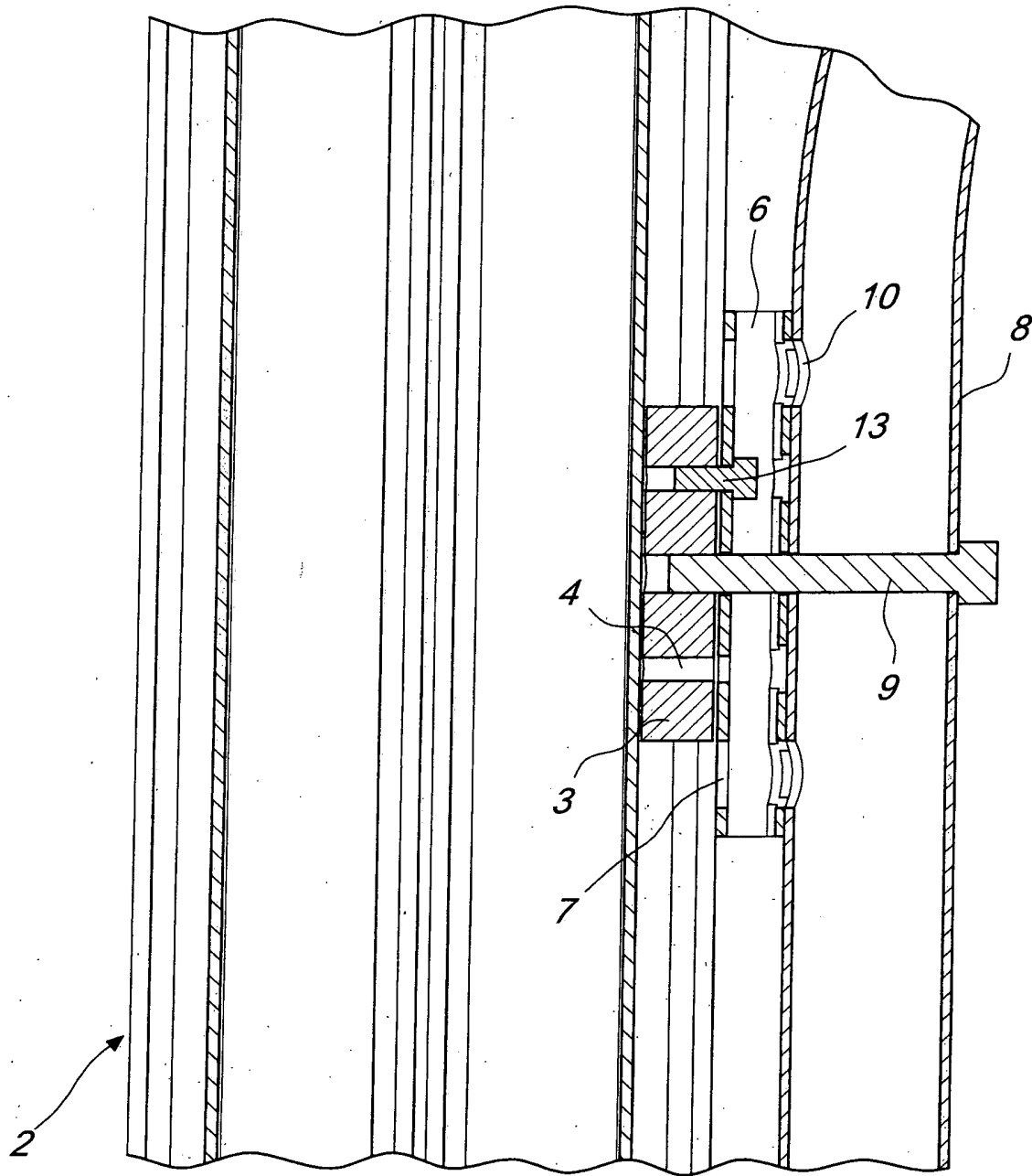


Fig. 6

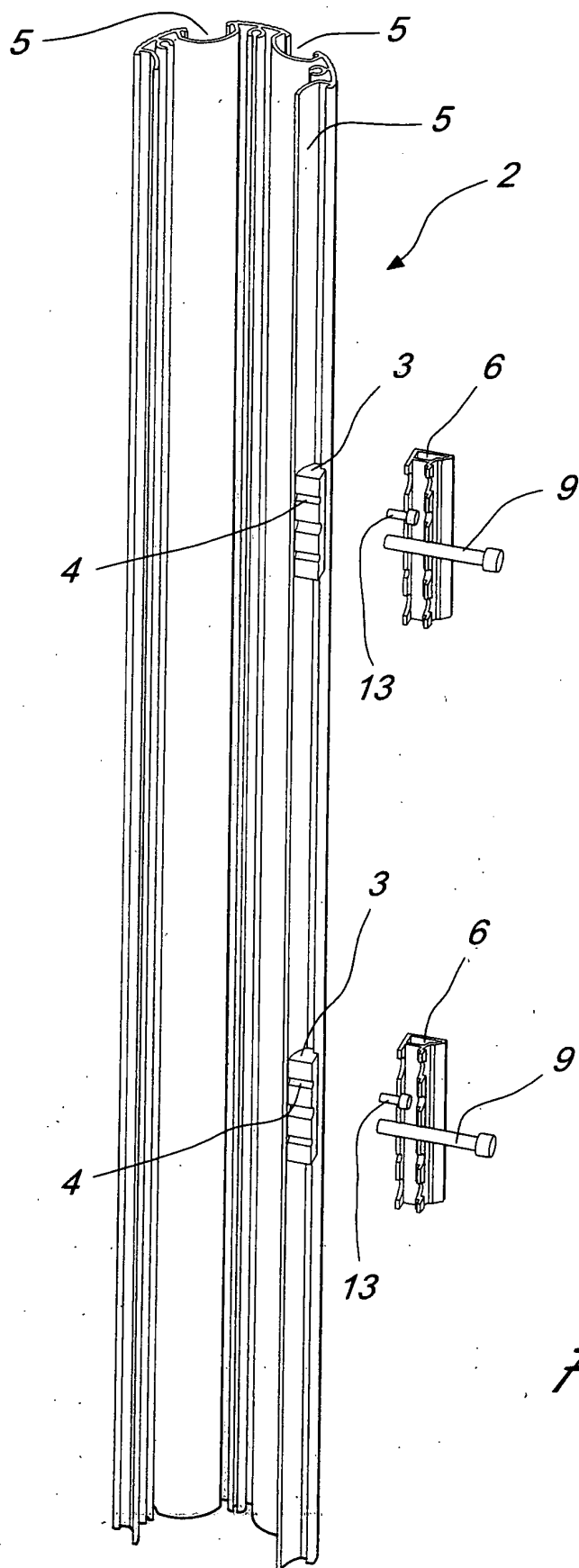


Fig. 7

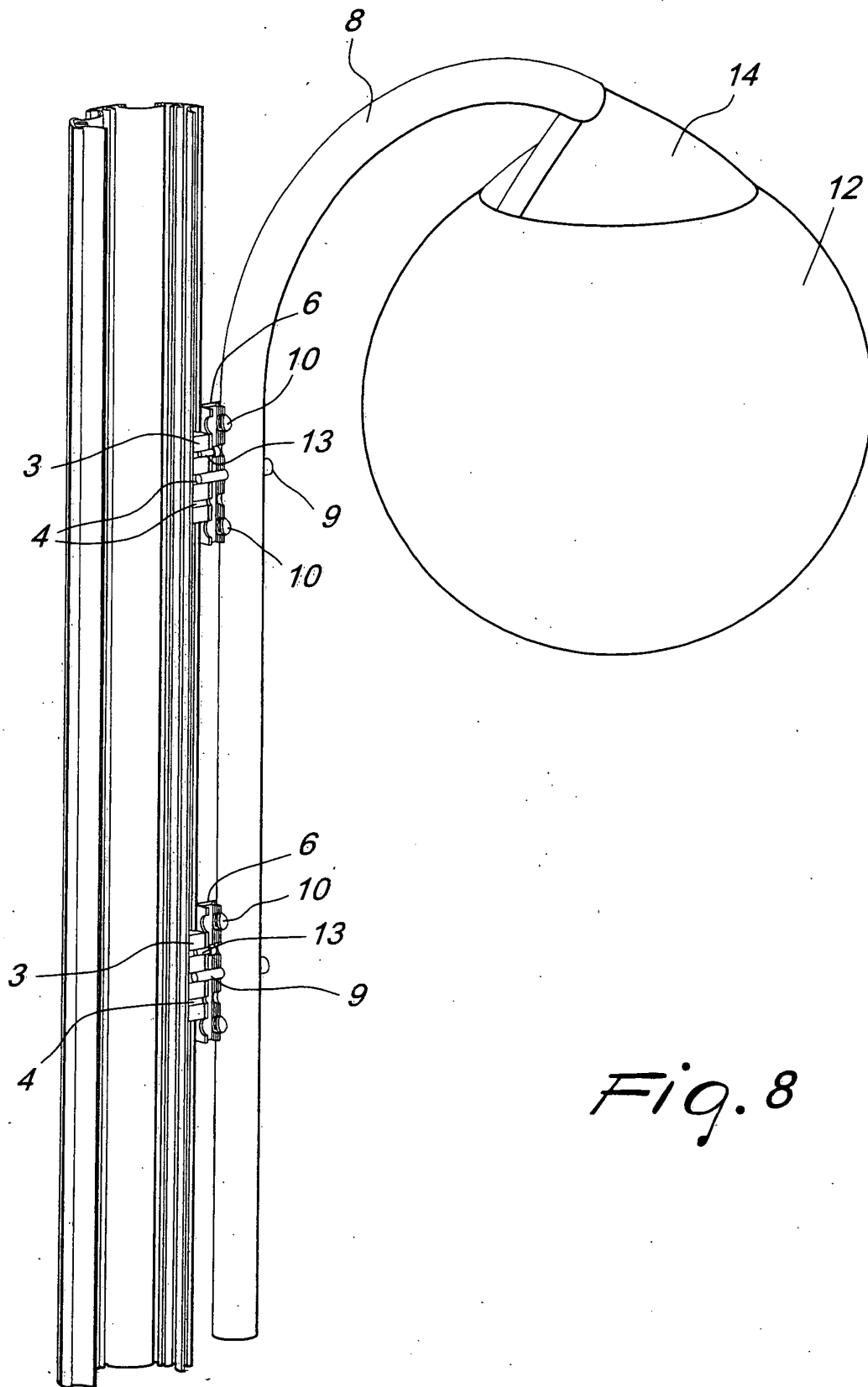


Fig. 8

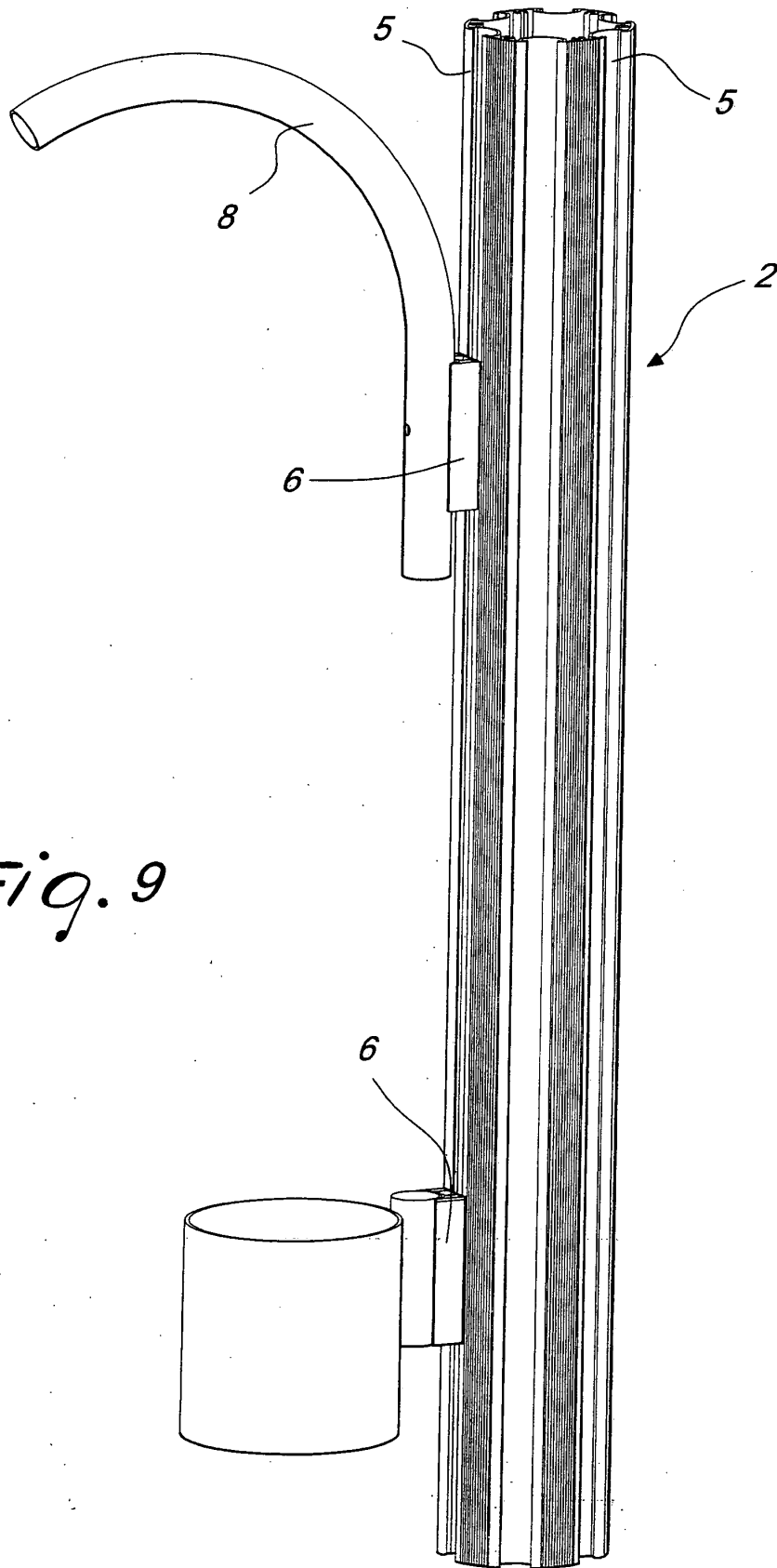


Fig. 9

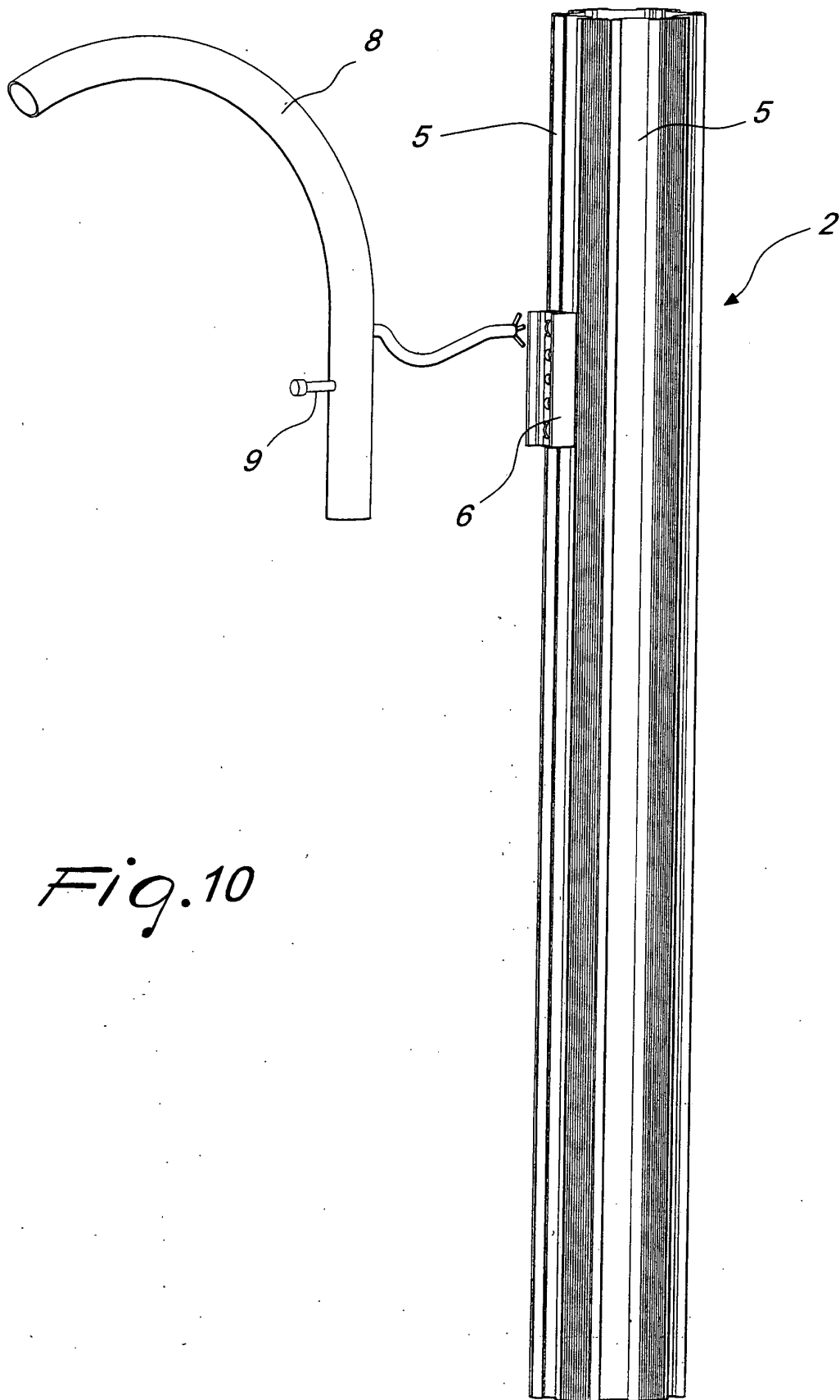


Fig. 10

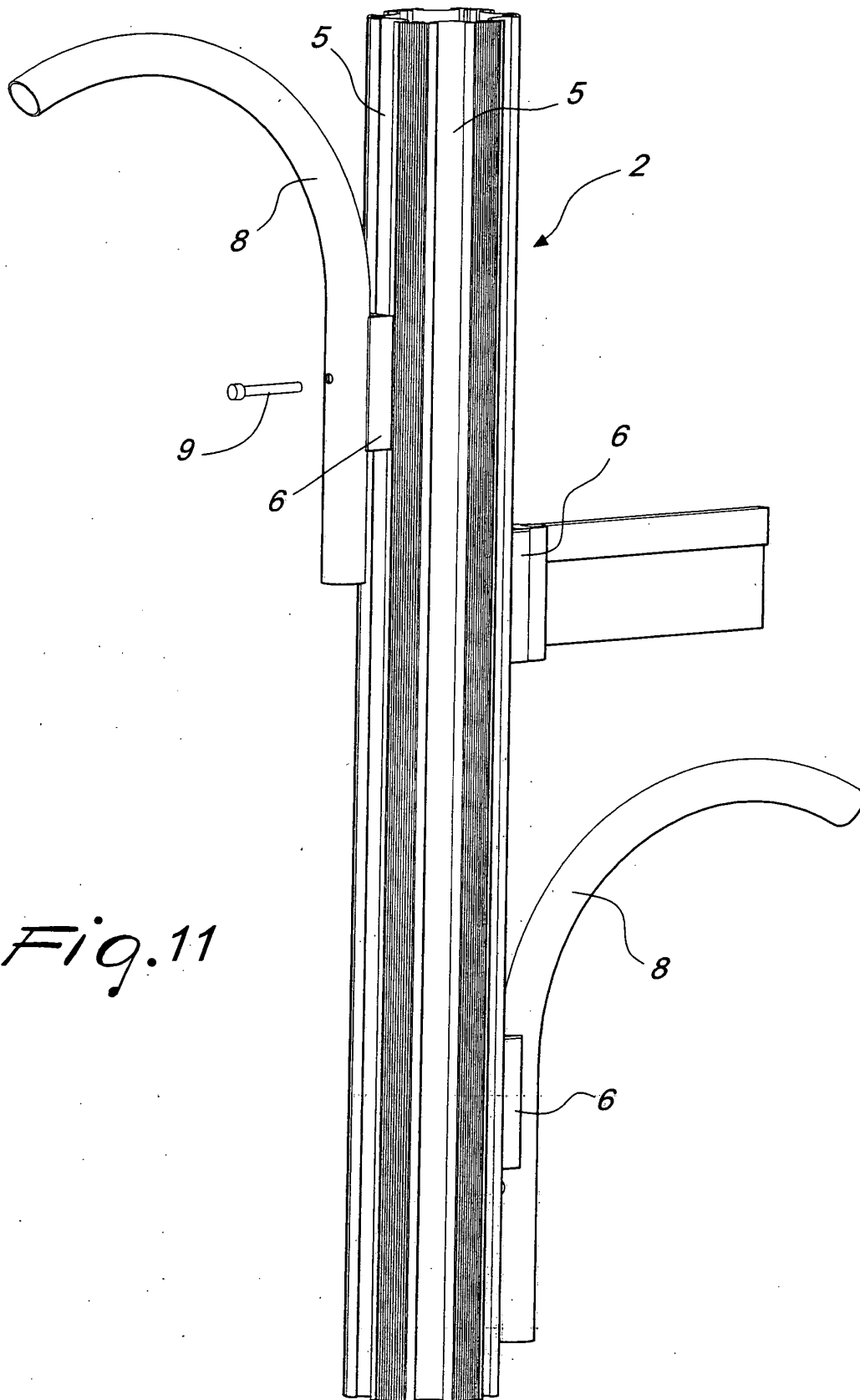


Fig. 11