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(54) Closure of cavity of lamp post

(57) The subject matter of the invention is closure of cavity of lamp post.

Closure of cavity of lamp post according to the invention has got the cover (2) inserted into the wall (1) which fits the cavity hole. The cover (2), from both ends, is provided with the ports 3 and axially located from the inside catches (4). The cover rests on centrally flattened consoles (5) that are welded axially in relation to the cavity hole in the inside of the post. These consoles make the sectors of the cylinder of which every one is provided with the cut-out (6) in the form of letter "T" and the tapped hole (7). To one of the welded consoles (5) the earth screw (8) is fastened which is inserted after the welding is finished and which has got the ability to be regulated in a certain, limited range. Spacing of the cuts-out (6) of the consoles (5) relates to spacing of the catches (4) of the cover (2) which dimensionally fit the cuts-out (6) and which in their closed state enter the corresponding cuts-out (6) of the consoles (5), creating stiff joints. In the overlaying in pairs ports (3) of the cover (2) and the tapped holes (7) of the consoles (5), there are located some press bolts (9). The edges of cover (2) and the edges of cavity hole are chamfered.

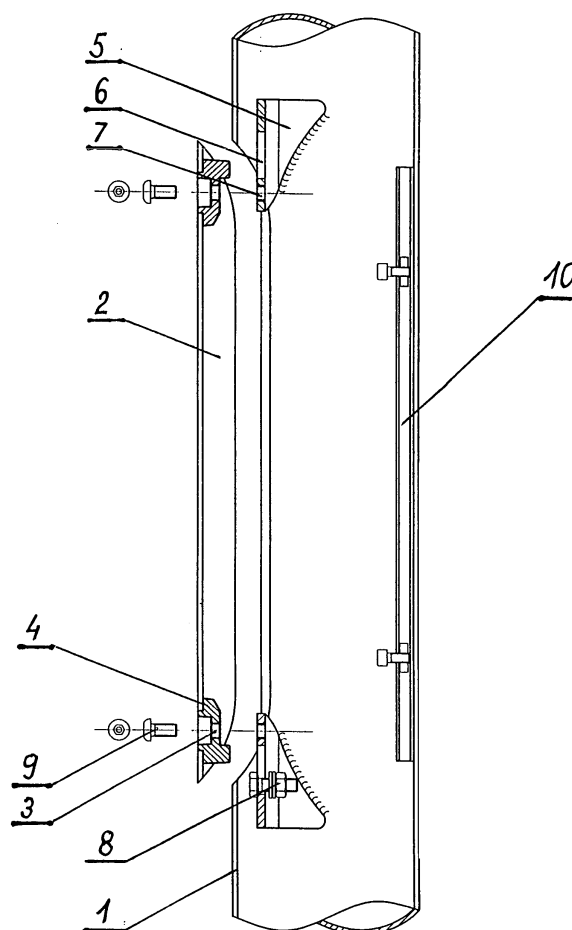


Fig. 1

EP 1 681 408 A2

Description

[0001] The subject matter of the invention is closure of cavity of lamp post. Lamp posts, applied for example for lighting streets, squares and buildings in principle have got in their lower part an axial cavity where electrical equipment is located in the forms of electrical terminals and protections such as ground contacts. The access to the cavity is a hole which is cut out in the side wall of the post.

[0002] In respect of safety as well as aesthetic considerations, cavities are protected by means of different kinds of closures such as small door embedded on hinges and provided with the lock that may be closed with a suitable key. We also know another closure of cavity of metal lamp post which is made of two rollers joined by three flats in such a way that the central one was the base for fixing the joint post and the other two rollers were the partial reinforcement of the edge of the hole cut out in the post cavity. These rollers were arranged in such a way that the first one was under the upper, and the second one under the lower edge of cavity hole. The rollers were provided with threaded through-holes serving for embedding the closure on the post.

[0003] The hole of cavity results in considerable, inconvenient weakening of the construction of the post. Because lamp posts are exposed to changeable loadings, caused by weather conditions, mainly by wind, and the known constructions of closures of cavity did not take over the existing stresses, it was necessary to work up such a construction which in a considerable degree would strengthen and stiffen the post near the cavity and at the same time would ensure good access to terminals and safeguards.

[0004] We also know from the application of the utility model W 113594 the closure of cavity of lamp post, which has got a cover inserted into the wall of the post fitting the hole of cavity and provided from both ends with ports as well as catches located axially from the inside. This cover rests on centrally flattened consoles that are welded axially in relation to the cavity hole in the inside of the post. Each console is provided with a lateral, slotted cut-out as well as with a threaded hole. Spacing of cuts-out of the consoles relates to spacing of the catches of the cover which are dimensionally fitting the cuts-out and in their closed state enter the equivalent cut-out. In the overlaying in pairs ports of the cover and in the threaded holes of the consoles, some press bolts are located. In order to ensure better adhesion, edges of the cover as well as edges of the cavity hole are chamfered.

[0005] The known closure of cavity considerably strengthens the construction of the post where the cavity hole takes place, and the cover inserted into the wall of the post and fixing it from both sides locks made of catches of the cover and cuts-out of the consoles make a stiff unit able to carry a considerable loading that occur during the operations in the lamp post in the proximity of cavity. But still, this closure gives insufficient access to earth

screw fixed permanently from the inside to the lateral wall of cavity of the post. Such solution leads to intense assembling inconveniences resulting from limited possibility of fixing an earth conductor in the cavity of the post after arranging and connecting the post joint.

[0006] Closure of cavity of the lamp post according to the invention in this invention has got a cover inserted into the wall of the post which the hole cavity and is also provided from both ends with ports and the embedded axially from the inside catches. The cover rests on axially welded in relation to cavity hole in the inside of the post, centrally flattened consoles of which every one is provided with fissured cut-out having the shape of letter "T" and a threaded hole. Spacing of cut-outs of the consoles corresponds to spacing of the catches of the cover which are dimensionally fitting the cuts-out and in their closed state are entering the equivalent cut-out. On the overlaying in pairs ports of the cover and threaded holes of the consoles, some press bolts are located. On the other hand, to one of the welded consoles an earth screw is fastened which is inserted after the welding is finished and which has got the ability of regulation in a certain, limited range.

[0007] The cut-out in the consoles, having the shape of letter "T" consisting of a segment perpendicular to the post axle as well as of a segment parallel to the post axle, performs a double role. The segment perpendicular to the post axle serves for fixing the cover to the post wall by means of screws, while the segment parallel to post axle enables and makes easier to insert an earth screw which in turn results in a simple, handy and quick installation.

[0008] Closure of cavity of lamp post according to the invention is presented in the enclosed drawing. Fig. 1 shows closure in the intersection in its spreaded state, fig. 2 shows closure from the front view in its folded state, fig. 3 shows the cavity from the view when the cover is removed, fig. 4 presents closure in its cross-section.

[0009] Closure of cavity of lamp post according to the invention has got the cover 2 inserted into the wall 1 which fits the cavity hole. The cover 2, from both ends, is provided with the ports 3 and axially located from the inside catches 4. The cover rests on centrally flattened consoles 5 that are welded axially in relation to the cavity hole in the inside of the post. These consoles make the sectors of the cylinder of which every one is provided with the cut-out 6 in the form of letter "T" and the tapped hole 7.

[0010] To one of the welded consoles 5 the earth screw 8 is fastened which is inserted after the welding is finished and which has got the ability to be regulated in a certain, limited range. Spacing of the cuts-out 6 of the consoles 5 relates to spacing of the catches 4 of the cover 2 which dimensionally fit the cuts-out 6 and which in their closed state enter the corresponding cuts-out 6 of the consoles 5, creating stiff joints.

[0011] In the overlaying in pairs ports 3 of the cover 2 and the tapped holes 7 of the consoles 5, there are lo-

cated some press bolts 9.

[0012] In order to ensure better adhesion, the edges of cover 2 and the edges of cavity hole are chamfered. On the opposite side of the cavity hole, the assembly rail 10 is fixed to the post wall 1 to which a cable joint of lamp post is fastened. 5

[0013] Closure of cavity of the lamp post according to the invention is applied in the constructions of lamp posts, especially the metal ones meant for outer lightings which are endangered to changing loads caused by weather conditions. 10

Claims

- 15
1. Closure of cavity of lamp post having the cover inserted into the wall of the post which fits the cavity hole and is provided from both ends with ports as well as catches located axially from the inside, which rests on centrally flattened consoles welded axially in relation to the cavity hole, of which every one is provided with a slotted cut-out as well as with a threaded hole, while spacing of cuts-out of the consoles relates to spacing of the catches of the cover, which are dimensionally fitting the cuts-out and in their closed state enter the corresponding cut-out, whereas in the overlaying in pairs ports of the cover and in the threaded holes of the consoles, some press bolts are located, **characterized in, that** the slotted cut-out (6) in the consoles has got the shape of letter "T", while to one of the welded consoles (5) an earth screw is fastened, inserted after the welding is finished and having the possibility of regulation in a certain, limited range. 20 25 30 35
 2. Closure according to claim 1, **characterized in that** the edges of the cover (2) and the edges of the cavity hole are chamfered. 40

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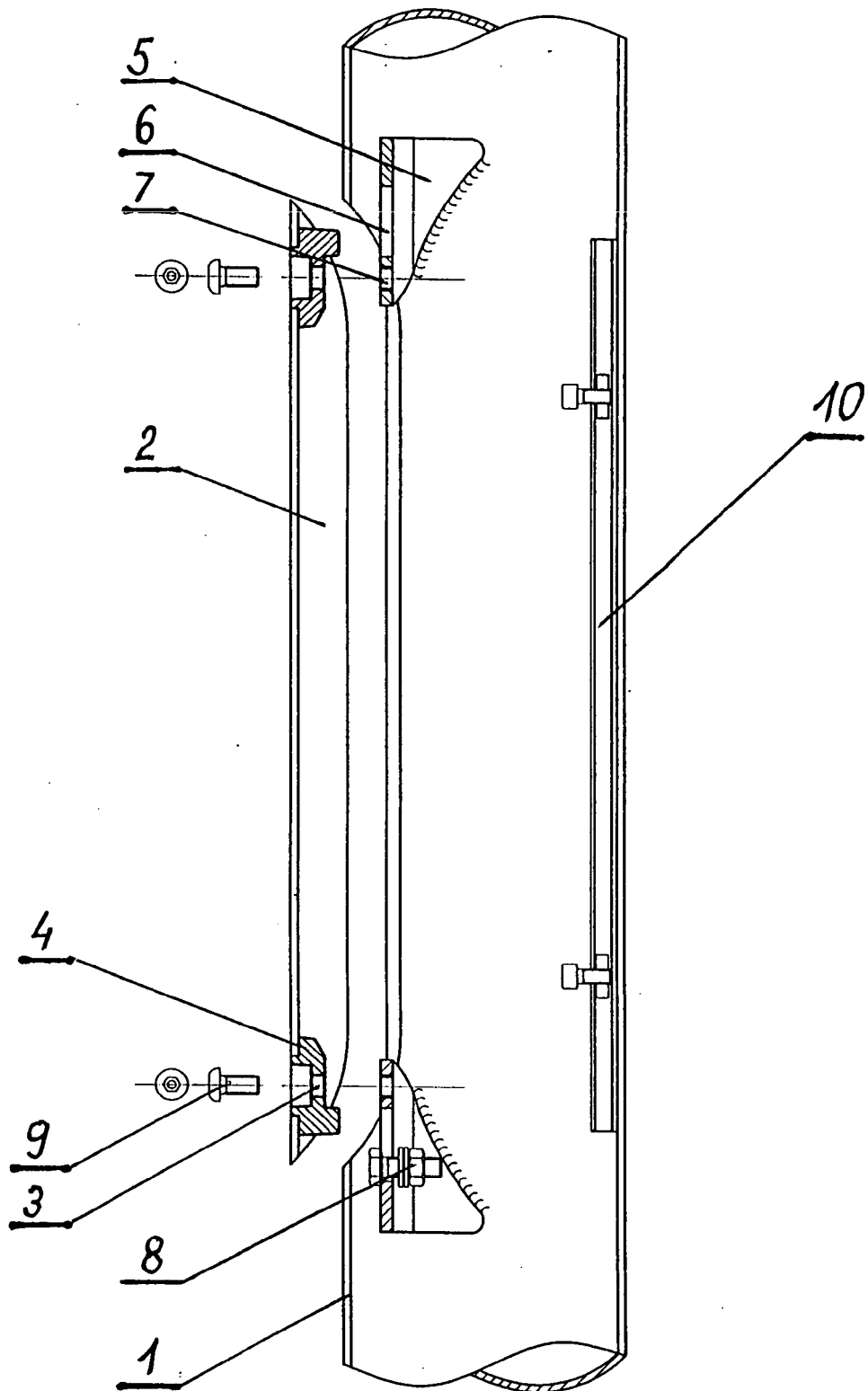


Fig. 1

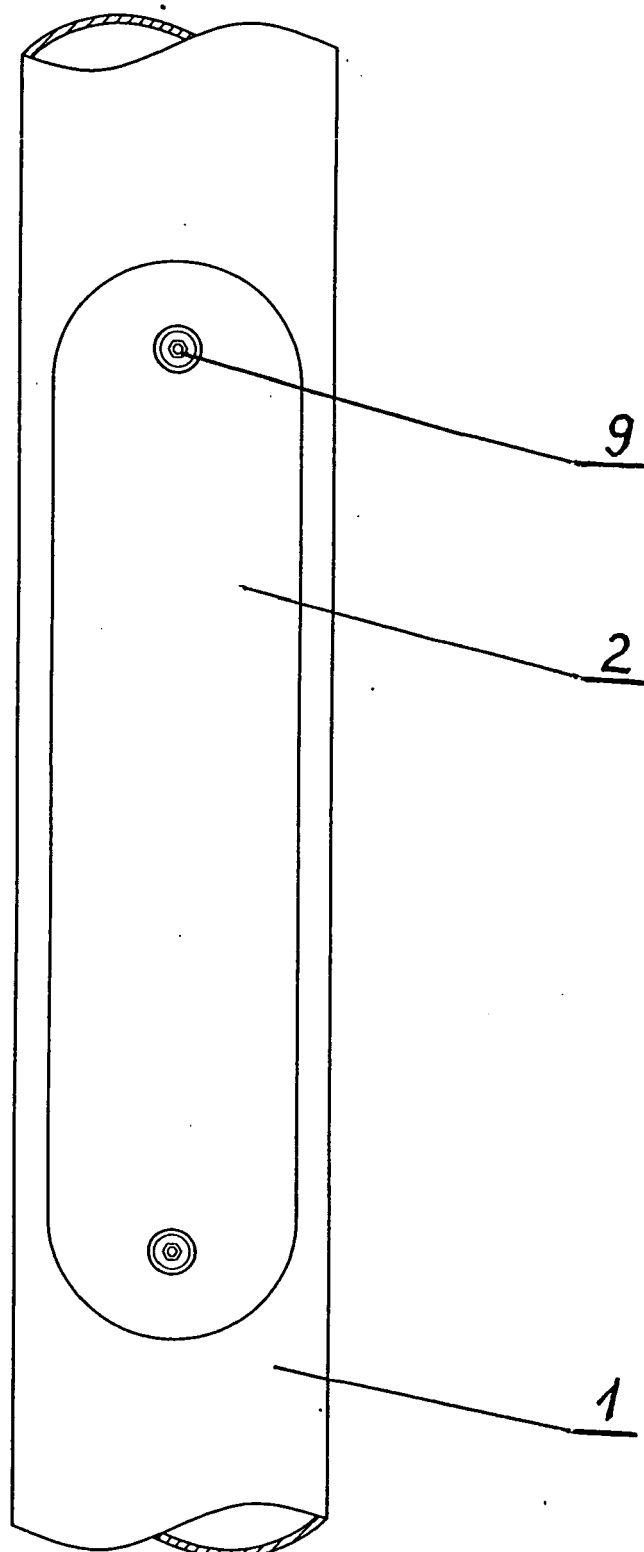


Fig. 2

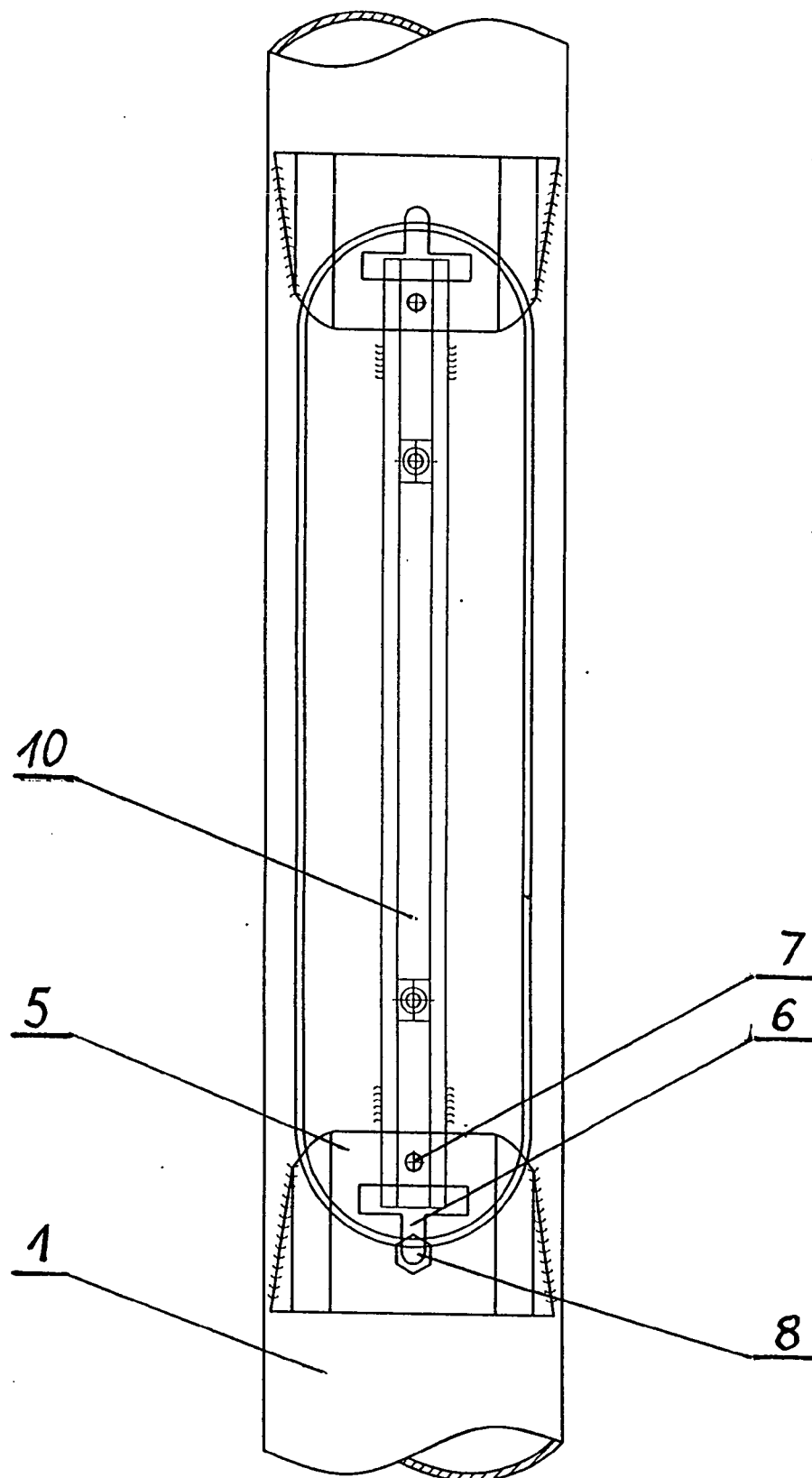


Fig. 3

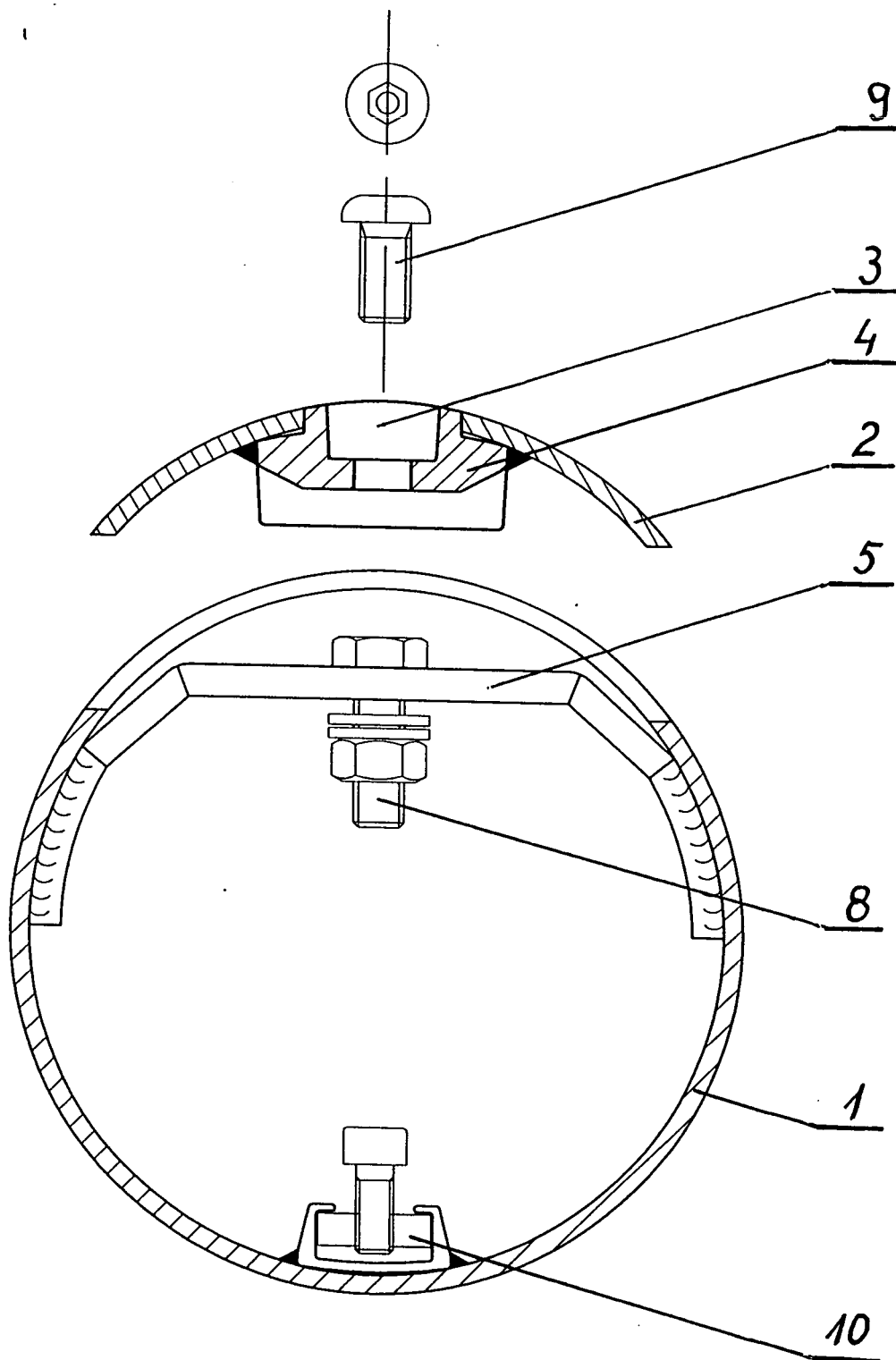


Fig. 4