



(51) International Patent Classification:

A61G 19/00 (2006.01) A45F 3/12 (2006.01)

(21) International Application Number:

PCT/IT2020/000027

(22) International Filing Date:

28 February 2020 (28.02.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

102019000002921 01 March 2019 (01.03.2019) IT

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: DEVICE FOR TRANSPORTING A COFFIN

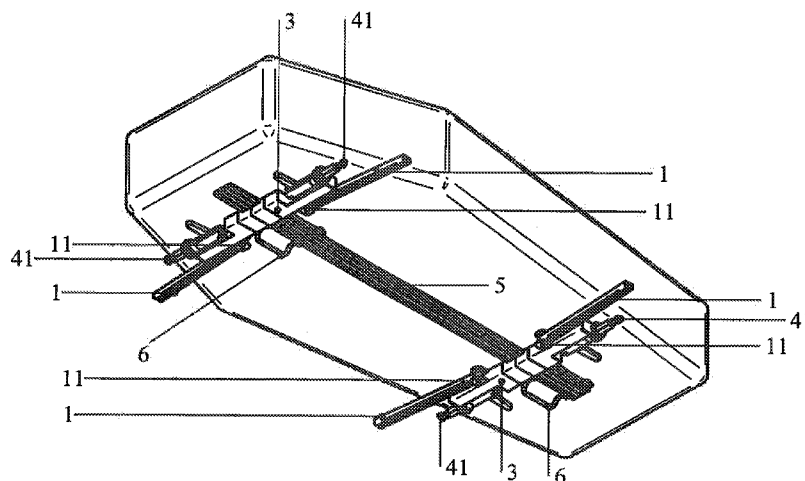


FIG. 1

(57) Abstract: A device for transporting a coffin is described, composed of a supporting frame approximately covered by the coffin, comprising a plurality of sliding shelves (1, 2) used to increase the extension of the supporting frame with respect to the area covered by the coffin.



DEVICE FOR TRANSPORTING A COFFIN

5

The present invention refers to a device for transporting a coffin.

In general, the present invention refers to hoods, funeral envelopes, funeral urns.

10 In particular, the present invention refers to a lifting or lowering devices for coffins, a removable handle for coffer, handling systems through handles or other mechanical means.

The prior art is given by patent US-B2-
15 8,918,969, dealing with a support to enable the transport of a funeral container having a bottom surface, a plurality of side surfaces and an upper surface. The support includes a basic element having a generally rather long length to cover the
20 width of the funeral container and an upper surface sized and configured for receiving the lower surface of the funeral container. A vertical member has a lower end coupled with the basic element and an upper end. The projecting element extends in a
25 generally perpendicular plane to the basic element.

A member is provided for the handle which is coupled with the straight member. The handle includes a receiving surface for a hand which can be grasped by a user's hand.

5 Moreover, the prior art is given by patent US-A-4,017,947, dealing with a coffin, with a groove extending around it, next to its bottom and being completely lacking handles. A transporting device is provided, to be engaged in the groove when applied
10 thereto, the transport device being easily dismountable for its re-use.

 Moreover, the prior art is given by patent US-B1-9,889,057, dealing with a retractable handle system for a coffin. A coffin with disappearing
15 handles includes a box with a hood-type cover openly coupled thereto. A base coupled with the box comprises a panel whose length and width are similar to length and width of the box. Spacers are coupled with the panel to form channels. Arms are
20 sliding positioned in the channels. At least four bars are coupled with the arms. The bars can have ends angled by 45°, which allow the bars to adhere one to the other when they are in a closed position, making them not appear any more as
25 handles on the coffer box. By sliding the arms, the

bars move from the closed position to the open position.

The invention of patent US-B2-8,918,969 solves the problem of regulating the position of the handles depending on the need of the operators responsible for transporting the coffin. However, the used device modifies the overall sizes and the aesthetics of the coffin.

The invention of patent US-A-4,017,947 solves the problem of transporting a coffin equipped with a lower groove which allows an easy hold for a removable device. For this reason, the invention of patent US-A-4,017,947 could be the most relevant prior art to solve the technical problem of having to transport a coffin improving safety and stability conditions.

The invention of patent US-B1-9,889,057 solves the problem of making the supporting means disappear when not used.

Object of the present invention is providing a device which facilitates the transport of a coffin improving its stability and safety for an operator.

A further object is providing a device for transporting a coffin of a retractable type, in order not to change the atmosphere of concentration

during a funeral.

A further object is providing a device for transporting a coffin whose configuration can be quickly modified, depending on the number of
5 operators responsible for its transport.

A further object is providing a device for transporting a coffin which can be used through widely used components and industrial diffusion to reduce its production costs.

10 A further object is providing a device for transporting a coffin which can be easily assembled and transported.

The above and other objects and advantages of the invention, as will result from the following
15 description, are obtained with a device for transporting a coffin as claimed in claim 1. Preferred embodiments and non-trivial variations of the present invention are the subject matter of the dependent claims.

20 It is intended that all enclosed claims are an integral part of the present description.

It will be immediately obvious that numerous variations and modifications (for example related to shape, sizes, arrangements and parts with
25 equivalent functionality) can be made to what is

described, without departing from the scope of the invention, as disclosed in the enclosed claims.

The present invention will be better described by some preferred embodiments thereof, provided as
5 a non-limiting example, with reference to the enclosed drawings, in which:

- Figure 1 shows an axonometric view of a device associated with a coffin of an embodiment of the device for transporting a coffin according to the
10 present invention;
- Figure 2 shows a further axonometric view associated with the previous Figure;
- Figure 3 shows a plan view of an embodiment of the device for transporting a coffin according to
15 the present invention;
- Figure 4 shows a side view associated with the previous Figure;
- Figure 5 shows a front view associated with the previous Figure;
- 20 - Figure 6 shows an enlarged part VI of the previous Figure;
- Figure 7 shows an axonometric view of a meaningful part of an embodiment of the device for transporting a coffin according to the present
25 invention;

- Figure 8 shows a front view of a meaningful part of an embodiment of the device for transporting a coffin according to the present invention;
- 5 - Figure 9 shows a front view of a further meaningful part of an embodiment of the device for transporting a coffin according to the present invention; and
- Figure 10 shows an axonometric view of a
10 meaningful part used as variation of an embodiment of the device for transporting a coffin according to the present invention.

With reference to Figures 1 and 2, it is possible to note that a device for transporting a
15 coffin is composed of a supporting frame approximately covered by the coffin.

Advantageously, the device according to the present invention comprises a plurality of sliding shelves 1, 2, each of such sliding shelves 1, 2
20 being designed to increase the extension of the supporting frame with respect to the area covered by the coffin.

With reference to Figures 1, 3 and 7, it is possible to note that each of the sliding shelves 1
25 is connected to the supporting frame through a

hinge 11 to be able to rotate inside and outside.

In the same way, each of the sliding shelves 2 is connected to the supporting frame through a linear guide to be able to slide inside and outside
5 (as shown, for example, in Figure 10).

Each of the sliding shelves 1, 2, comprises a concavity to enable the interaction with the shoulder of an operator (not shown).

Each of the sliding shelves 1, 2 comprises at
10 least one portion of a layer of deformable material, not shown, to improve the distribution of the load on an operator.

With reference to Figures 1 and from 3 to 6, it is possible to note that the supporting frame
15 comprises a plurality of transverse rods 3 approximately along the width direction of the coffin, to support each of the sliding shelves 1, 2.

Each of the transverse rods 3 is equipped with
20 a clamp 4 in order to fasten and lock the coffin.

The clamp 4 comprises a sliding rod 41 with a lever 42 for a quick locking. The end of such sliding rod 41 is shaped as an hook or anyway of another type of catching element, which can adhere
25 with safety to the surface of the coffin

The supporting frame comprises at least one longitudinal rod 5 connected to the plurality of transverse rods 3 through mechanical interface means with permanent locking systems or quick locking/unlocking systems (as shown, for example, in Figure 6).

Such at least one longitudinal rod 5 is equipped with handles 6 of a removable type or permanently fastened, and with a locking system comprising the clamp 4 to fasten and lock the coffin longitudinally.

The device can be completely detachable from the coffin once having ended its use.

The device for transporting a coffin comprises transverse rods equipped with clamps to fasten and lock the coffin. Each of such clamps comprises a sliding rod with a lever for their quick locking. The end of such sliding rod can be shaped as a hook or anyway of another type of catching element, which can adhere with safety to the surface of the coffin.

A variation provides that the sliding rod 41 is connected to the transverse rod 3 through a recall spring (not shown).

The longitudinal rod is connected to the

plurality of transverse rods through mechanical interface means with permanent locking systems or quick locking/unlocking systems, such as screws with a projecting shaped head, shown in Figure 6.

5 Both the transverse rods and the handles are applied to the longitudinal rod, making them slide till a suitable and more comfortable position for an operator. It is possible to increase the number of the operator stations by simply adding or
10 removing a transverse rod and a pair of handles sliding along the longitudinal axis.

Alternatively, the ends of the longitudinal rod can house a locking system equipped with a holding hook to block head and feet of the coffin.
15 In this way, the device is fastened to the coffin not only transversally, but also longitudinally, allowing oscillations in pitch and roll safety when handling the coffin, for example along a staircase of a building or of a religious place.

20 The device of the invention is made with mechanical elements and parts of a commercial type.

For example, it is possible to use the following bill of industrial materials:

- Handles with plate/Offset, UHFNEAG125-S;
- 25 - Recess width 6mm/plane aluminum profiles,

HFSQN4-1070-1500;

- Recess width 10mm/plane aluminum profiles/1
recess, HFSPURE8-1830-400;
- Aluminum profiles / Rectangular tubes, HFHQ4080-
5 2-450;
- Push-Pull, MC07-15.

CLAIMS

1. Device for transporting a coffin, composed of a supporting frame approximately covered by the coffin, comprising a plurality of sliding shelves
5 (1, 2), each of said sliding shelves (1, 2) being designed to increase an extension of the supporting frame with respect to an area covered by the coffin, characterized in that each of said sliding shelves (1, 2) comprises a concavity to enable an
10 interaction with a shoulder of an operator.

2. Device according to the previous claim, characterized in that each of said sliding shelves (1) is connected to the supporting frame through a hinge (11) to be able to rotate inside and outside.

15 3. Device according to claim 1, characterized in that each of said sliding shelves (2) is connected to the supporting frame through a linear guide to be able to slide inside and outside.

4. Device according to any one of the previous
20 claims, characterized in that each of said sliding shelves (1, 2) comprises at least one portion of a layer of deformable material to improve the distribution of the load on an operator.

5. Device according to claim 1, characterized in
25 that the supporting frame comprises a plurality of

transverse rods (3) approximately along a width direction of the coffin, to support each of said sliding shelves (1, 2), each of said transverse rods (3) being equipped with a clamp (4) in order
5 to fasten and lock the coffin.

6. Device according to the previous claim, characterized in that said clamp (4) comprises a sliding rod (41) with a lever (42) for its quick locking, ends of said sliding rod (41) being shaped
10 as a hook or anyway being of another type of catching element which can adhere with safety to a surface of the coffin.

7. Device according to claim 5, characterized in that the supporting frame comprises at least one
15 longitudinal rod (5) connected to a plurality of transverse rods (3) through mechanical interface means with permanent locking systems or quick locking/unlocking systems.

8. Device according to the previous claim,
20 characterized in that said at least one longitudinal rod (5) is equipped with handles (6) of a removable type or permanently fastened and of a locking system comprising said clamp (4) to fasten and lock the coffin longitudinally.

25 9. Device according to any one of the previous

claims, characterized in that it is completely detachable from the coffin once having used it.

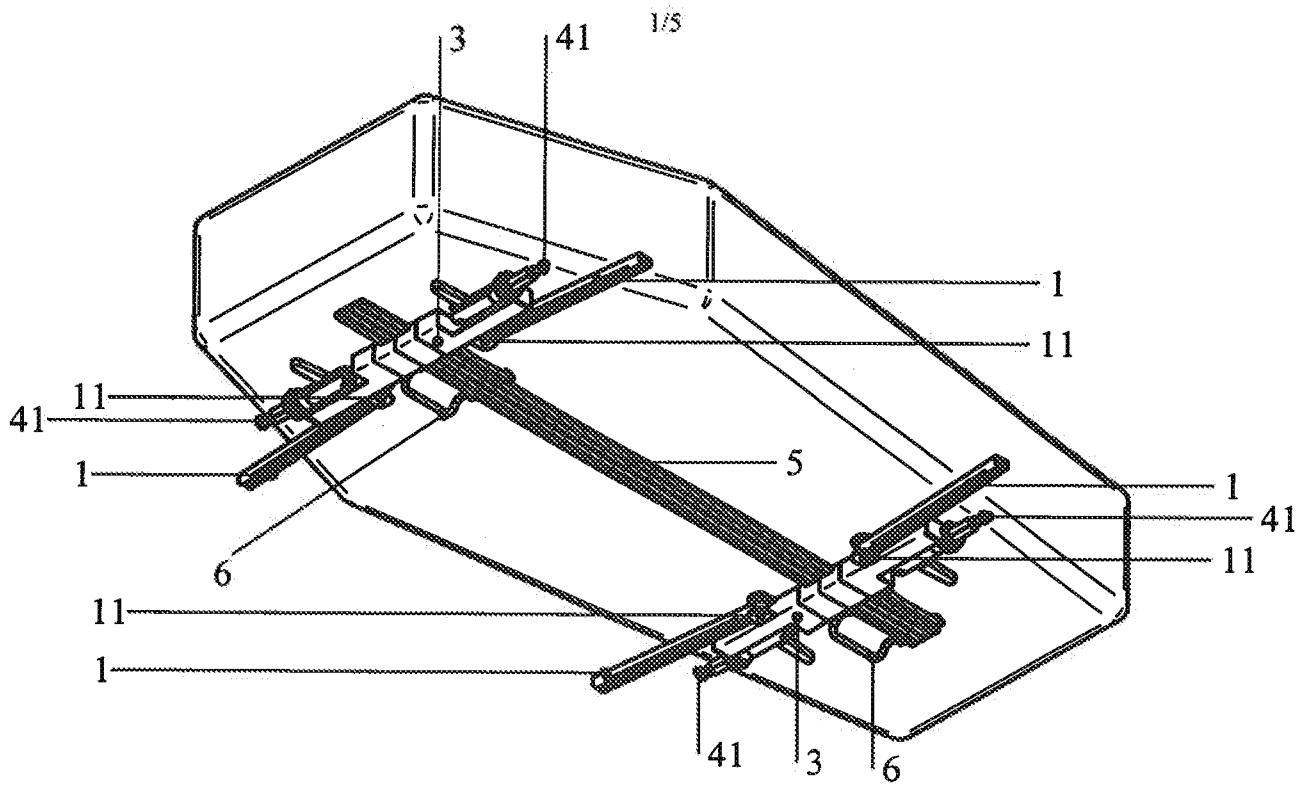


FIG. 1

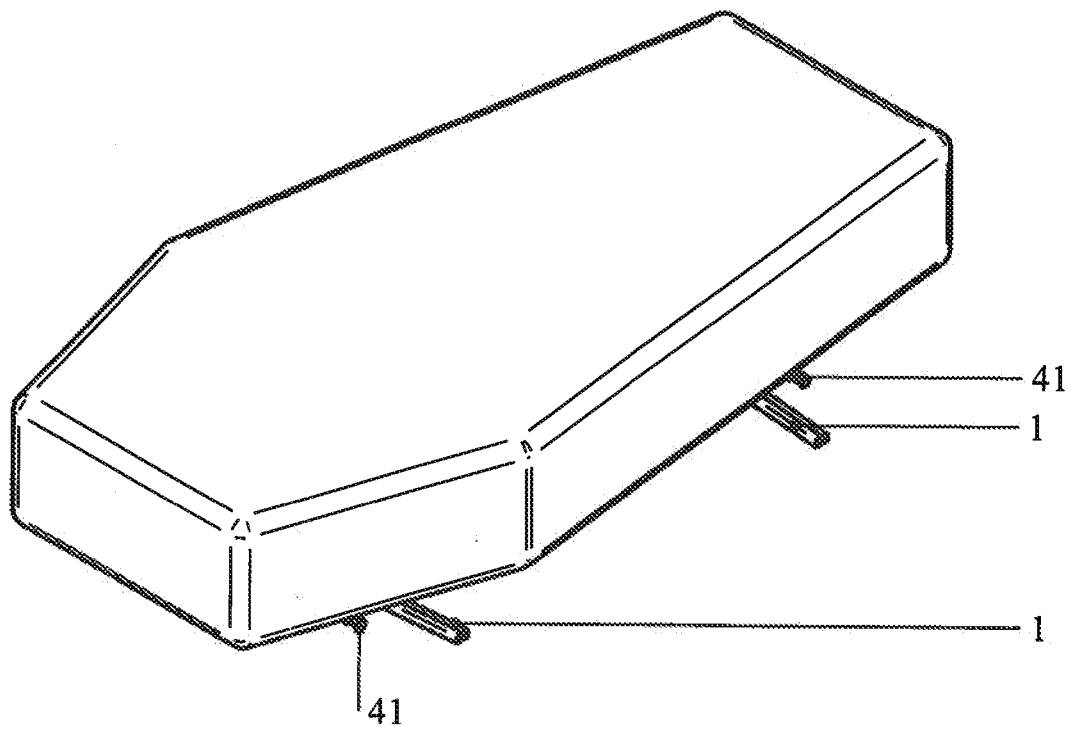


FIG. 2

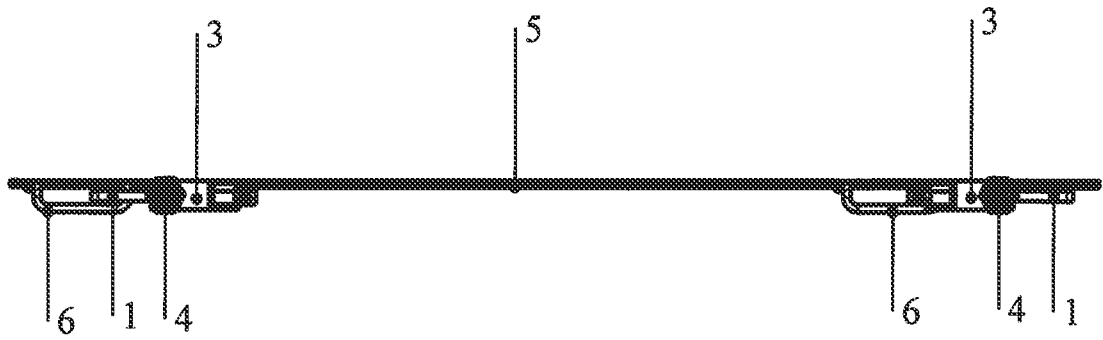


FIG. 4

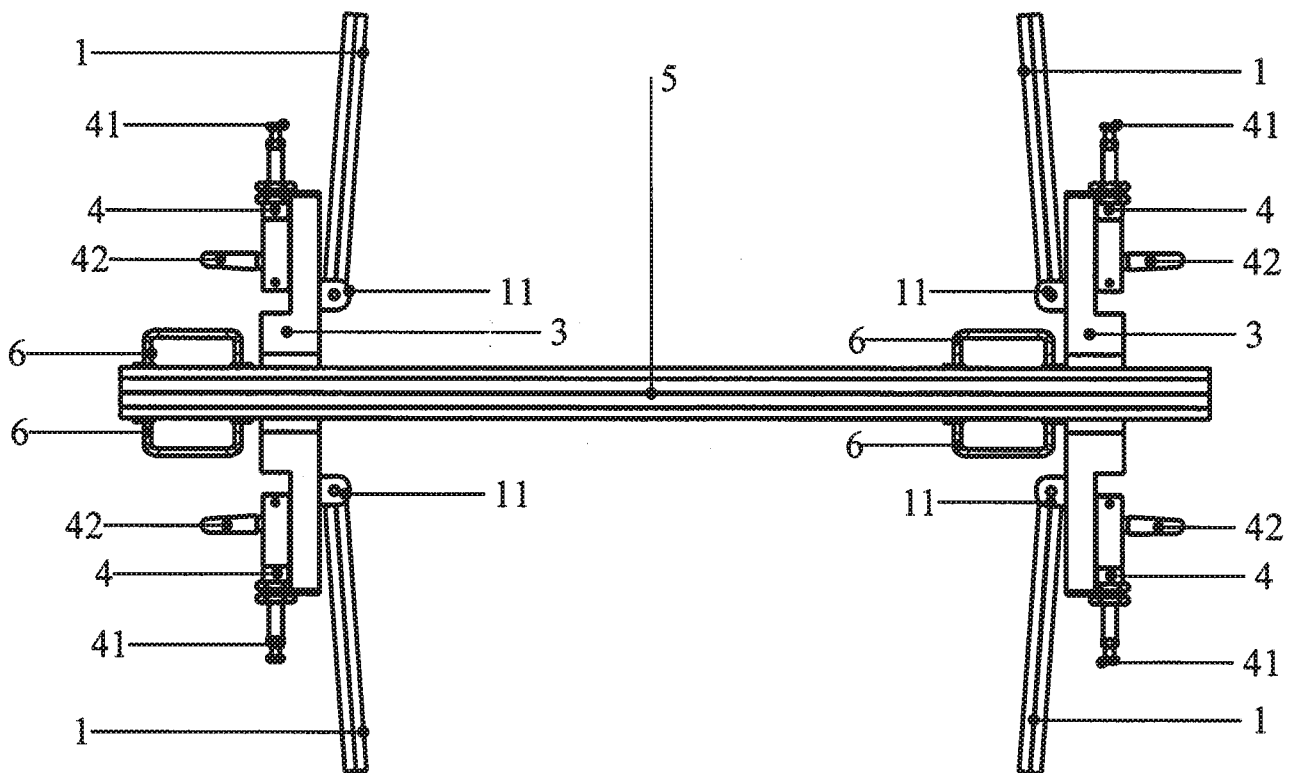


FIG. 3

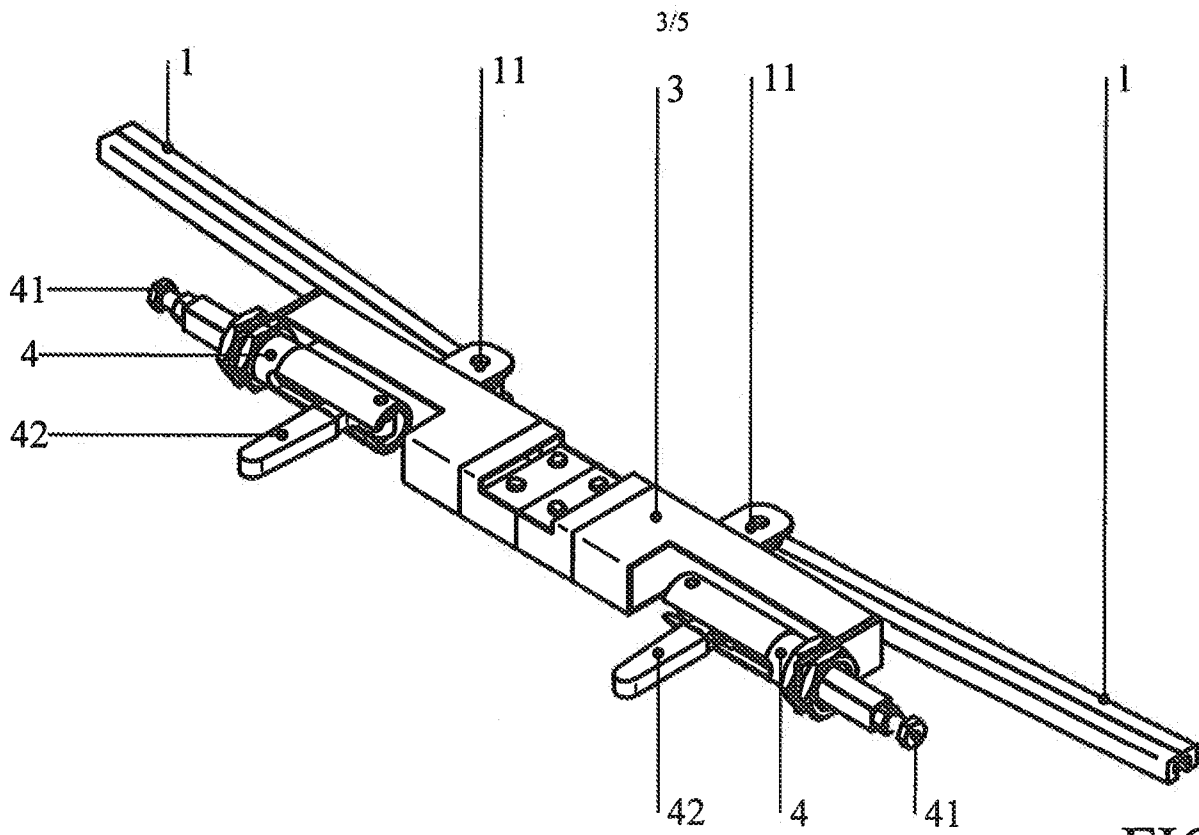


FIG. 7

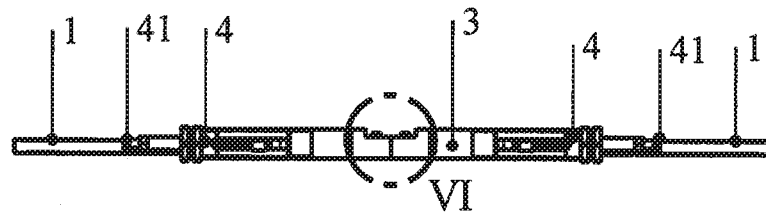


FIG. 5

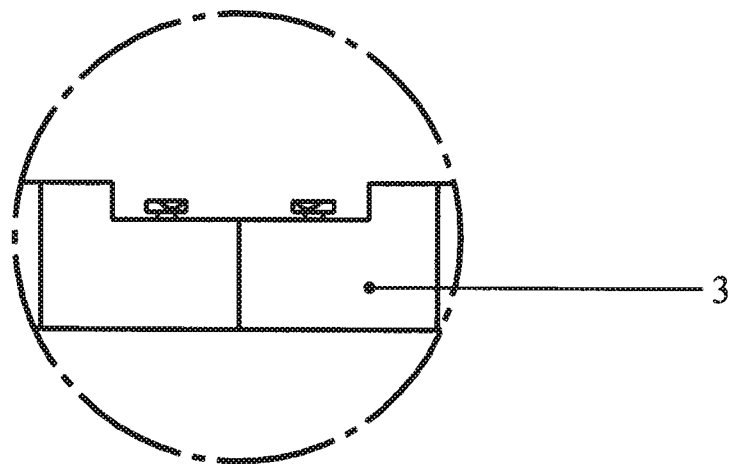


FIG. 6

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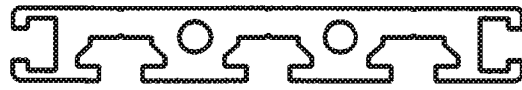


FIG. 8

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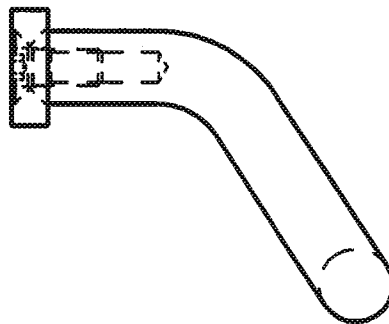


FIG. 9

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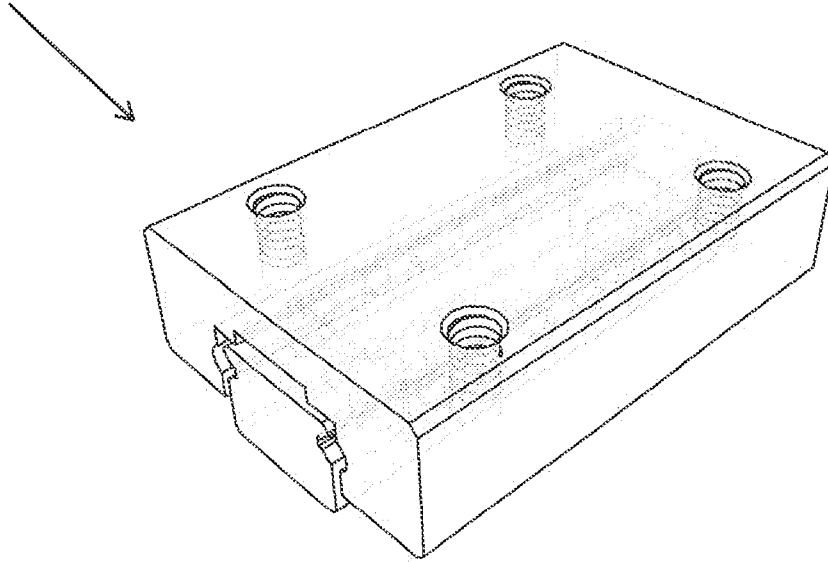


FIG. 10