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(54) **Chimney cowl**

(57) A chimney cap comprising an axis, on which a hood is mounted; the hood consists of a body, stabilizer, and a tube-shaped element, wherein, the axis is a double bent rod the bottom section of which is rigidly fixed to the inner edge of the tube-shaped element of the hood seated in the base, and its top section is coincident with the axis of the tube-shaped element of the hood. A chimney cap has a bend in the form of a conical protrusion and has the tube-shaped element of the hood, which is equipped with at least two butterfly latches. The base of the chimney has at least two L-shaped notches to mount the tube-shaped element of the hood using the butterfly latches. The body and the stabilizer are mounted on a double bent rod so that the rotation movement around the axis is possible. The stabilizer is replaceable and has different shapes. The hood has a tail fixed to the body and the size of the clearance between the body and the tail can be adjusted using a butterfly turn button. The hood is hanged on a conically tipped top section of the double bent rod through a bearing-type embedding set, which consists of a washer, two slide bearings and a protective element. Furthermore the hood is equipped with a slide lock to enable the replacement of the stabilizer. The slide lock has a snapping element that is shaped as a spot-wise extrusion.

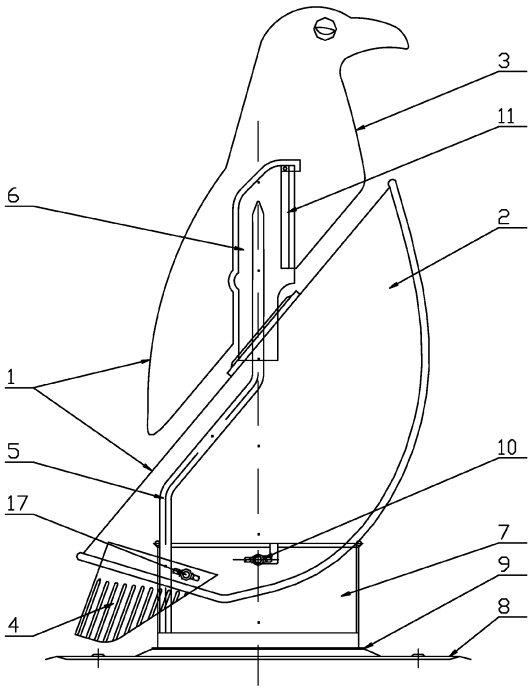

Fig.1

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Description

[0001] The present Invention relates to a chimney cap designed to facilitate the chimney flue cleaning.

[0002] A chimney cap is known from the description of a Utility Model No. 64930**;** according to this Model, the chimney cap is a device utilizing the wind force to support the chimney draught. The chimney cap consists of a base with an axis fixed to it. On the axis, a hood is embedded, i.e. placed in a bearing. The hood is equipped with a stabilizer. The stabilizer causes the hood to take a position depending on the wind direction. The hood always takes such a position that the outlet is on the leeward side (downwind).

[0003] In the known solution of chimney cap, the stabilizer is detachably mounted. Thus, while using the chimney cap, it is possible to detach and replace the stabilizer without damaging any elements of the cap with which the stabilizer is directly connected because this cap has a stabilizer that is slid into a guide fixed to the hood. The stabilizer is blocked against sliding out for its deflected fins are put through the openings in the hood.

[0004] Another chimney cap with hybrid propulsion is known from the Polish Patent No. 202420**;** the chimney cap according to this Patent consists of a base connected with a tube-shaped bracket, and, within its axis, a rotator body is mounted with an embedded (fixed in a bearing) vertical axis. On the top part of the vertical axis, there is a turbine equipped with a flexible coupling connected with an electric motor shaft; the electric motor has a control system.

[0005] In the known solutions, the hood is mounted on a straight axis that runs perpendicularly to the base; the hood is centrally fixed, usually on a three-arm bracket, in the middle of the chimney flue. Those solutions make it difficult, or even impossible to clean the chimney flue with the chimney cap therein, consequently, the chimney cap has to be removed from the flue prior to cleaning.

[0006] The solution according to the Invention under this Patent eliminates this obstruction.

[0007] The essence of the present Invention is a chimney cap. Its characteristic feature is that a double bent rod constitutes the axis; the bottom section of the double bent rod is rigidly fixed to the inner edge of a tube-shaped element of a hood mounted in the base, and the rod's top section is coincident with the axis of the tube-shaped element of this hood. **Preferably,** the base has a bend in the form of a conical protrusion. **Preferably,** the tube-shaped element of the hood is equipped with at least two butterfly latches. **Preferably,** the base has at least two L-shaped notches to mount the tube-shaped element of the hood using the butterfly latches. **Preferably,** the body and the stabilizer are seated on the double bent rod; thus, they can rotate around the axis. **Preferably,** the stabilizer is replaceable and has various shapes. **Preferably,** the hood has a tail fixed to the body and the size of the clearance between the body and the hood's tail can be adjusted. **Preferably,** through the bearing-type embedding set, the hood is hanged on a double bent rod's top section that has a conically formed tip. **Preferably,** the bearing-type embedding set consists of a washer, two slide bearings, and a protective element. **Preferably,** the hood is equipped with a slide lock to enable the stabilizer to be replaced. **Preferably,** the slide lock has a spot-wise extruded snapping element.

[0008] Contrary to other known chimney caps, the advantage of the chimney cap according to this Invention is that it enables the chimney flue to be cleaned without dismantling and removing the chimney cap.

[0009] The object under this Invention is exemplified in the attached Drawings. They show several embodiments of the Invention. In Fig. 1, there is a diagrammatic side-view of the chimney cap. It shows the axis and the mounting place of the replaceable stabilizer that is part of the hood; Fig. 2 is a B-B sectional view of the chimney cap and includes a D detail, which shows the mounting of the bottom section of the double bent rod. Fig. 3 shows an A detail, which represents the bearing-type embedding of the double bent rod's top section. Fig. 4 exemplifies another embodiment of the chimney cap according to the present Invention; it shows a diagrammatic side-view of the chimney cap with a different replaceable stabilizer. Fig. 5 is an E-E sectional view of the slide lock and shows an E detail representing a sectional view of the slide lock with a spot-wise extruded snapping element used to fasten the replaceable stabilizer. Fig. 6 represents another embodiment of the chimney cap according to the present Invention; it is a diagrammatic side-view of the chimney cap that has another different replaceable stabilizer. Fig. 7 illustrates a sectional view with an F detail; it shows an integral (inseparable) connection of the bend situated in the base.

[0010] The object according to this Invention consists of two detachable parts: a hood **1** and a base **8.** The base **8** consists of a plane, which is permanently connected with its tube-formed element through a bend **9.** The bend **9** is shaped as a conical protrusion and placed on the plane of the base **8,** around the perpendicular, tube-shaped element of the base. The hood **1** consists of a body **2,** a replaceable stabilizer **3,** and a tube-shaped element **7.** The tube-shaped element **7** of the hood **1** is equipped with at least two butterfly latches **10.** The base has at least two L-shaped notches to mount the tube-shaped element **7** of the hood **1** using the butterfly latches **10.** The body **2** and the stabilizer **3** are seated so that they can rotate around the axis that is a double bent rod **5**; the bottom section of the double bent rod **5** is permanently mounted to the inner edge of the tube-shaped element **7** of the hood **1** seated in the tube-shaped element of the base **8**. The stabilizer **3** is replaceable and has different shapes. The hood **1** has a tail **4** fixed to the body **2** so that the size of the clearance between the body **2** and the tail **4** can be adjusted with the use of a butterfly turn button **17**. Through the bearing-type embedding set **6**, the hood **1** is hanged on a top section **14** of the double bent rod **5** and this top section **14** has a conically formed

tip. The bearing-type embedding set **6** consists of a washer **15**, two slide bearings **12,** and a protective element **13.** The hood 1 is equipped with a slide lock **11** to enable the stabilizer **3** to be replaced. The slide lock **11** has a snapping element **16** shaped as a spot-wise extrusion. The double bent rod **5** is bent so that its top section is coincident with the axis of the tube-shaped element **7** of the hood **1.**

Claims

1. A chimney cap comprising an axis, on which a hood is mounted; the hood consists of a body, stabilizer, and a tube-shaped element, **wherein,** the axis is a double bent rod **(5)** the bottom section of which is rigidly fixed to the inner edge of the tube-shaped element (**7**) of the hood (**1**) seated in the base (**8**), and its top section is coincident with the axis of the tube-shaped element (**7**) of the hood (**1**).

2. The chimney cap according to Claim 1, **wherein,** the base (**8**) has a bend (**9**) in the form of a conical protrusion.

3. The chimney cap according to Claim 1 and/or Claim 2, **wherein,** the tube-shaped element (**7**) of the hood (**1**) is equipped with at least two butterfly latches (**10**).

4. The chimney cap according to Claim 1, and/or Claim 2, and/or Claim 3, **wherein,** the base (**8**) has at least two L-shaped notches to mount the tube-shaped element (**7**) of the hood (**1**) using the butterfly latches (**10**).

5. The chimney cap according to Claim 1, and/or Claim 2, and/or 3, and /or 4, **wherein,** the body (**2**) and the stabilizer (**3**) are mounted on a double bent rod (**5**) so that the rotation movement around the axis is possible.

6. The chimney cap according to Claim 1, and/or Claim 2, and/or 3, and /or 4, and/or 5, **wherein,** the stabilizer (**3**) is replaceable and has different shapes.

7. The chimney cap according to Claim 1, and/or Claim 2, and/or 3, and /or 4, and/or 5, and/or 6, **wherein,** the hood (**1**) has a tail (**4**) fixed to the body (**2**) and the size of the clearance between the body (**2**) and the tail (**4**) can be adjusted using a butterfly turn button (**17**).

8. The chimney cap according to Claim 1, and/or Claim 2, and/or 3, and /or 4, and/or 5, and/or 6, and/or 7, **wherein,** the hood (**1**) is hanged on a conically tipped top section (**14**) of the double bent rod (**5**) through a bearing-type embedding set (**6**).

9. The chimney cap according to Claim 1, and/or Claim 2, and/or 3, and /or 4, and/or 5, and/or 6, and/or 7, and/or 8, **wherein,** the bearing-type embedding set (**6**) consists of a washer (**15**). two slide bearings (**12**). and a protective element (**13**).

10. The chimney cap according to Claim 1, and/or Claim 2, and/or 3, and /or 4, and/or 5, and/or 6, and/or 7, and/or 8, and/or 9, **wherein,** the hood (**1**) is equipped with a slide lock (**11**) to enable the replacement of the stabilizer (**3**).

11. The chimney cap according to Claim 1, and/or Claim 2, and/or 3, and /or 4, and/or 5, and/or 6, and/or 7, and/or 8, and/or 9, and/or 10, **wherein,** the slide lock (**11**) has a snapping element (**16**) that is shaped as a spot-wise extrusion.

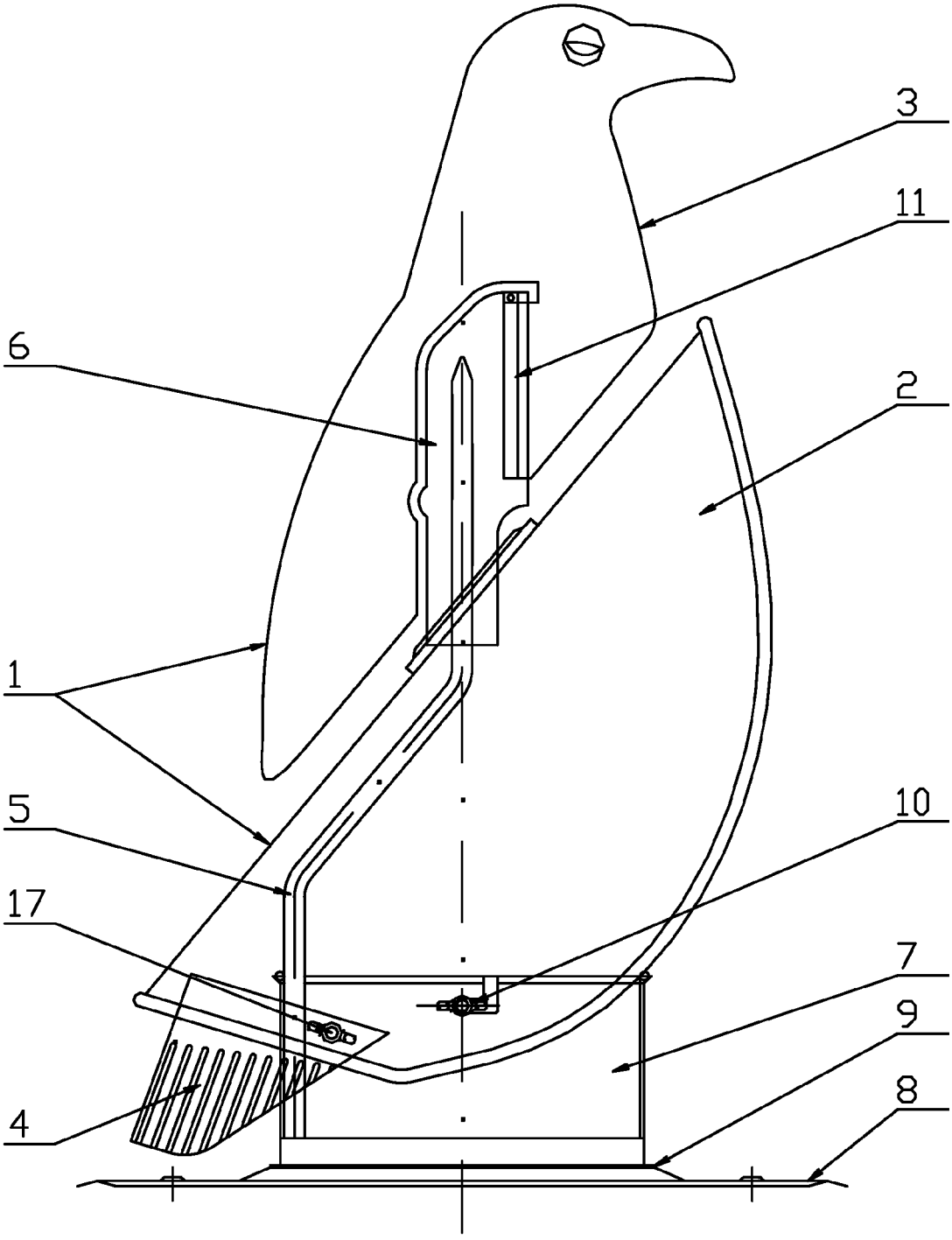

Fig.1

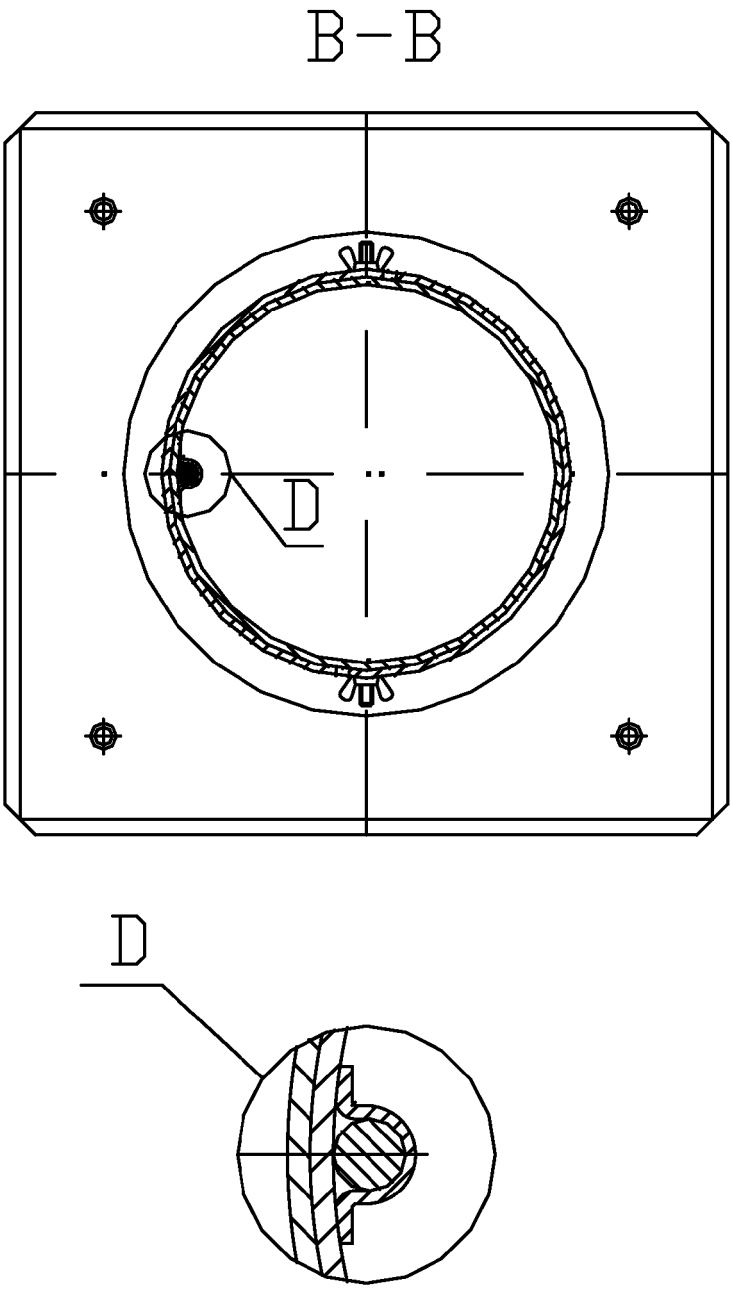

Fig.2

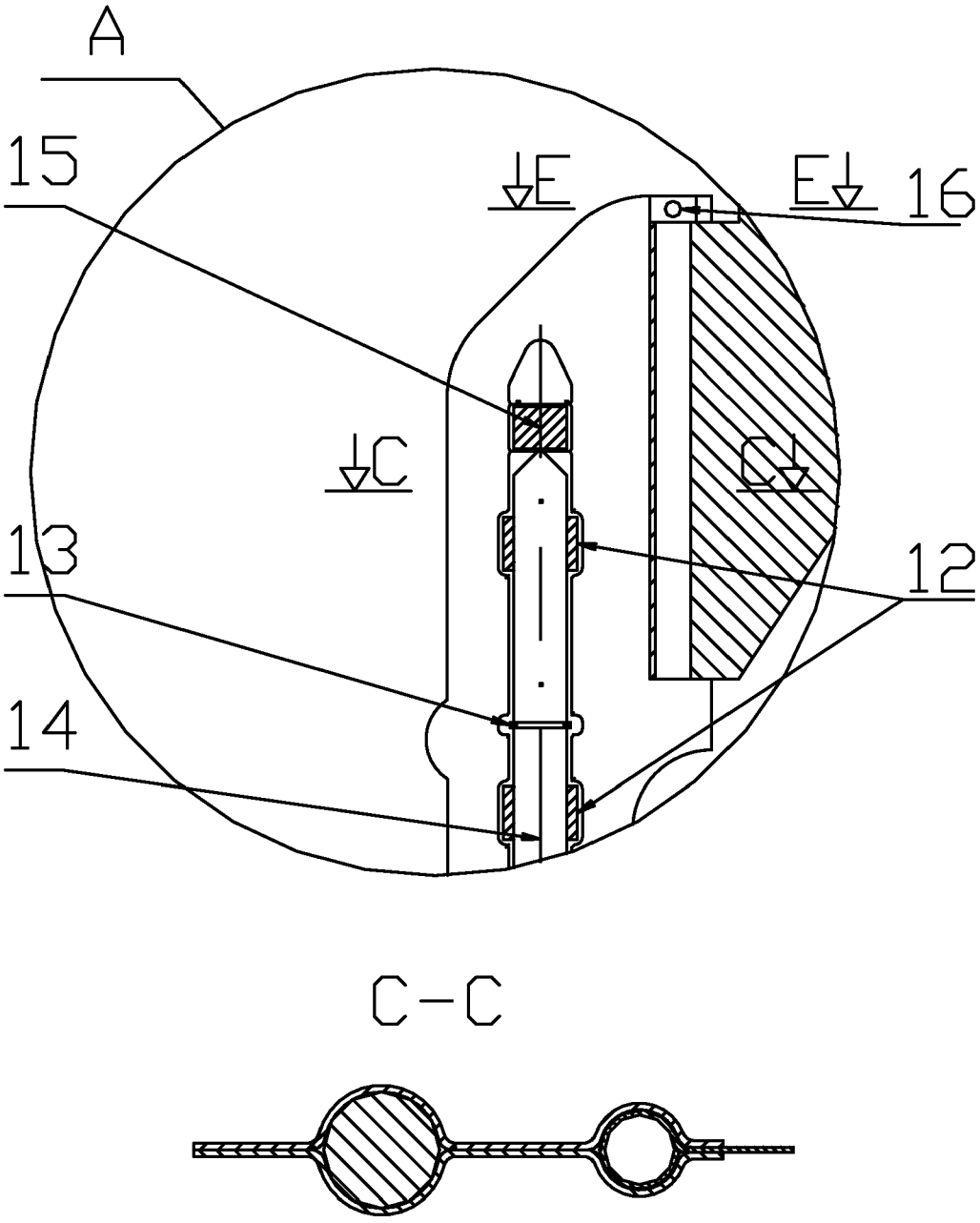

Fig.3

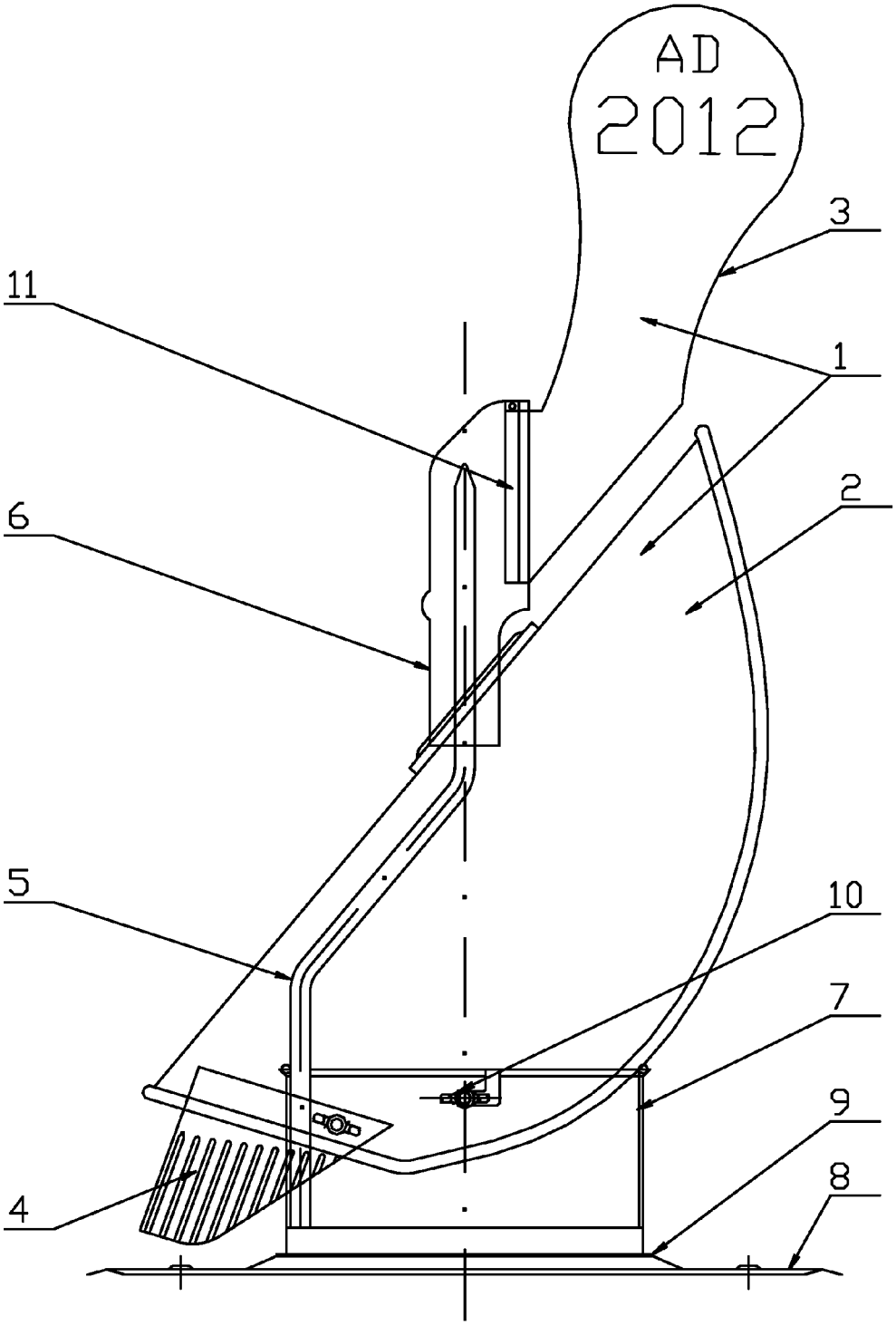

Fig.4

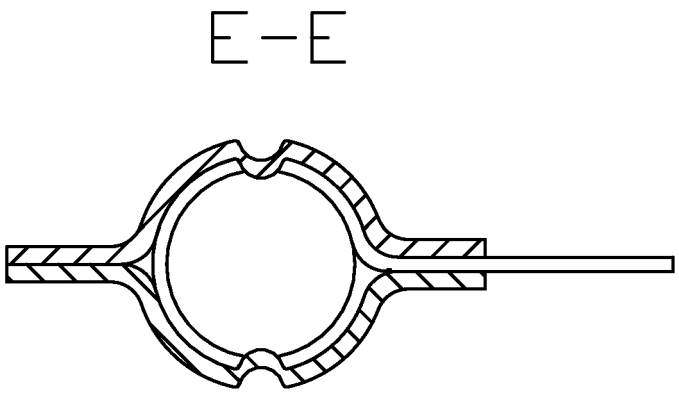

Fig.5

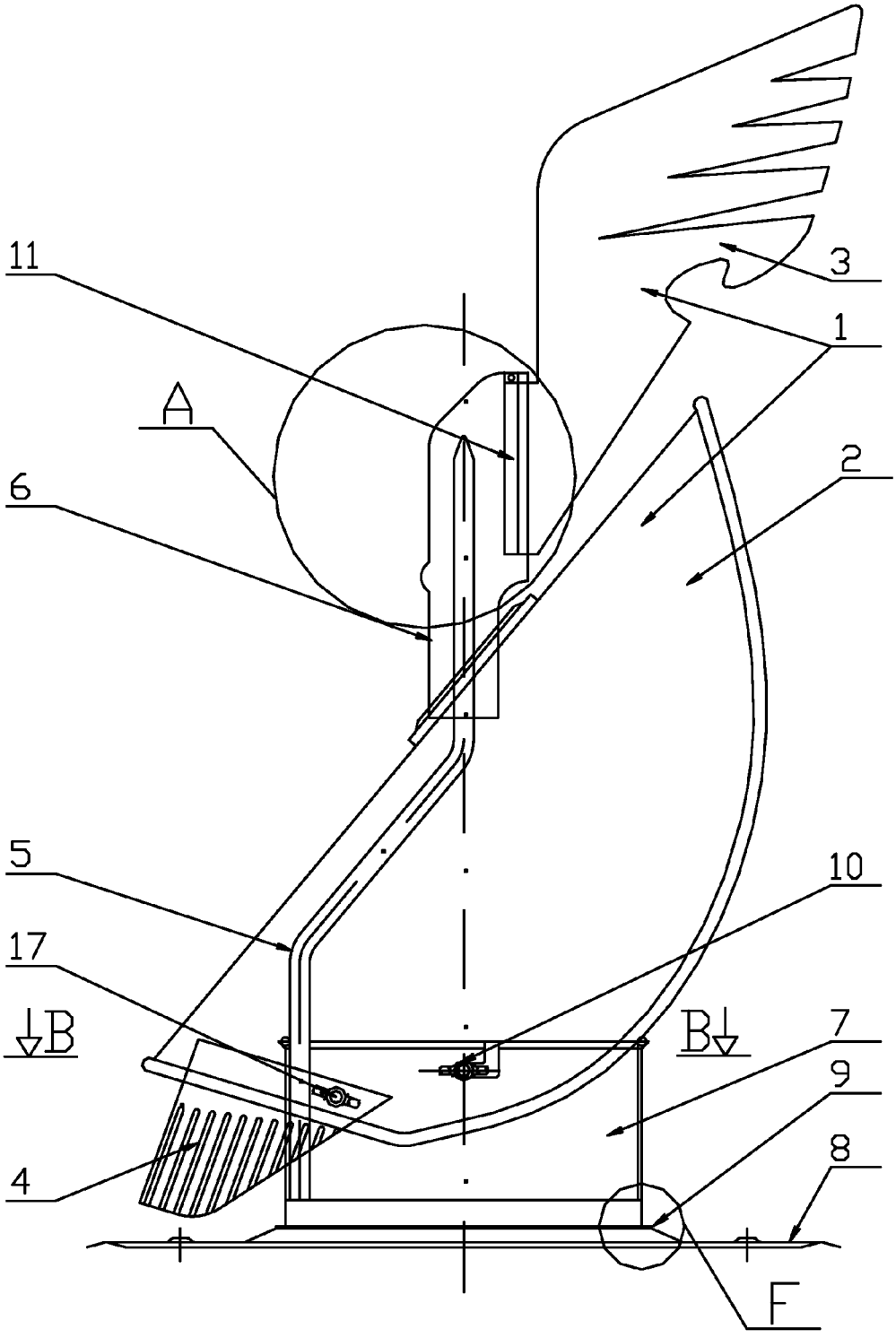

Fig.6

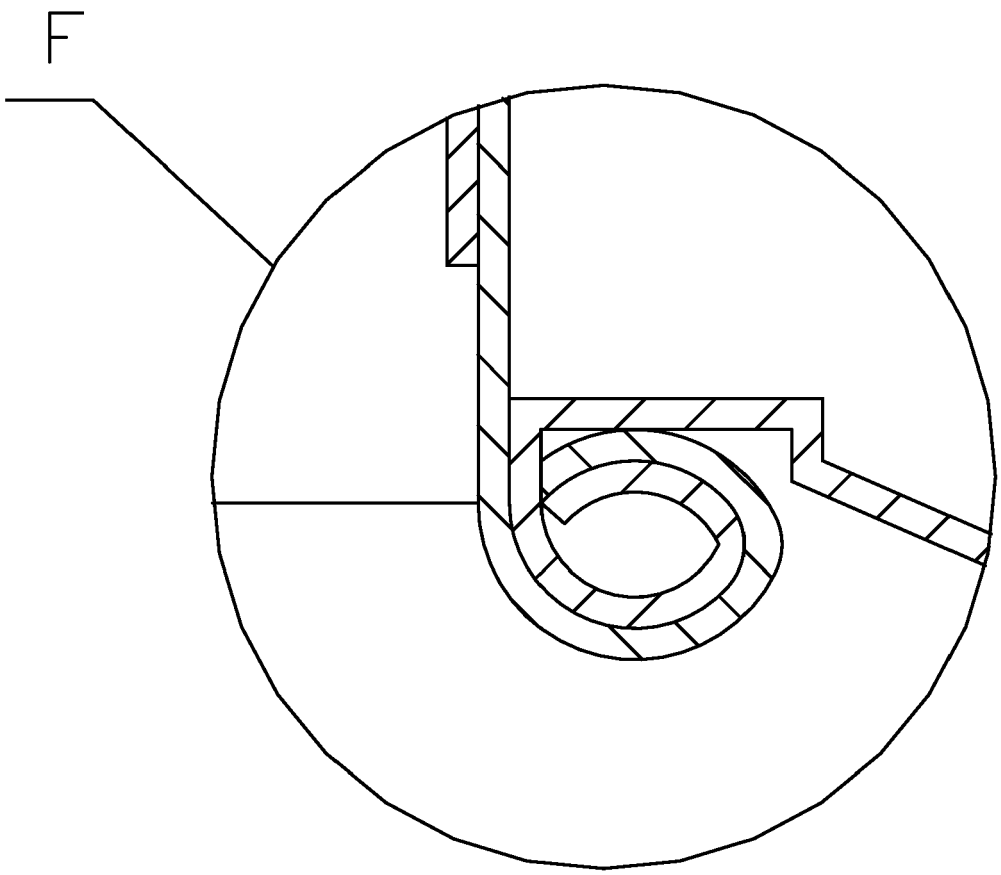

Fig.7

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- PL 64930 **[0002]**
- PL 202420 **[0004]**