



(22) Date de dépôt/Filing Date: 2008/12/09

(41) Mise à la disp. pub./Open to Public Insp.: 2010/06/09

(51) Cl.Int./Int.Cl. *B65F 1/14* (2006.01),
B65D 50/00 (2006.01)

(71) Demandeurs/Applicants:
ZACCOLO, SANDRO, CA;
DITCHBURN, H.T. MARTIN, CA

(72) Inventeurs/Inventors:
ZACCOLO, SANDRO, CA;
DITCHBURN, H.T. MARTIN, CA

(54) Titre : LOQUET A L'EPREUVE DES ANIMAUX

(54) Title: ANIMAL PROOF LATCH

(57) **Abrégé/Abstract:**

A securing latch includes a tubular body with a general hood latch configuration where the tension providing mechanism, housing, engagement component and finger pull portions are animal tamper proof. The latch body is attached to a mounting flange for placement onto a garbage receptacle container. The engagement hook and finger pull lever are connected to a tension loaded rod housed within the body housing providing tamper proof protection while securing the container lid in a closed position.



10

ABSTRACT

A securing latch includes a tubular body with a general hood latch configuration where the tension providing mechanism, housing, engagement component and finger pull portions are animal tamper proof. The latch body is
15 attached to a mounting flange for placement onto a garbage receptacle container. The engagement hook and finger pull lever are connected to a tension loaded rod housed within the body housing providing tamper proof protection while securing the container lid in a closed position.

Animal Proof Latch

BACKGROUND OF THE INVENTION

An improved animal tamper-resistant container lid latch designed for securing the lid of trash containers in a closed position, the same being readily released when the lid is to be lifted in order to gain access. It is a primary object and purpose of the present invention to construct a latch very economically while utilizing a tension loaded finger pull engagement mechanism resistant to wildlife dexterity and resistant to wildlife destruction, and to further provide a handle form which will allow municipal garbage collection technicians to readily release the latch wearing protective gloves.

FIELD OF THE INVENTION

The latch of the present invention is designed for use with a variety of residential and commercial receptacles having a container lid top. Typical receptacles which can accept the said latch include receptacles for municipal recycling programs, garbage and compost collection receptacles, receptacle for the collection, sorting and storage of food, tub-like receptacles such as, animal feeding troughs and receptacles for the dispensing of wildlife feed.

Typically, lockable receptacles of the above-mentioned type are used with closure mechanisms not fully developed for resistance to animal dexterity and destruction as they are manufactured of materials which can be gnawed through by wildlife or damaged by impact associated with receptacle being knocked over by persistent animals. The basic problem associated with common garbage collection containers used for organic waste is that the closure latch is not tamper proof enough to outsmart common urban animals like the Raccoon. These municipal receptacles have now become standard for organic waste collection and the closure

latch become even less tamper proof with wear of the mechanism over time and excessive use. As a result of the above-described container closer options, it is difficult to guarantee wildlife proof garbage containers. Accordingly, container lids are either weighted with a heavy anchoring object, retrofitted with resilient elastomer type tie down cords which are chewable by animal teeth and tedious for garbage collection crews to disengage, fitted with retrofit webbing straps and plastic buckles also vulnerable to animal teeth and impact damage caused by toppling over and general abuse of containers while handled by garbage crew.

10 BRIEF SUMMARY OF THE INVENTION

An object of the present invention is to solve the above-identified problems and drawbacks of conventional container lid restraint and securing systems by providing a retrofitted latch design which is animal tamper proof.

Other objects of the invention are:

- 15 (i) to provide a securing latch which is relatively inexpensive to manufacture, durable and lightweight;
- (ii) to provide a securing latch which is quickly and easily installed using ordinary tools and fasteners, and
- (iii) to provide a securing latch which is adaptable to fit a range of
- 20 receptacle sizes and configurations.

Yet another object of the invention is to provide a securing latch which is capable of outsmarting common urban wildlife and urban pets such as cats and dogs while ergonomically accessible for garbage technicians wearing protective gloves.

The securing latch of the present invention can be used with standard
25 municipal garbage bins for organic waste collection while resisting atmosphere and

environmental degradation. The securing latch is removable and reusable, and can be mounted on different containers such as wooden boxes, metal drums, plastic bins of various shapes.

As used herein, "receptacle" is intended to mean any container, such as a bin,
5 box, frame, or bag used for storage or collection.

The securing latch can be formed from a variety of materials including a combination of super tough polymers such as glass reinforced nylon, viscoelastic elastomers and metal such as aluminum, stainless steel and powder coated steel.

CLAIMS:

1. An animal proof locking pull latch comprising:
 - (a) a spring loaded, finger pull, engagement hook latch where spring is protected from damage; and
 - 5 (b) resistant to wildlife animal strength and dexterity.
2. The animal proof latch of claim 1 including a mounting bracket for securing latch assembly to rigid surfaces and engaging with a secondary closure component.
3. The animal proof latch of claim 2 wherein the rigid materials constructing latch components are resistant to wildlife chewing and gnawing damage.
- 10 4. The animal proof latch of claim 3 wherein the pull handle is streamline in profile to discourage animal paw and mouth pull operation.
5. The animal proof latch of claim 4 wherein the engagement hook portion of the finger pull handle engages with a closure component forming an animal proof locking latch.

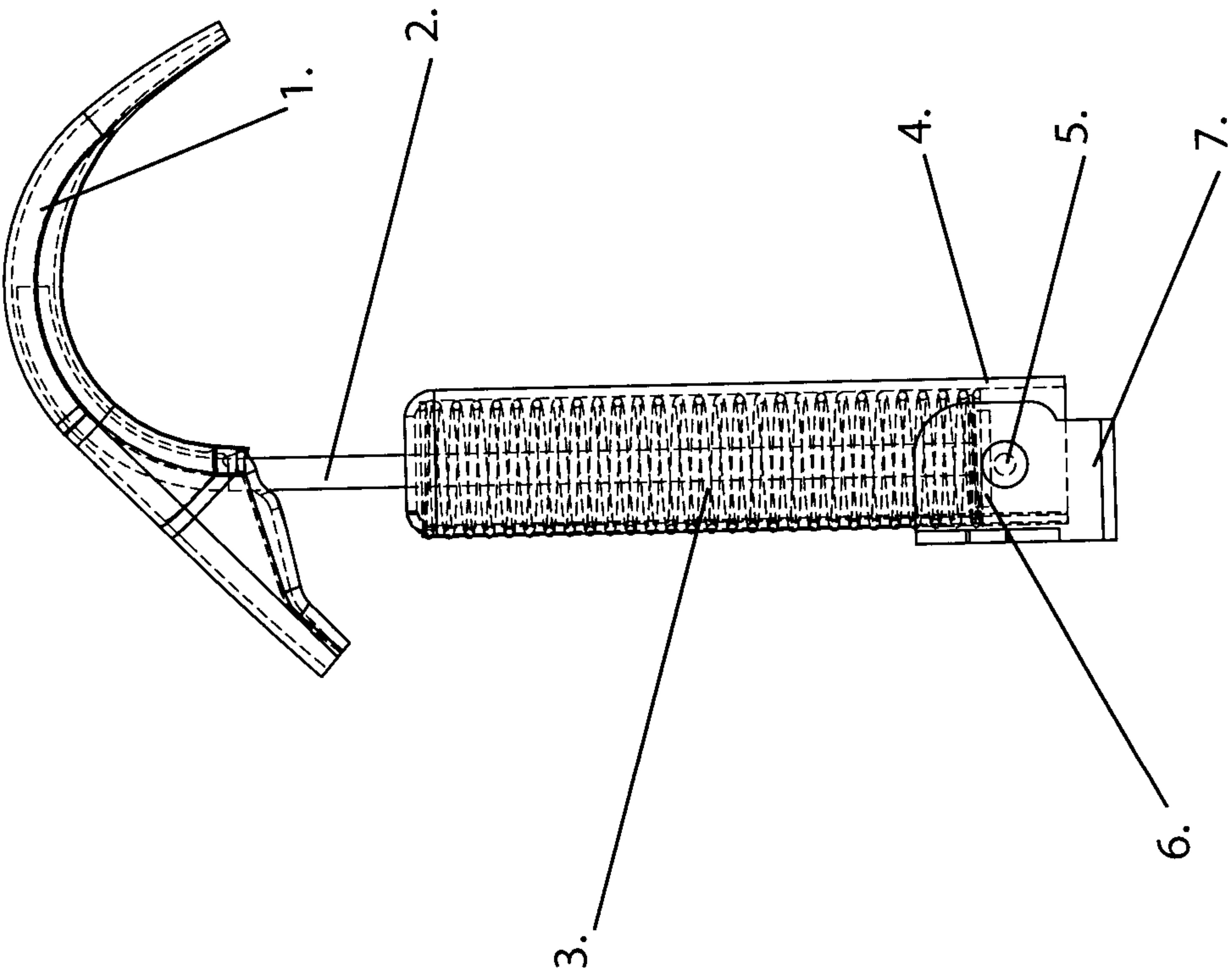


FIGURE 1.0

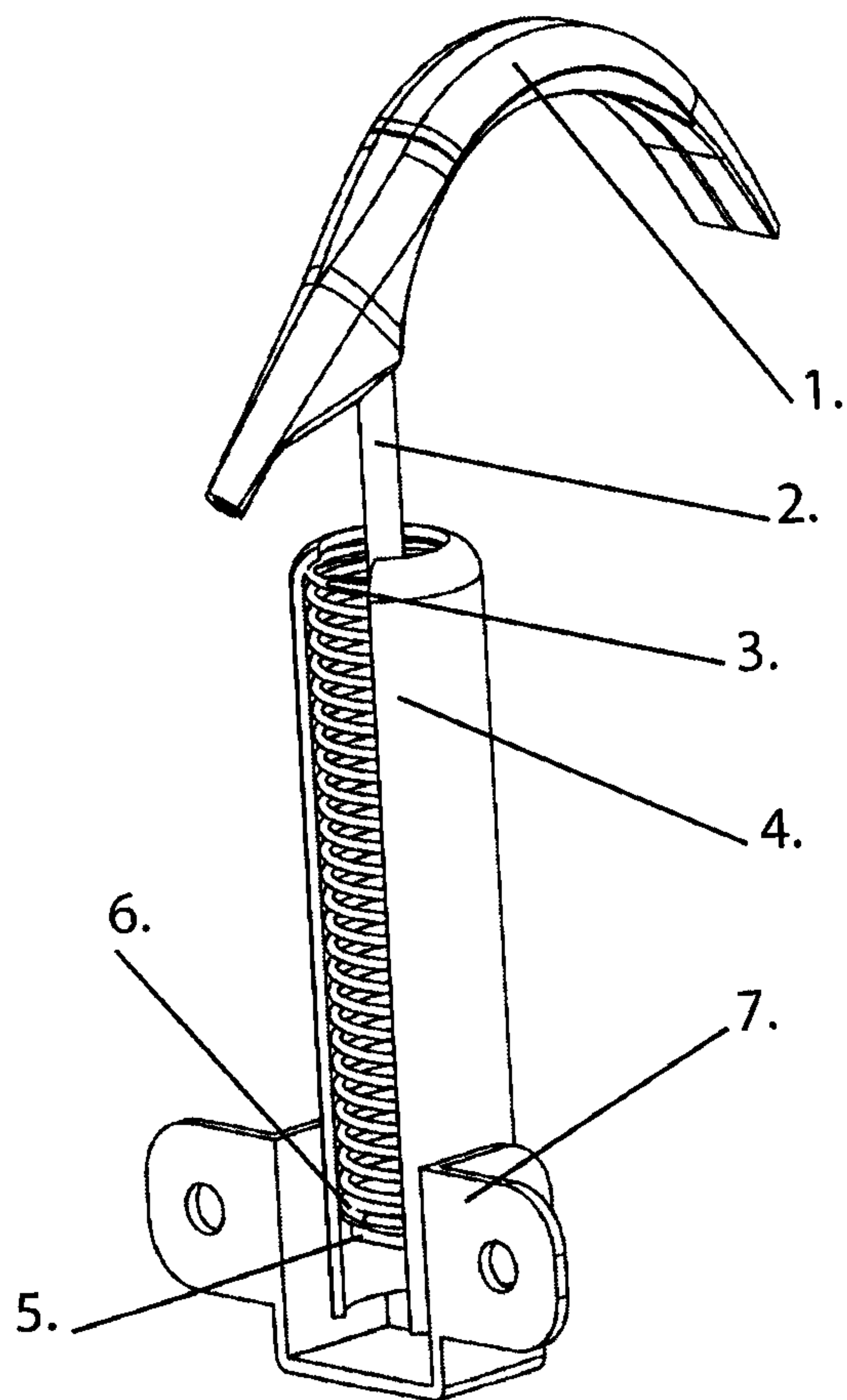


FIGURE 2.0

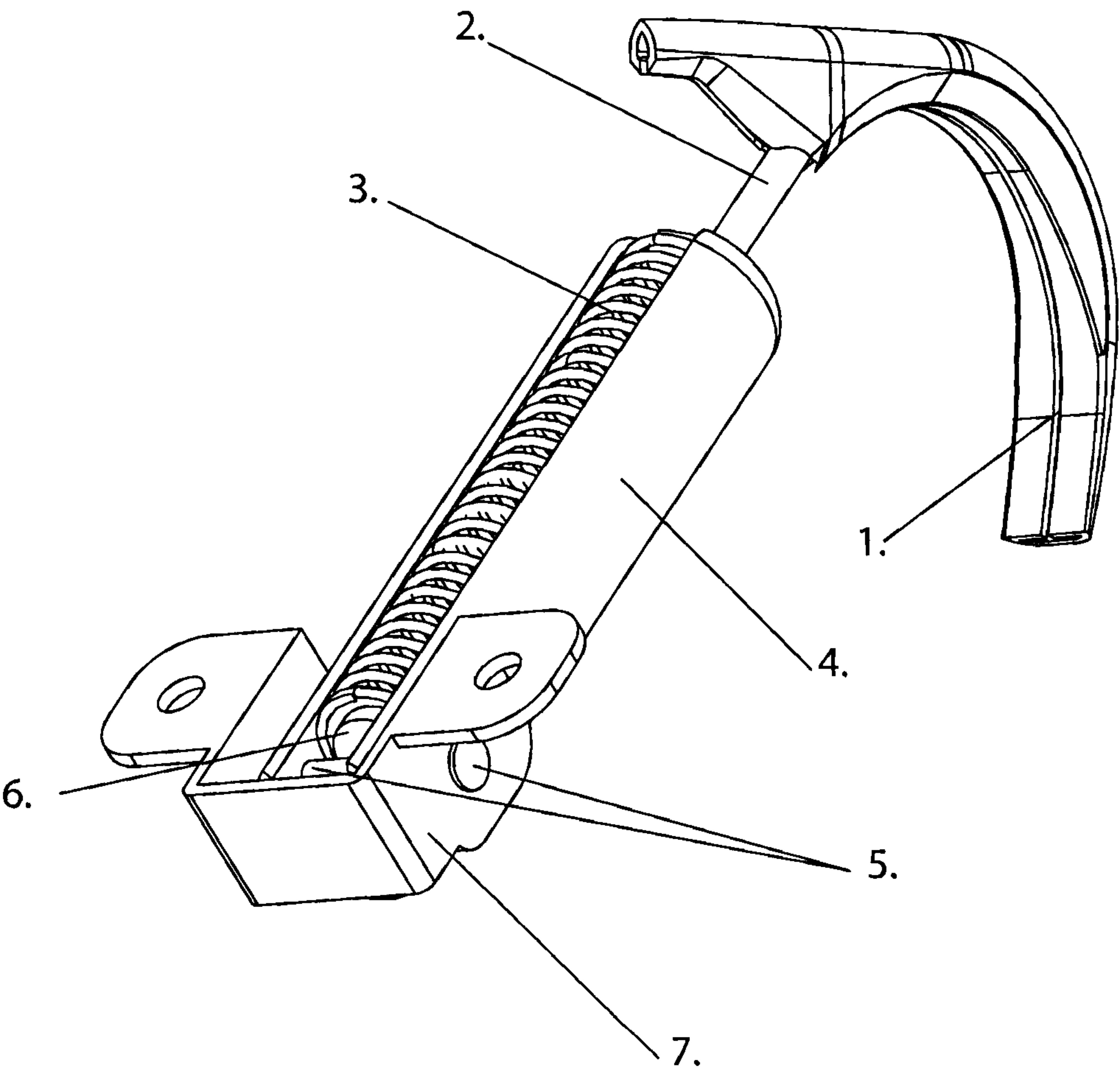


FIGURE 3.0

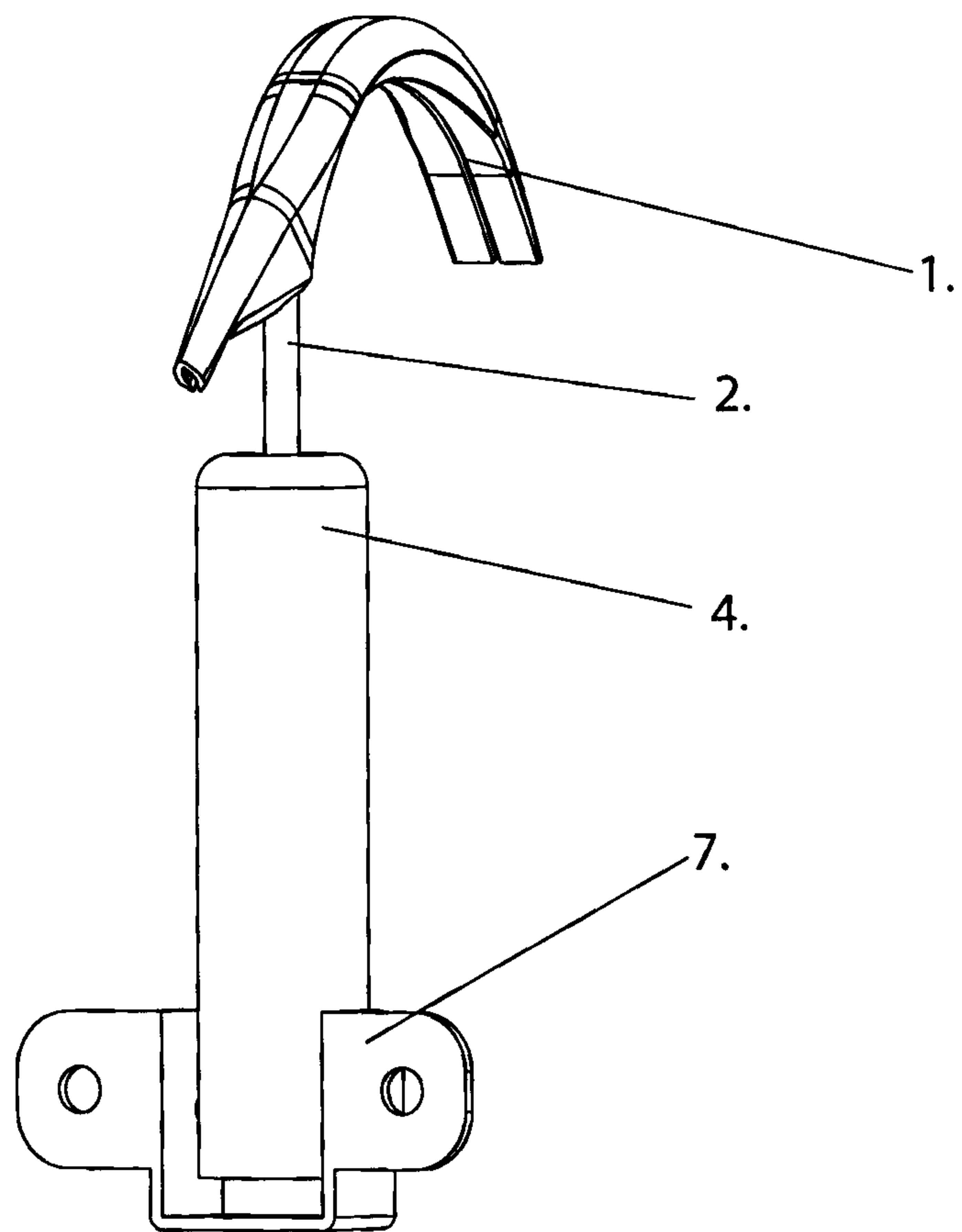
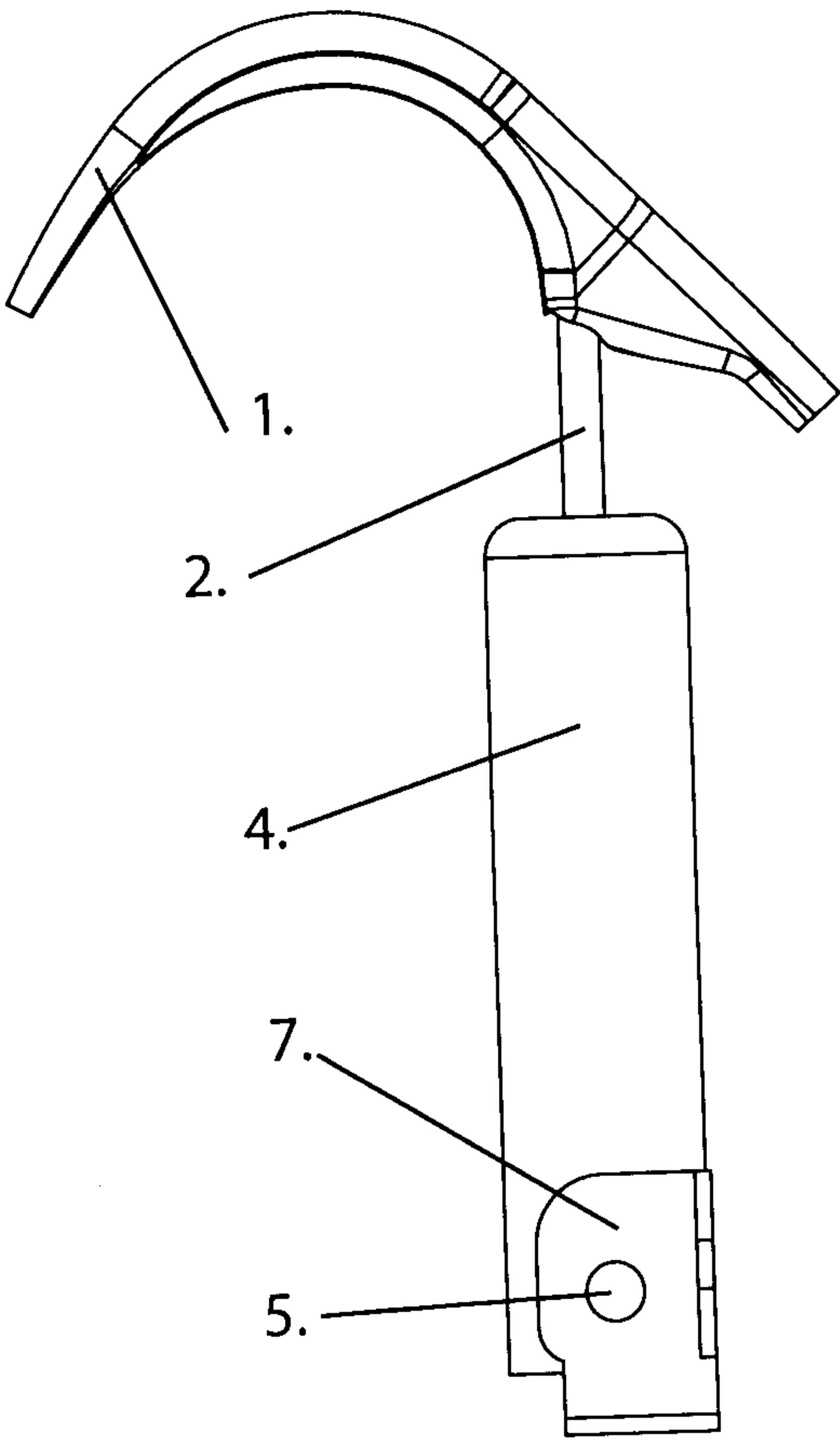


FIGURE 4.0



.FIGURE 5.0