



(22) Date de dépôt/Filing Date: 2000/03/28

(41) Mise à la disp. pub./Open to Public Insp.: 2001/09/28

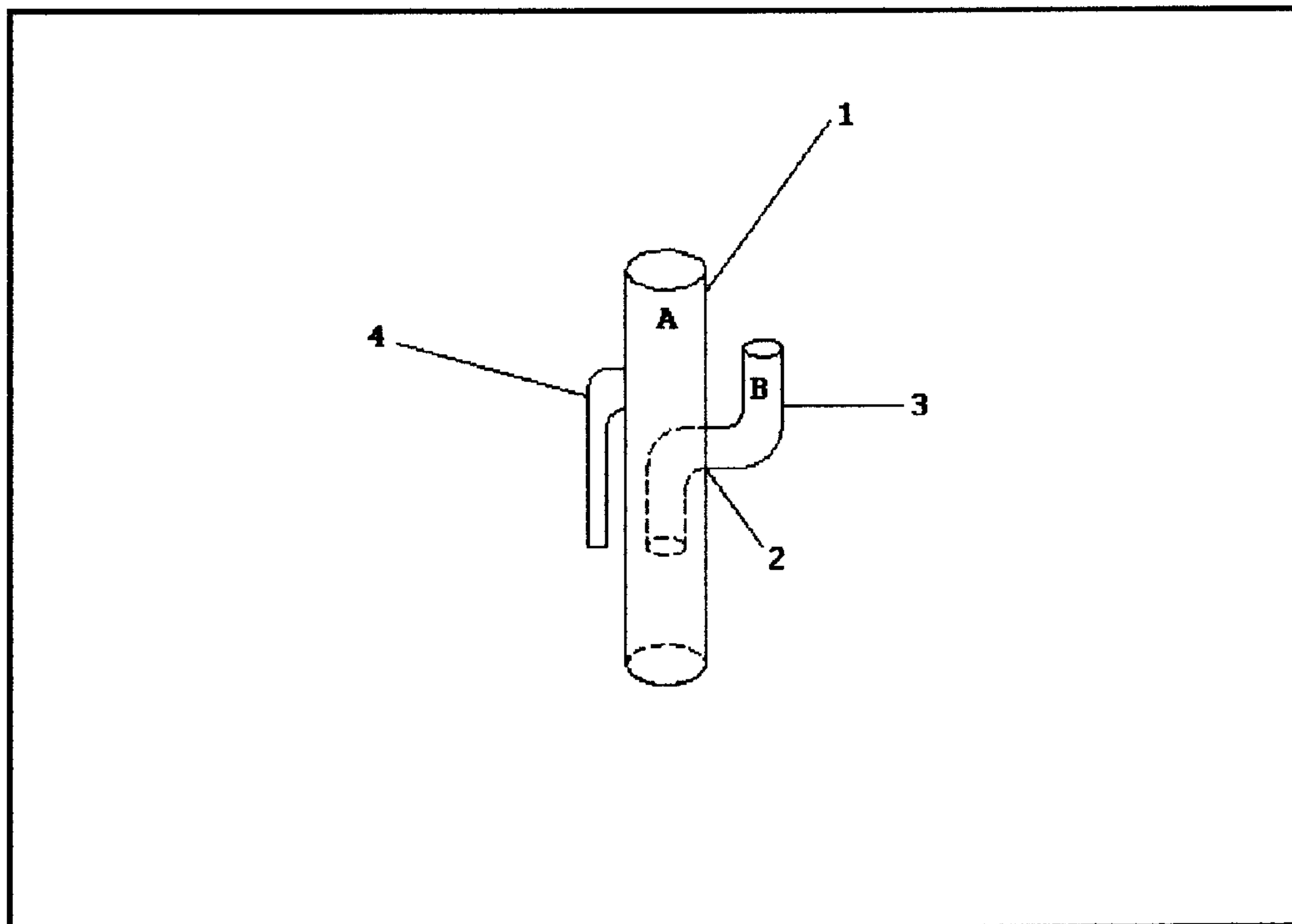
(51) Cl.Int.⁷/Int.Cl.⁷ E03D 11/00

(71) Demandeur/Applicant:
SEYMOUR, CARL, CA

(72) Inventeur/Inventor:
SEYMOUR, CARL, CA

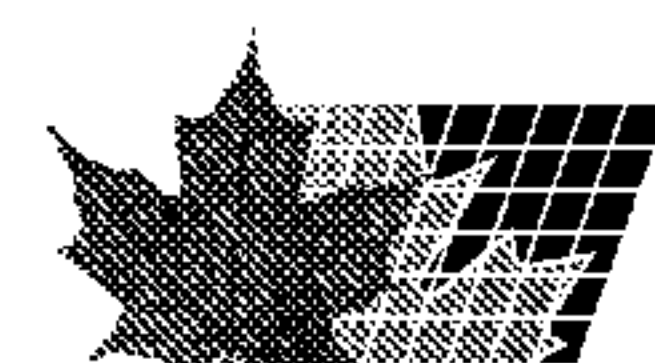
(54) Titre : VIDANGER SANS CONDENSATION

(54) Title: FLUSH-N-VAC



(57) **Abrégé/Abstract:**

The purpose of the proposed device is to collect and dispose of accumulated condensation on the exterior of a toilet/urinal. This invention utilizes a venturi, a moisture collecting container, a hose and water pressure from the flushing action in a flush box to create a vacuum which disposes of the collected moisture. The proposed device consists of a venturi, a water pressure source (i.e., a refill tube) and a hose. The said venturi consists of two pieces of tubing whereby a narrow piece of tubing is inserted through the side of a wider piece of tubing. The wider piece of tubing is installed in the water pressure source. The said water pressure source or refill tube is located in the flush box. One end of the said hose is attached to the narrow tube of the venturi and the other end is placed in a moisture collecting container located beneath the toilet/urinal. Upon flushing, the collected moisture is sucked into the hose, transported to the toilet bowl and disposed of each time the toilet is flushed.



Abstract

The purpose of the proposed device is to collect and dispose of accumulated condensation on the exterior of a toilet/urinal. This invention utilizes a venturi, a moisture collecting container, a hose and water pressure from the flushing action in a flush box to create a vacuum which disposes of the collected moisture. The proposed device consists of a venturi, a water pressure source (i.e., a refill tube) and a hose. The said venturi consists of two pieces of tubing whereby a narrow piece of tubing is inserted through the side of a wider piece of tubing. The wider piece of tubing is installed in the water pressure source. The said water pressure source or refill tube is located in the flush box. One end of the said hose is attached to the narrow tube of the venturi and the other end is placed in a moisture collecting container located beneath the toilet/urinal. Upon flushing, the collected moisture is sucked into the hose, transported to the toilet bowl and disposed of each time the toilet is flushed.

FLUSH-N-VAC

BACK GROUND OF THE INVENTION

This invention relates to the automatic disposal of external moisture collected from toilets/urinals.

A common remedy for moisture dripping from a flush box is to install a tray beneath the flush box to collect and hold this water. This device alone is inefficient because although the tray collects the moisture, if the tray is not emptied on a regular basis, it tends to overflow onto the floor. Additionally, when this occurs some of the water invariably seeps underneath the toilet bowl causing the floor beneath to decay.

I have found that by installing a venturi into the refill tube (located in the flush box) a vacuum is created which can be used to dispose of external moisture collected in a container positioned beneath the toilet/urinal.

The said venturi consists of two pieces of tubing whereby a narrow piece of tubing is inserted through the side of the wider piece of tubing. The narrower tubing is inserted at a 90% degree angle and forms an "S" shape. The wider piece of tubing is installed directly into the water pressure source.

A vacuum is created in the narrow tubing of the venturi as water passes through the wider tubing of the venturi each time the toilet is flushed. This vacuum will continue until the flush box is filled and water flow is shut off by float action in the flush box. By attaching a hose to the narrow tubing of the venturi (which extends out through the side of the wider tubing) and placing the other end of the hose into the moisture collecting container (i.e., a tray), this vacuum source can be used to remove water from the container and dispose of it into the toilet bowl every time the toilet is flushed. Thereby, eliminating the need to empty the container and avoid the damage this moisture causes to bathroom floors.

In drawings which illustrate embodiments of the invention, **Figure 1** is a side view of the venturi; **Figure 2** is a top view of the flush box, into which the venturi has been installed.

The tool illustrated consists of a 4 cm. length of 1/4" Tubing 1 with a 3/16" Hole 2 drilled into one side. A 4 cm. length of 1/8" Tubing 3 is formed into an "S" shape -- the 1/8" Tubing 3 is passed through the 3/16" Hole 2 so that one half of the 1/8" Tubing is running down the inside centre of the 1/4" Tubing 1 and the other half runs along the outside of the 1/4" Tubing 1. A water tight seal is applied to hold the 1/8" Tubing 3 in place. A Clip 4 is attached to the outside of the 1/4" Tubing to hold it in place inside the overflow Tube 6. The venturi when designed may be molded from copper, plastic or other suitable material. Size may also vary, depending upon application.

The upper end A of Tubing 1 is installed into the outlet end of Refill Tube 5 and secured to the inside of overflow Tube 6 by Clip 4. One end of a 1/8" Hose 7 is installed onto the outer end B of intake Tube 3; the other end is placed into the tray beneath the flush box.

A notch may have to be filed or cut into the rim of the flush box so that Hose 7 will not be closed off by the flush box cover.

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. An apparatus consisting of a venturi attached to a water pressure source and to a hose placed in a moisture collecting container.
2. A tool defined in claim 1, which utilizes water pressure to create a vacuum to remove moisture and/or condensation from any bathroom fixture.



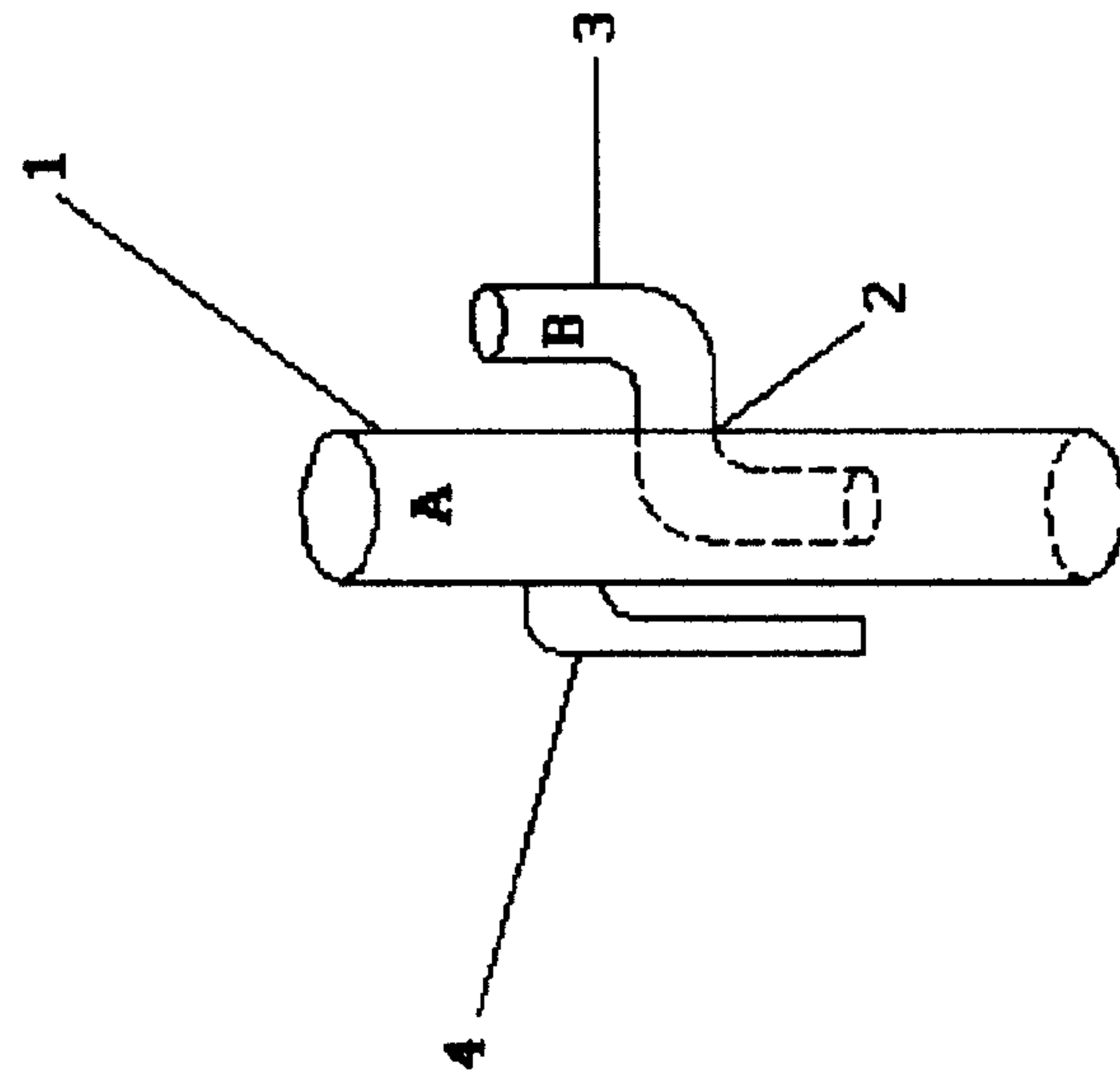


FIG 1

