

US00D533270S

(12) **United States Design Patent** (10) **Patent No.:** **US D533,270 S**
Kierce et al. (45) **Date of Patent:** **** Dec. 5, 2006**

(54) **INTRODUCER CANNULA AND CANNULA STRAIGHTENER**
(75) Inventors: **Paul C. Kierce**, Woburn, MA (US);
James Lock, Boston, MA (US);
Audrey C. Marshall, Boston, MA (US)
(73) Assignee: **Children's Medical Center Corporation**, Boston, MA (US)
(**) Term: **14 Years**
(21) Appl. No.: **29/209,386**
(22) Filed: **Jul. 15, 2004**
(51) **LOC (8) Cl.** **24-02**
(52) **U.S. Cl.** **D24/112**
(58) **Field of Classification Search** D24/112,
D24/130; 604/264, 60, 57, 59, 19, 27
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,084,033	A	*	1/1992	O'Neill et al.	.....	604/264
D363,544	S	*	10/1995	Rowland et al.	.....	D24/112
5,688,246	A	*	11/1997	Waitz et al.	.....	604/264
D408,529	S	*	4/1999	Hechel	.....	D24/112
6,004,302	A	*	12/1999	Brierley	.....	604/264
D450,382	S	*	11/2001	Nestenborg	.....	D24/112
6,387,087	B1	*	5/2002	Grooters	.....	604/264

* cited by examiner

Primary Examiner—Louis S. Zarfaz

Assistant Examiner—Daniel Yu

(74) *Attorney, Agent, or Firm*—Kohn & Associates, PLLC;
Kenneth I. Kohn

(57) **CLAIM**

The ornamental design for an introducer cannula and cannula straightener, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an introducer cannula with a curved distal end that maintains a passageway throughout its length, a knob is included on the proximal end to ease handling in surgery;

FIG. 2 is a side view of the introducer cannula showing a curved distal end, and the broken lines show a straight position of the distal end when a cannula straightener is inserted;

FIG. 3 is a side view of the introducer cannula when the distal end is in a straight position, showing that the passageway is maintained in the straight position;

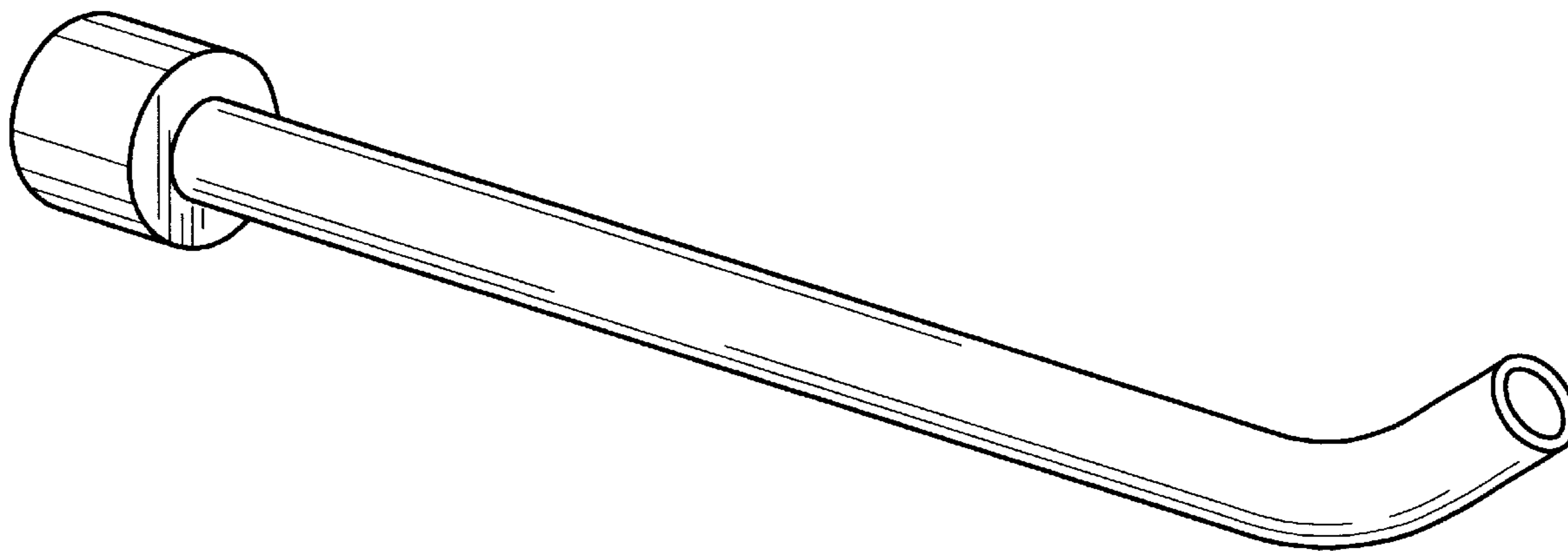
FIG. 4 is a side view of an introducer cannula and cannula straightener combination wherein the cannula straightener straightens the curved distal tip of the introducer cannula, a length of a distal tip of the cannula straightener protrudes from the distal end of the introducer cannula;

FIG. 5 is a front view of the introducer cannula and cannula straightener combination wherein the introducer cannula includes an indicator at its proximal end to indicate the direction of the distal tip when curved;

FIG. 6 is a perspective frontal view of the introducer cannula showing that the passageway is maintained; and,

FIG. 7 is a side view of the opposite side as shown in FIG. 2 showing the introducer cannula with the distal end in a curved position.

1 Claim, 2 Drawing Sheets



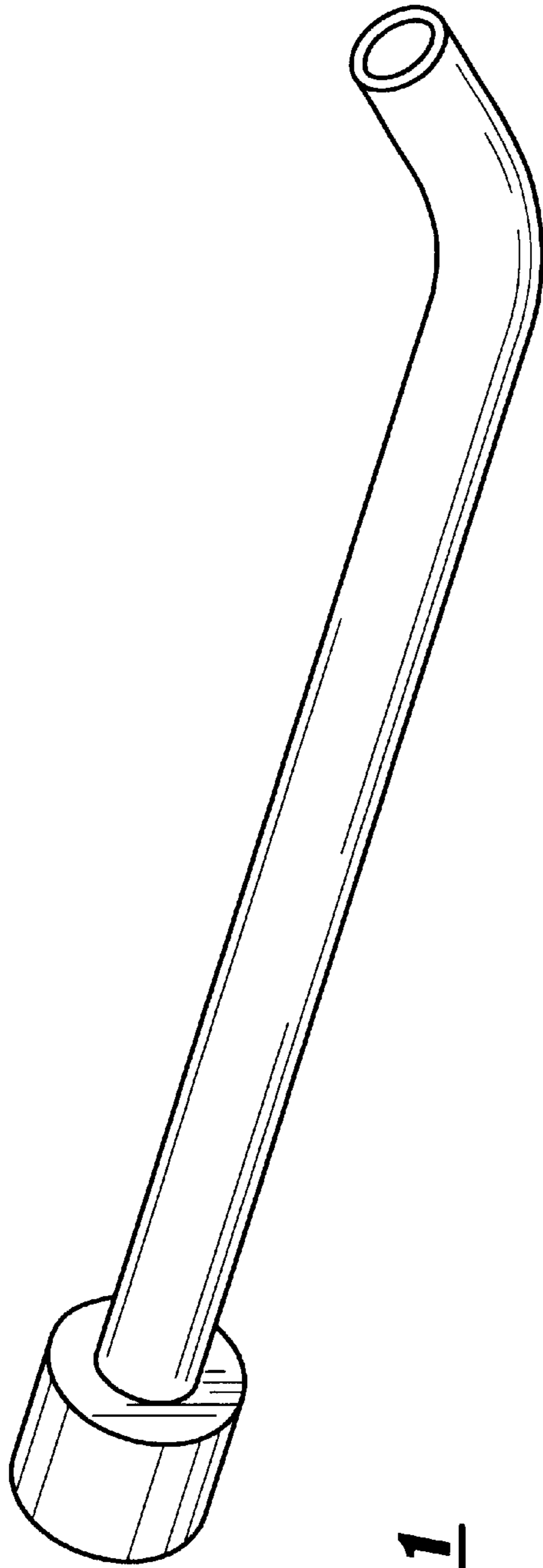


FIG - 1

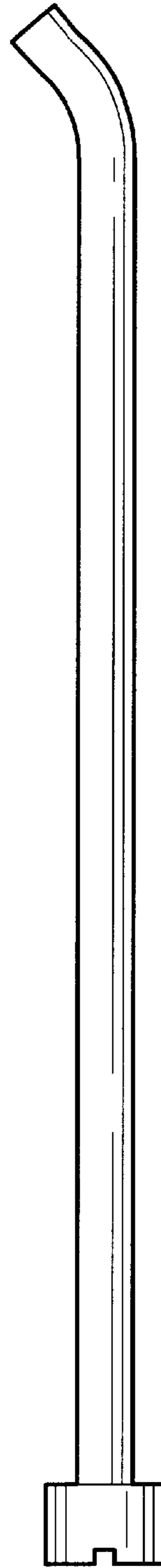


FIG - 2

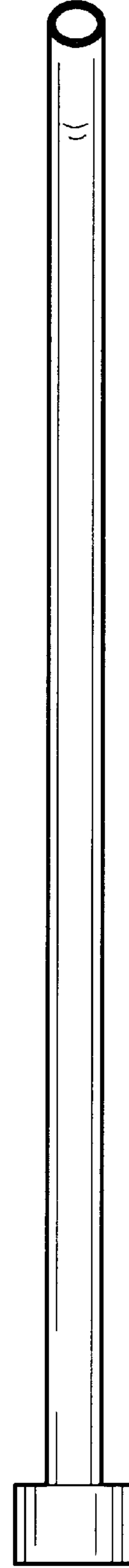


FIG - 3

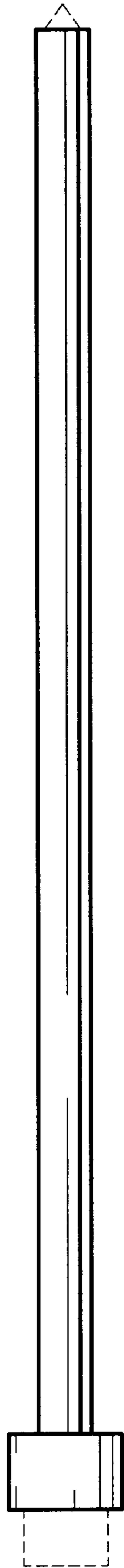


FIG - 4

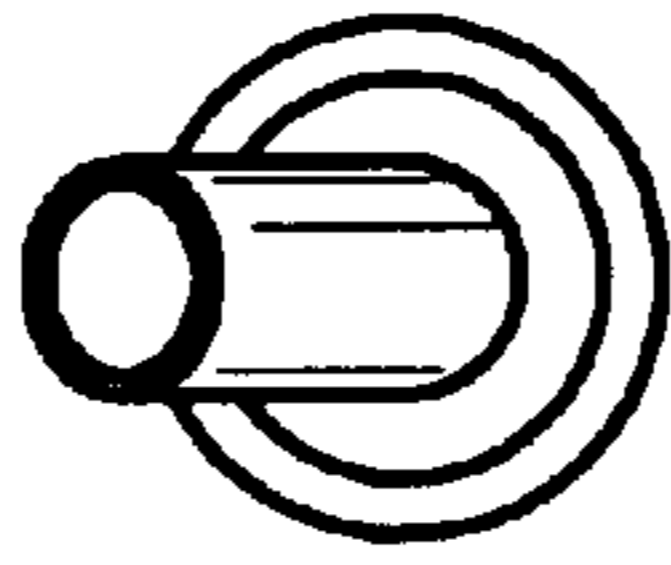


FIG - 6

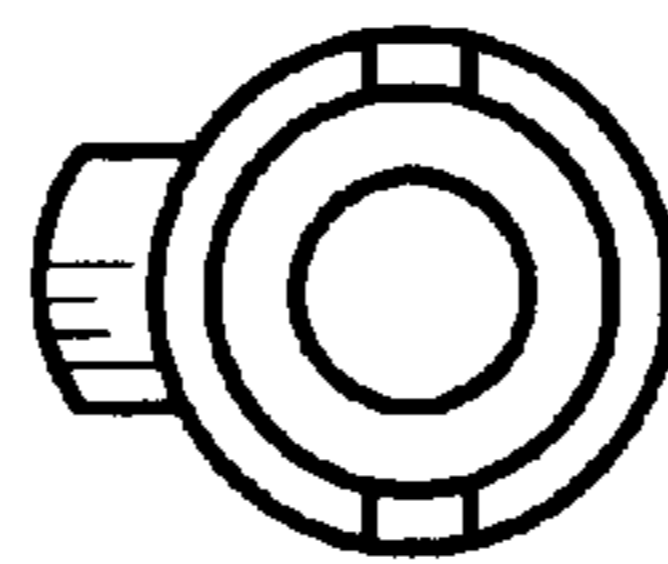


FIG - 5

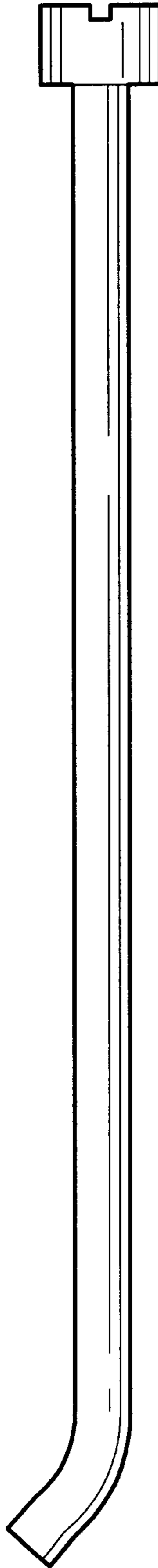


FIG - 7