



US00D469462S

(12) **United States Design Patent**
Onodera et al.

(10) **Patent No.:** **US D469,462 S**

(45) **Date of Patent:** **** Jan. 28, 2003**

(54) **HEATER LAMP UNIT FOR FIXING TONER
IN AN IMAGE FORMING APPARATUS**

(75) Inventors: **Ken Onodera**, Ibaraki (JP); **Shuho
Yokokawa**, Ibaraki (JP); **Sho
Sawahata**, Ibaraki (JP)

(73) Assignee: **Hitachi Koki Co., Ltd.**, Tokyo (JP)

(**) Term: **14 Years**

(21) Appl. No.: **29/132,833**

(22) Filed: **Nov. 17, 2000**

(30) **Foreign Application Priority Data**

May 19, 2000 (JP) 2000-013254

(51) **LOC (7) Cl.** **16-03**

(52) **U.S. Cl.** **D18/40**

(58) **Field of Search** D18/36, 40, 43,
D18/56; 219/486; 250/325; 399/33, 100,
103, 122, 186, 320, 322

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 3,324,291 A * 6/1967 Hudson 250/325
- 3,875,407 A * 4/1975 Hayne 399/100
- 3,891,846 A * 6/1975 Ito 399/100
- 4,063,810 A * 12/1977 Mailloux 399/100
- D350,974 S * 9/1994 Inoue et al. D18/40
- 5,450,174 A * 9/1995 Osbourne et al. 399/186
- 5,572,307 A * 11/1996 Tomatsu et al. 399/122

- 5,787,319 A * 7/1998 Tomatsu 399/33
- 5,842,098 A * 11/1998 Ueno et al. 399/322
- 6,097,904 A * 8/2000 Tsuruno et al. 399/33
- 6,181,898 B1 * 1/2001 Sato 399/103
- 6,229,120 B1 * 5/2001 Jewell 219/486

FOREIGN PATENT DOCUMENTS

JP 2-21667 2/1990

* cited by examiner

Primary Examiner—Caron D. Veynar

(74) *Attorney, Agent, or Firm*—Sughrue Mion, PLLC

(57) **CLAIM**

The ornamental design for a heater lamp unit for fixing toner in an image forming apparatus, as shown.

DESCRIPTION

FIG. 1 is a perspective view of the top, front and one end of the heater lamp unit for fixing toner in an image forming apparatus showing our new design;
 FIG. 2 is a top plan view thereof;
 FIG. 3 is a side elevational view of one side thereof;
 FIG. 4 is a bottom plan view thereof;
 FIG. 5 is an end elevational view of an opposite end thereof;
 FIG. 6 is an end elevational view of said one end thereof;
 and,
 FIG. 7 is a side elevational view of an opposite side thereof.
 The invention is shown broken away to indicate indeterminate length.

1 Claim, 3 Drawing Sheets

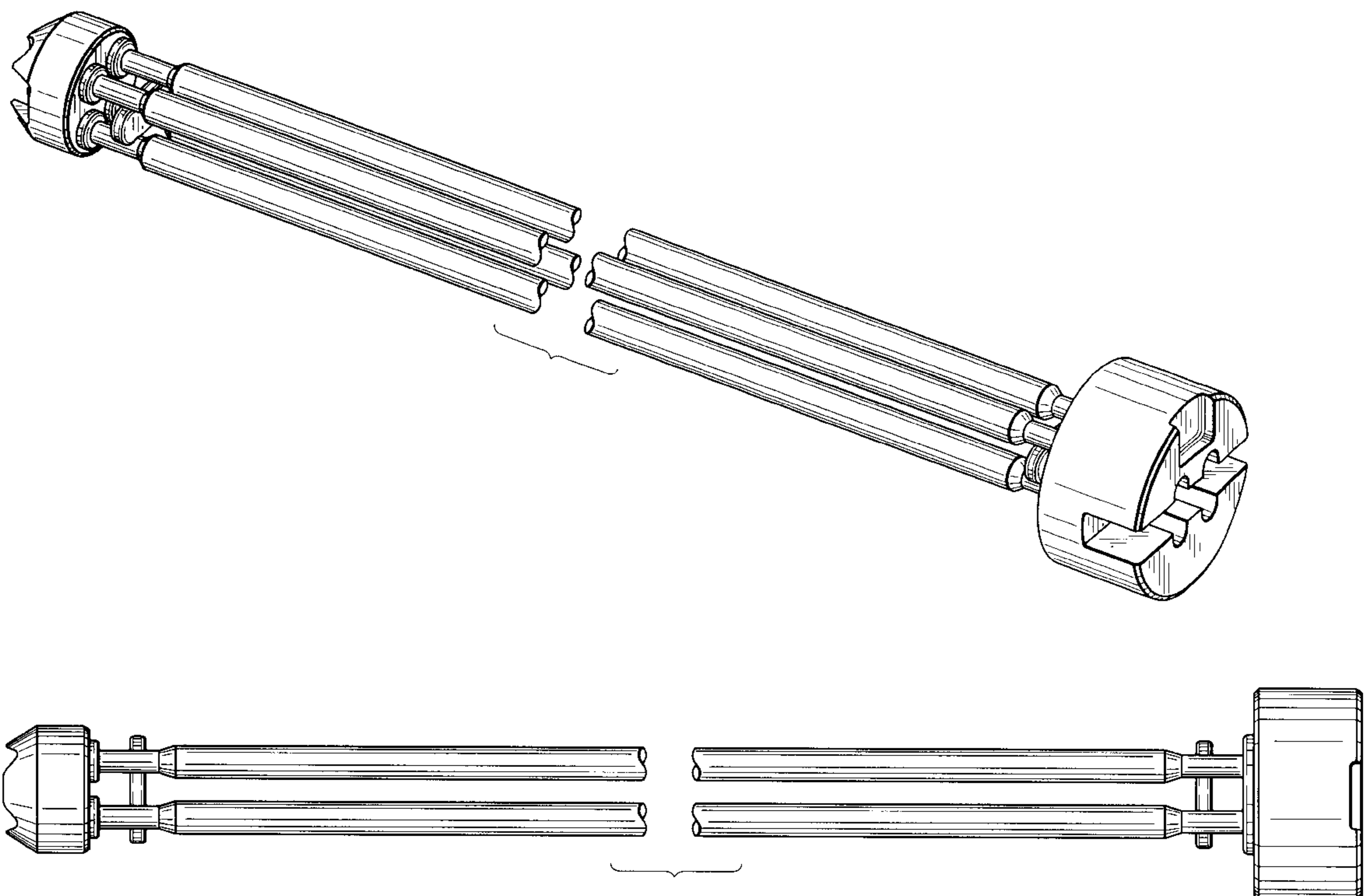


FIG. 1

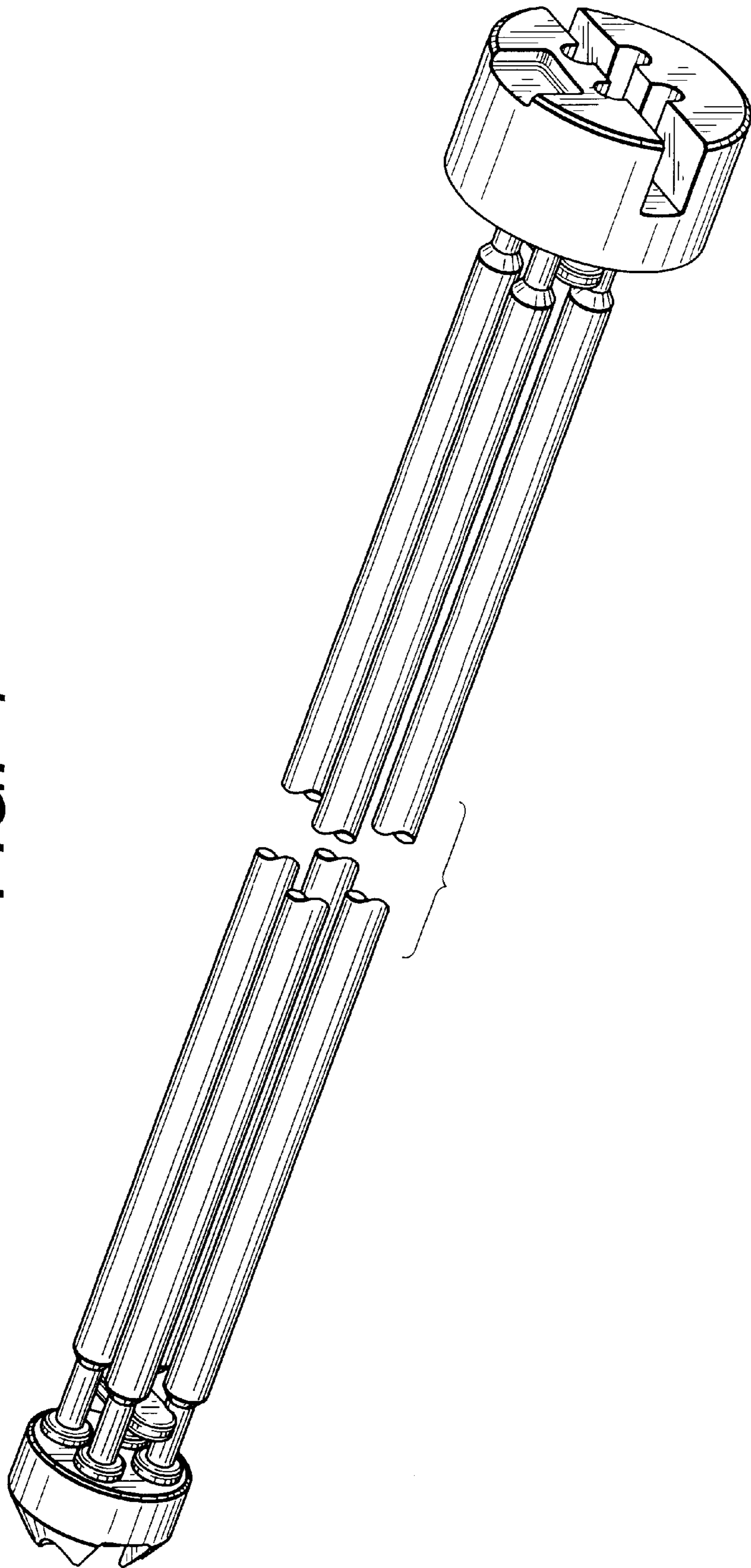


FIG. 2

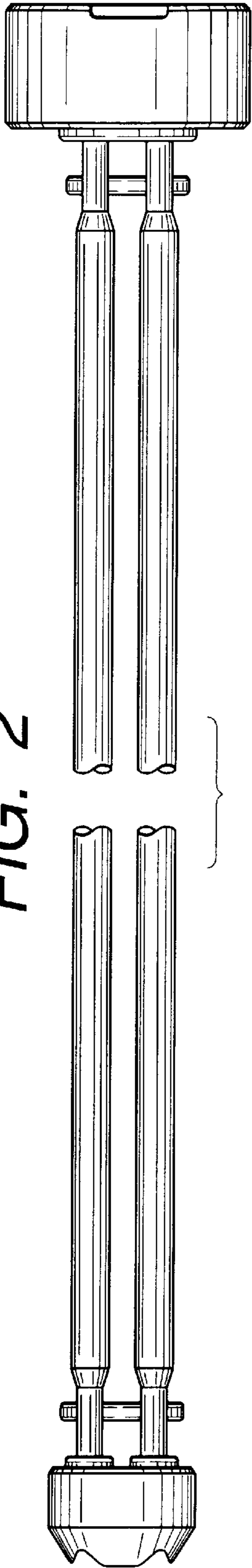


FIG. 3

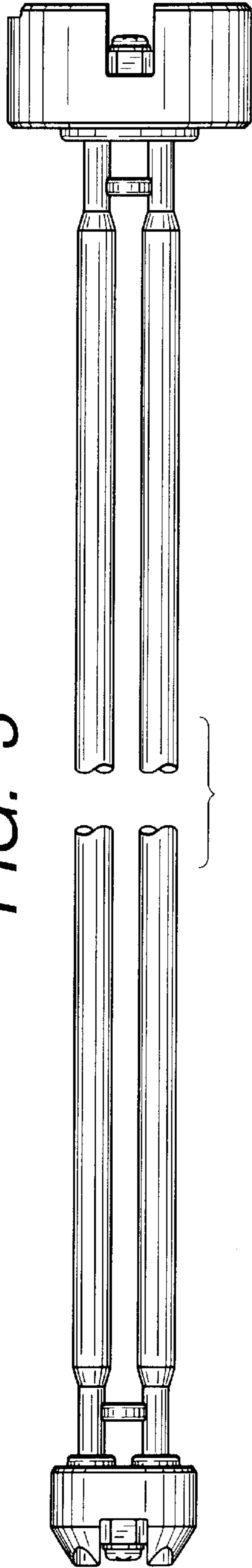


FIG. 4

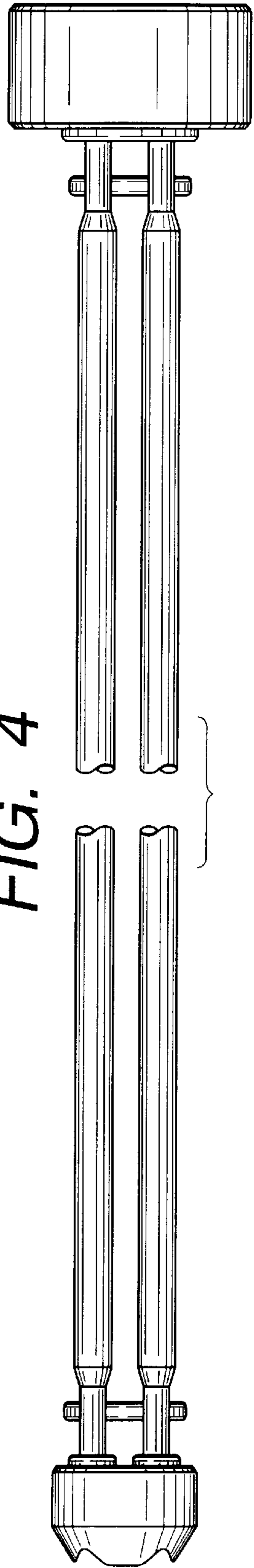


FIG. 5

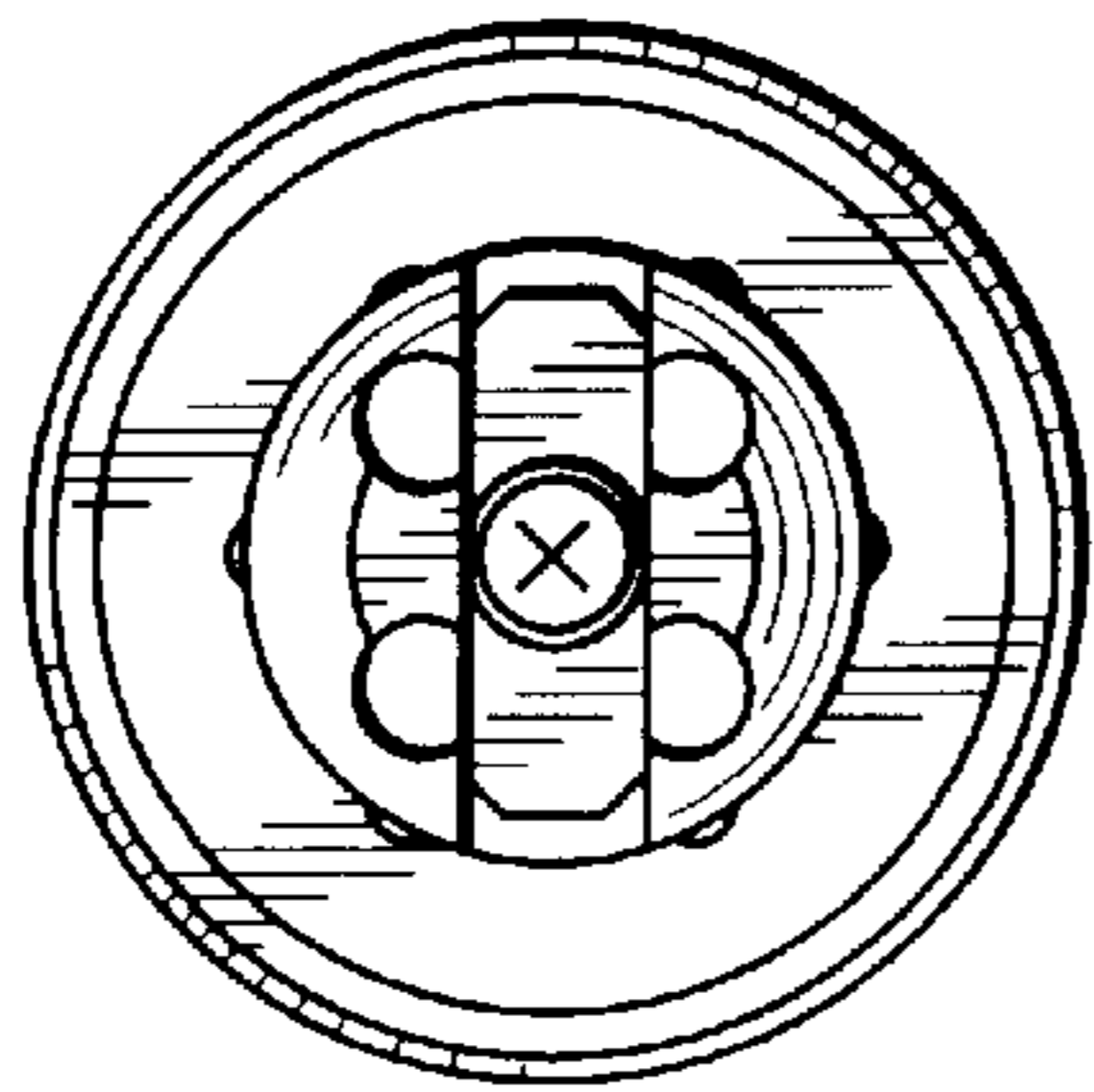


FIG. 6

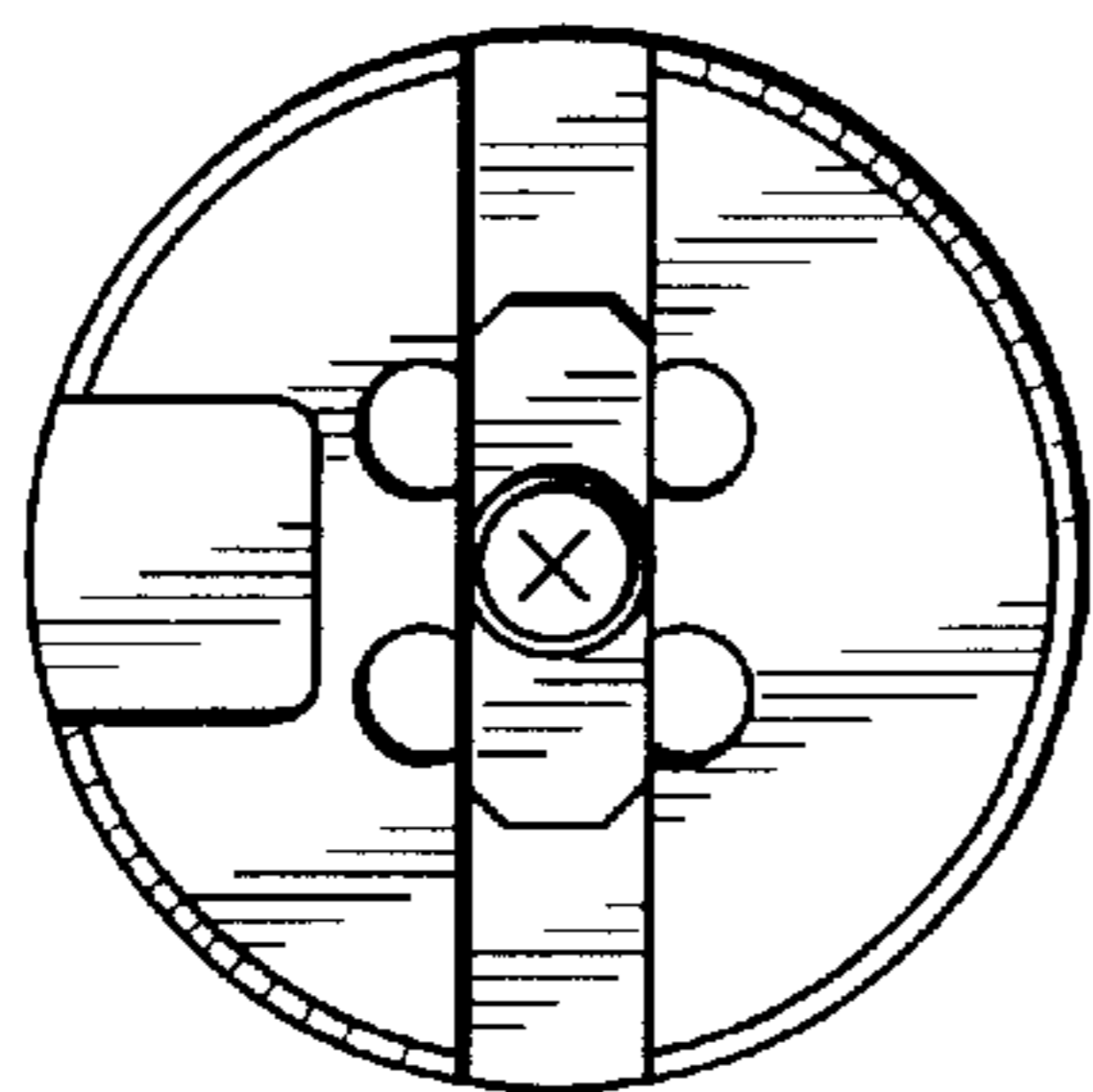


FIG. 7

