



US00D468015S

(12) **United States Design Patent**  
**Horppu**

(10) **Patent No.:** **US D468,015 S**

(45) **Date of Patent:** **\*\* Dec. 31, 2002**

(54) **COMBINED CONNECTOR WITH VALVE AND NON-RETURN VALVE FOR MEDICAL EQUIPMENT**

*Primary Examiner*—Ian Simmons  
(74) *Attorney, Agent, or Firm*—White & Case LLP

(75) **Inventor:** **Petri Horppu**, Göteborg (SE)

(57) **CLAIM**

(73) **Assignee:** **Astra Tech AB**, Molndal (SE)

The ornamental design for a combined connector with valve and non-return valve for medical equipment, as shown and described.

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

(21) **Appl. No.:** **29/145,145**

(22) **Filed:** **Jul. 16, 2001**

(30) **Foreign Application Priority Data**

Jan. 22, 2001 (SE) ..... 01-0136

(51) **LOC (7) Cl.** ..... **24-02**

(52) **U.S. Cl.** ..... **D24/129**

(58) **Field of Search** ..... D24/129, 110.6;  
D23/245, 244; 604/905, 247, 248, 256,  
323, 326, 537, 335; 251/310

**DESCRIPTION**

FIG. 1 is an exploded perspective view of a combined connector with valve and non-return valve for medical equipment showing my new design;

FIG. 2 is a perspective view of the connector with valve with the non-return valve removed;

FIG. 3 is a top plan view thereof;

FIG. 4 is a right side elevational view thereof;

FIG. 5 is a bottom plan view thereof;

FIG. 6 is a left side elevational view thereof;

FIG. 7 is a rear elevational view thereof;

FIG. 8 is a front elevational view thereof;

FIG. 9 is a perspective view of the non-return valve, with the connector with valve removed;

FIG. 10 is a left side elevational view thereof;

FIG. 11 is a front elevational view thereof;

FIG. 12 is a top plan view thereof;

FIG. 13 is a right side elevational view thereof;

FIG. 14 is a rear elevational view thereof; and,

FIG. 15 is a bottom plan view thereof.

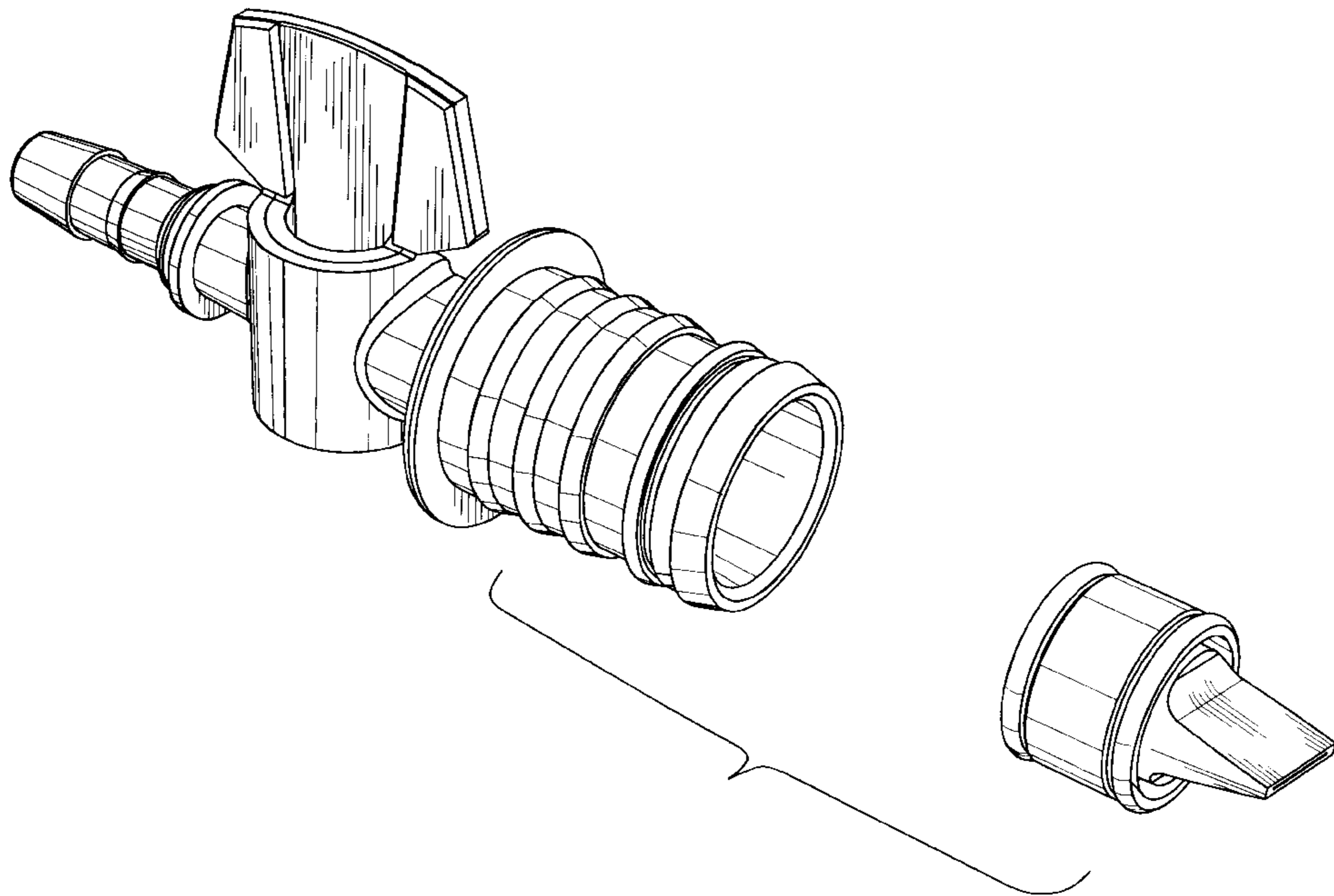
(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D198,499	S	*	6/1964	Harautuneian	.....	D24/129
D257,286	S	*	10/1980	Folkman	.....	D24/129
4,436,519	A	*	3/1984	O'Neill	.....	604/256
5,330,437	A	*	7/1994	Durman	.....	604/256
5,403,290	A	*	4/1995	Noble	.....	604/905
5,752,938	A	*	5/1998	Flatland et al.	.....	604/256
5,897,527	A	*	4/1999	Tsukada	.....	604/82
5,957,898	A	*	9/1999	Jepson et al.	.....	604/533
6,044,859	A	*	4/2000	Davis	.....	604/247

\* cited by examiner

**1 Claim, 6 Drawing Sheets**



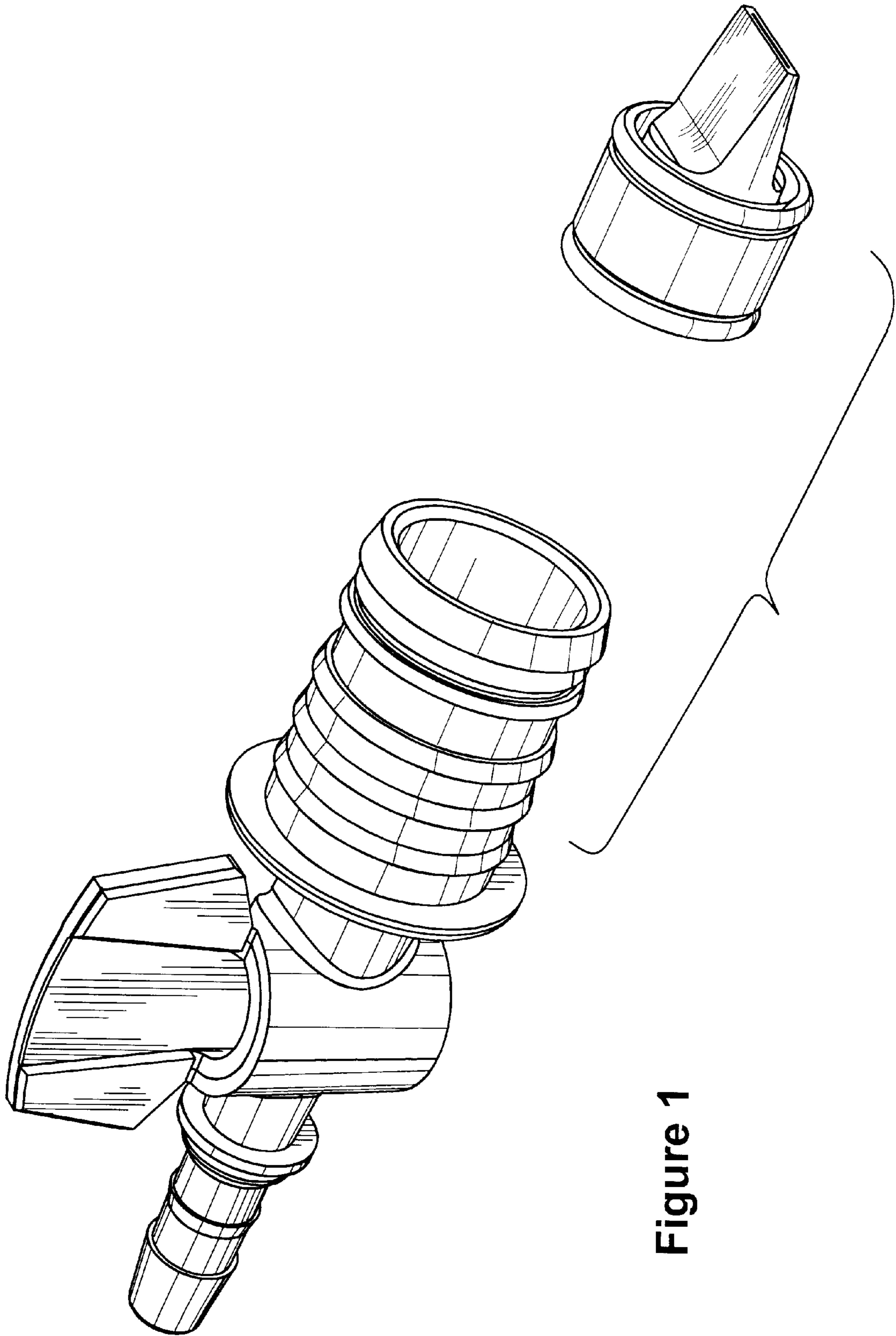


Figure 1

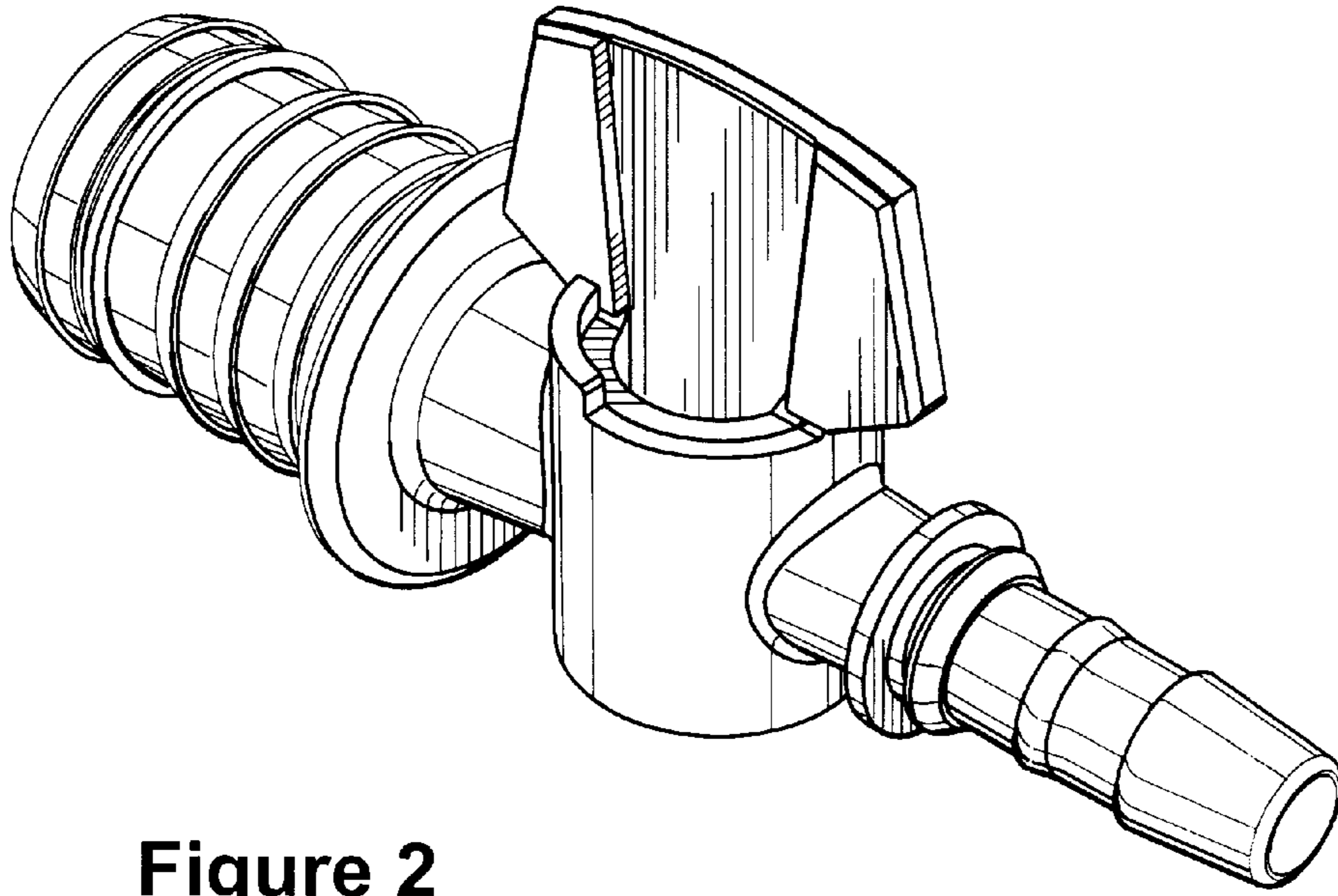


Figure 2

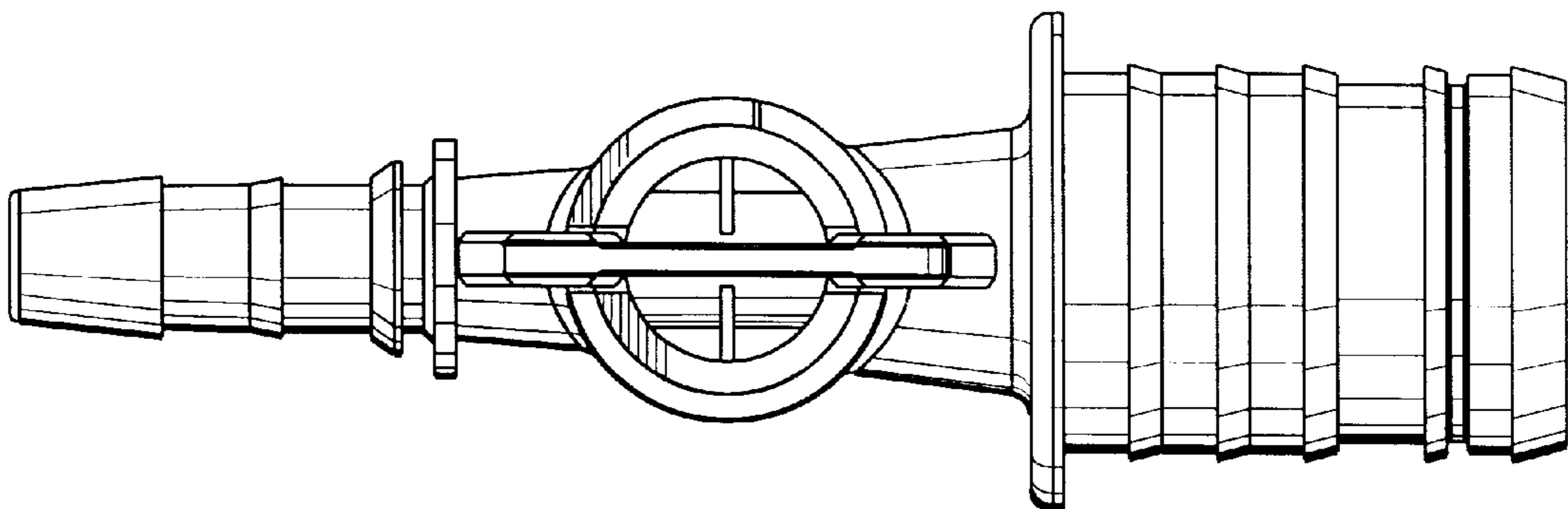


Figure 3

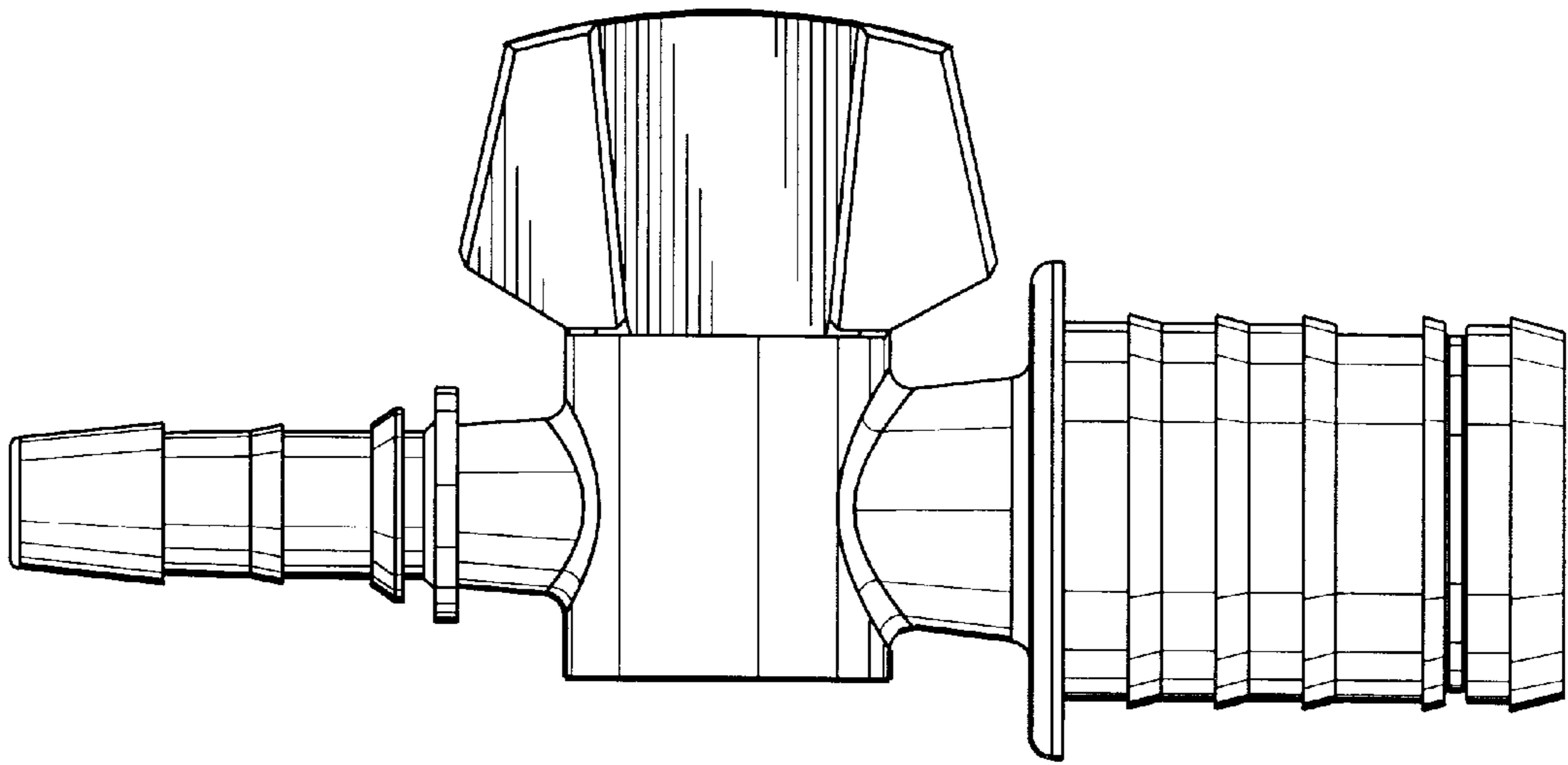


Figure 4

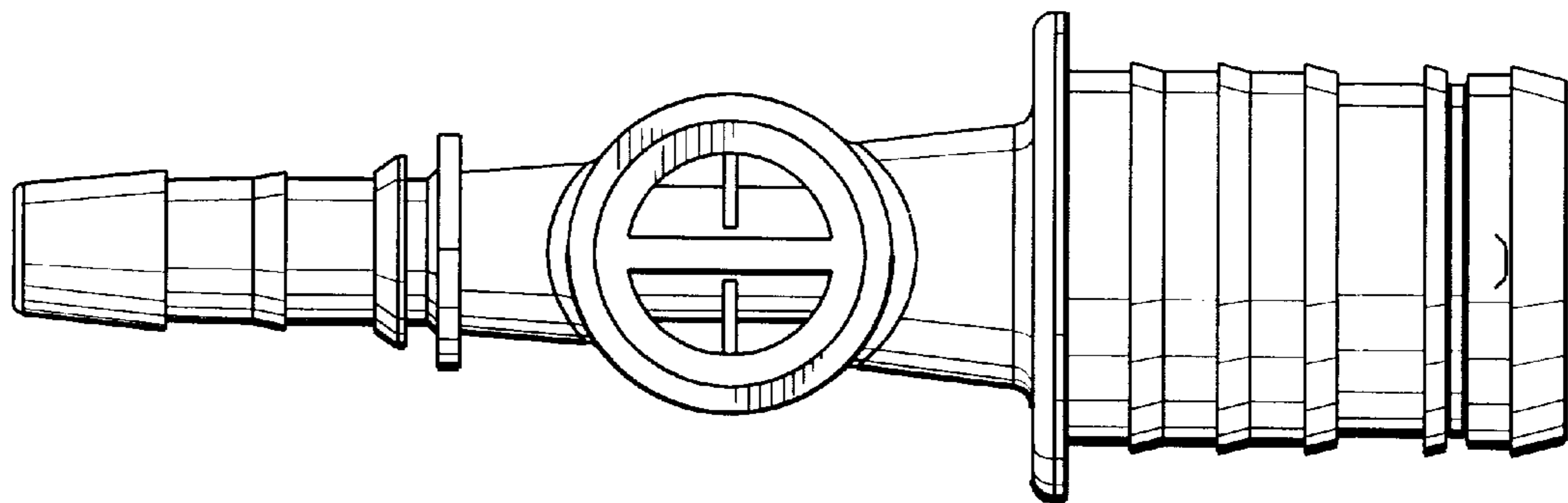


Figure 5

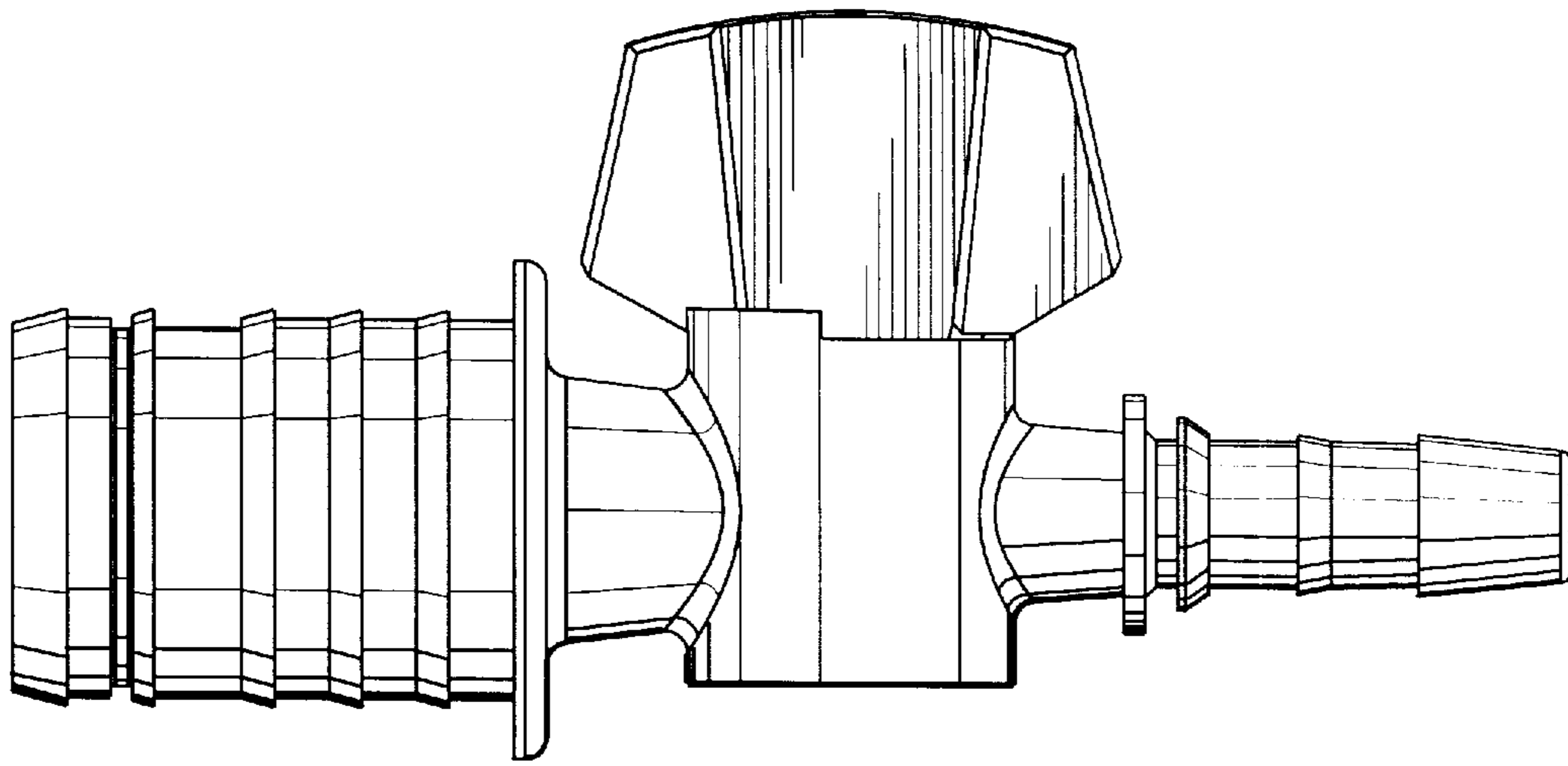


Figure 6

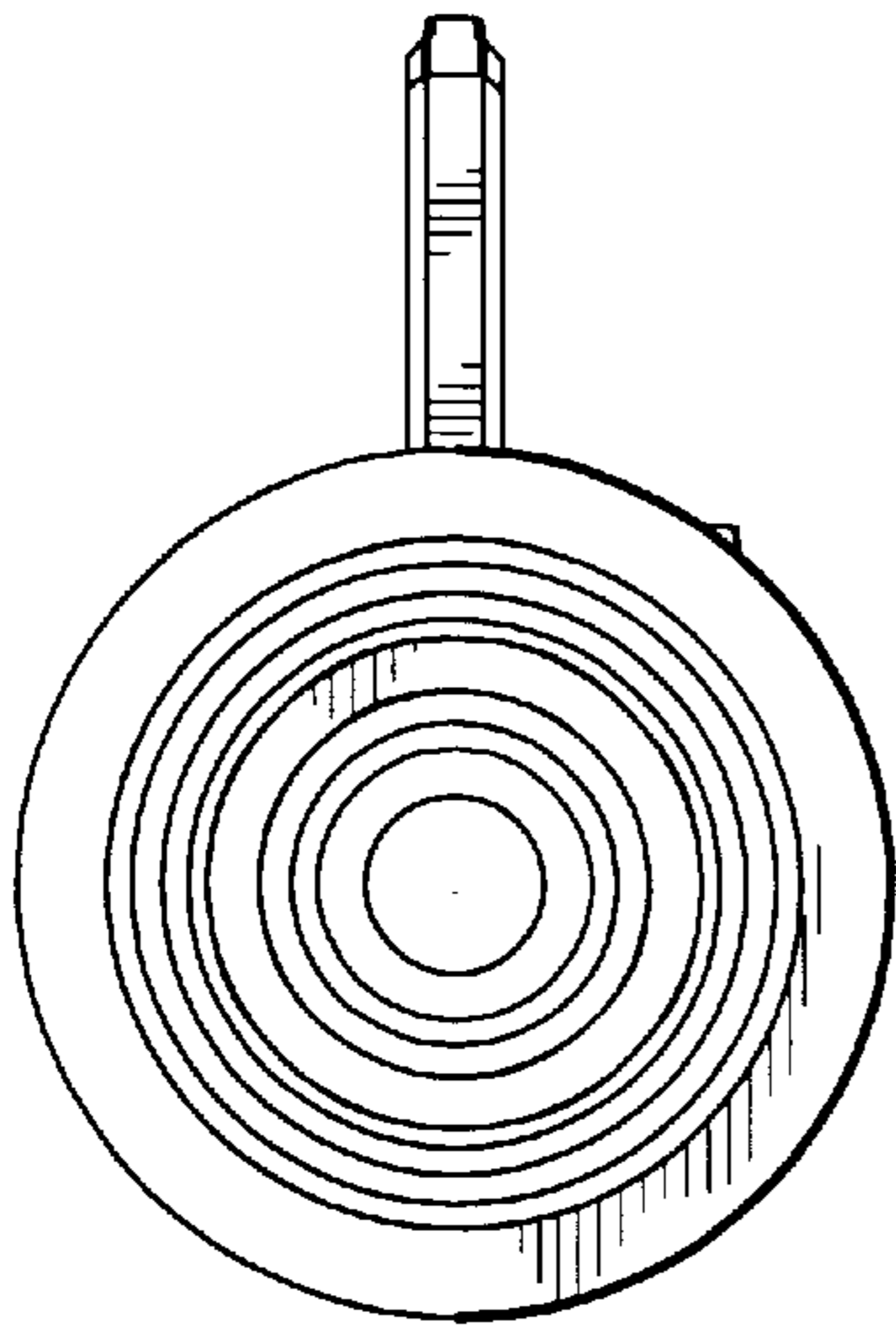


Figure 7

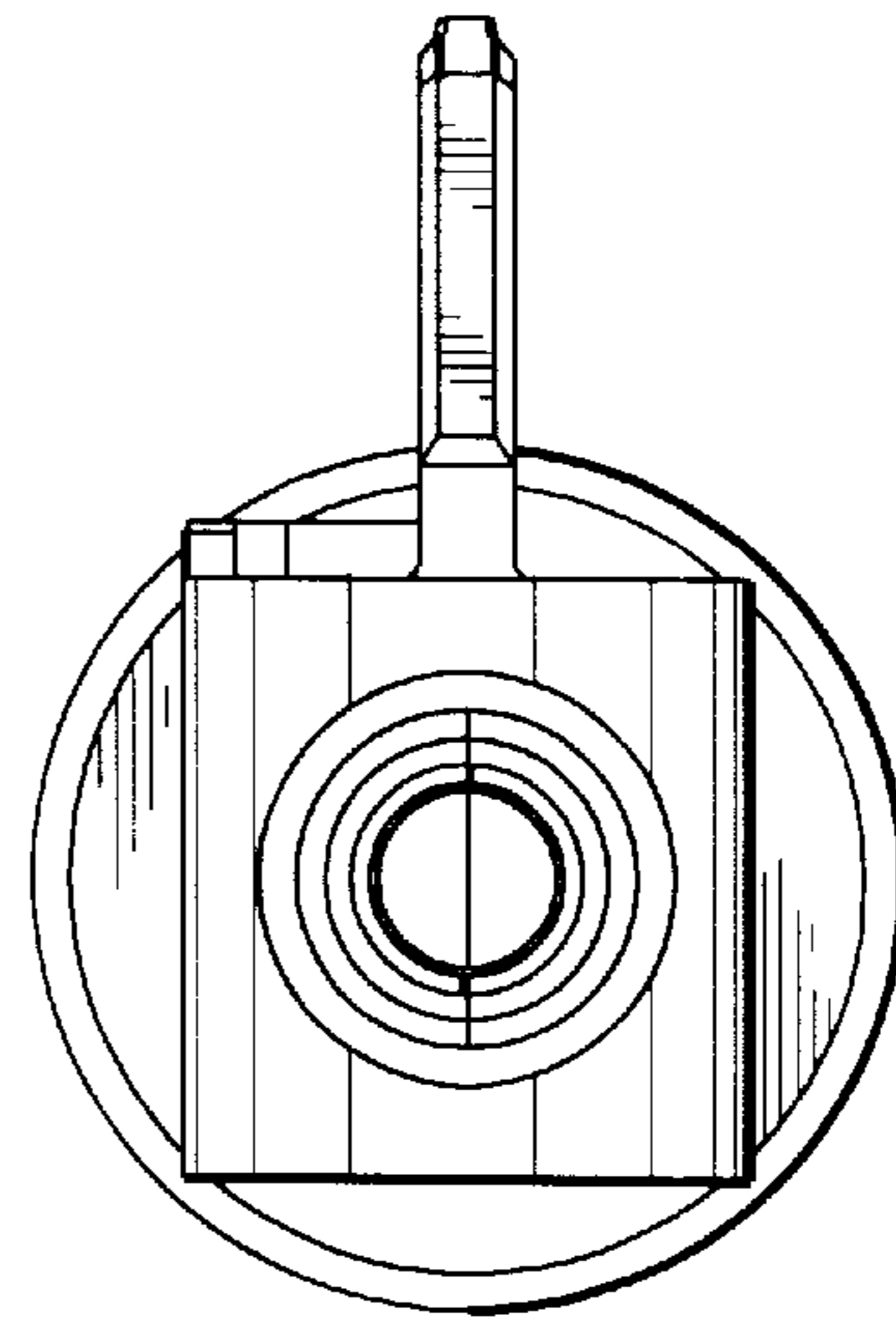


Figure 8

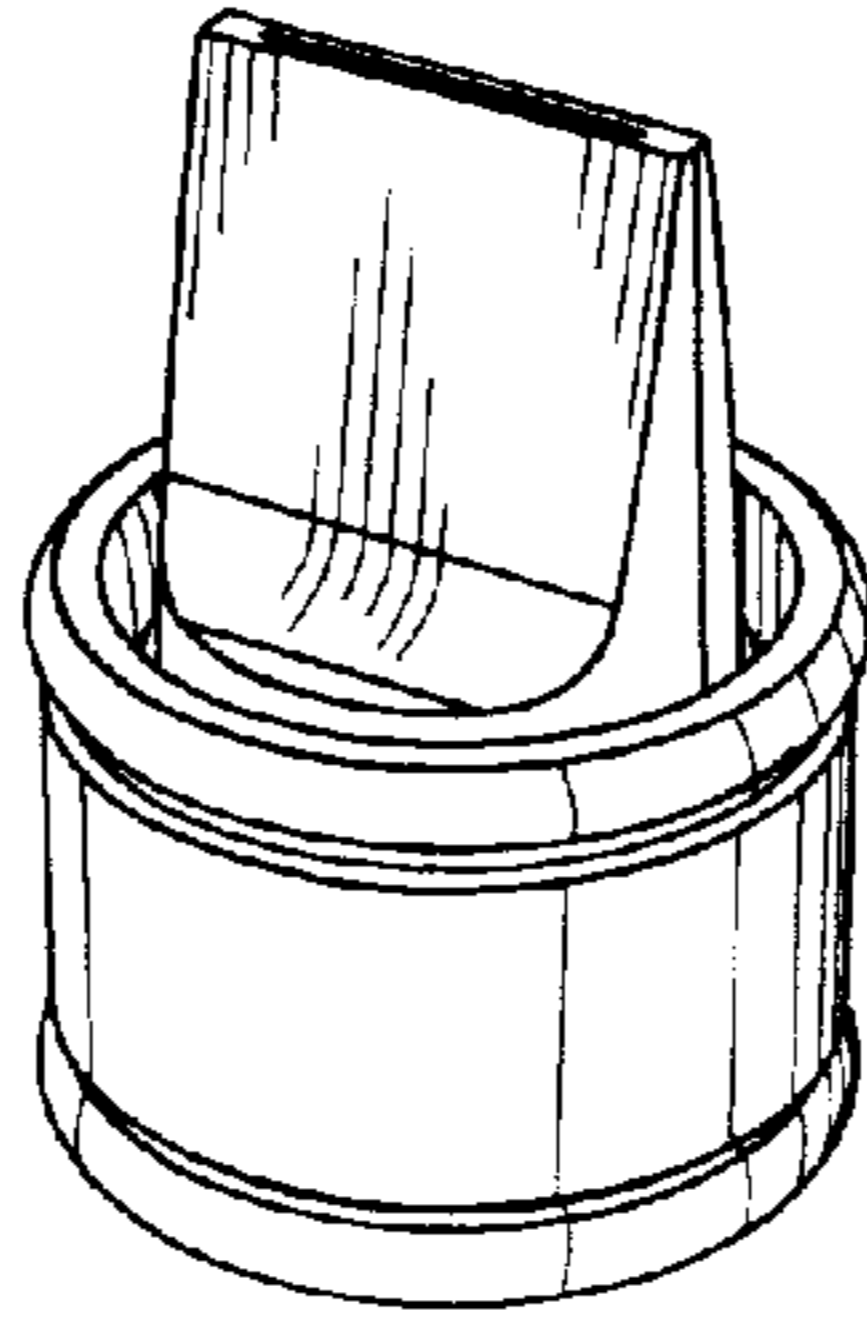


Figure 9

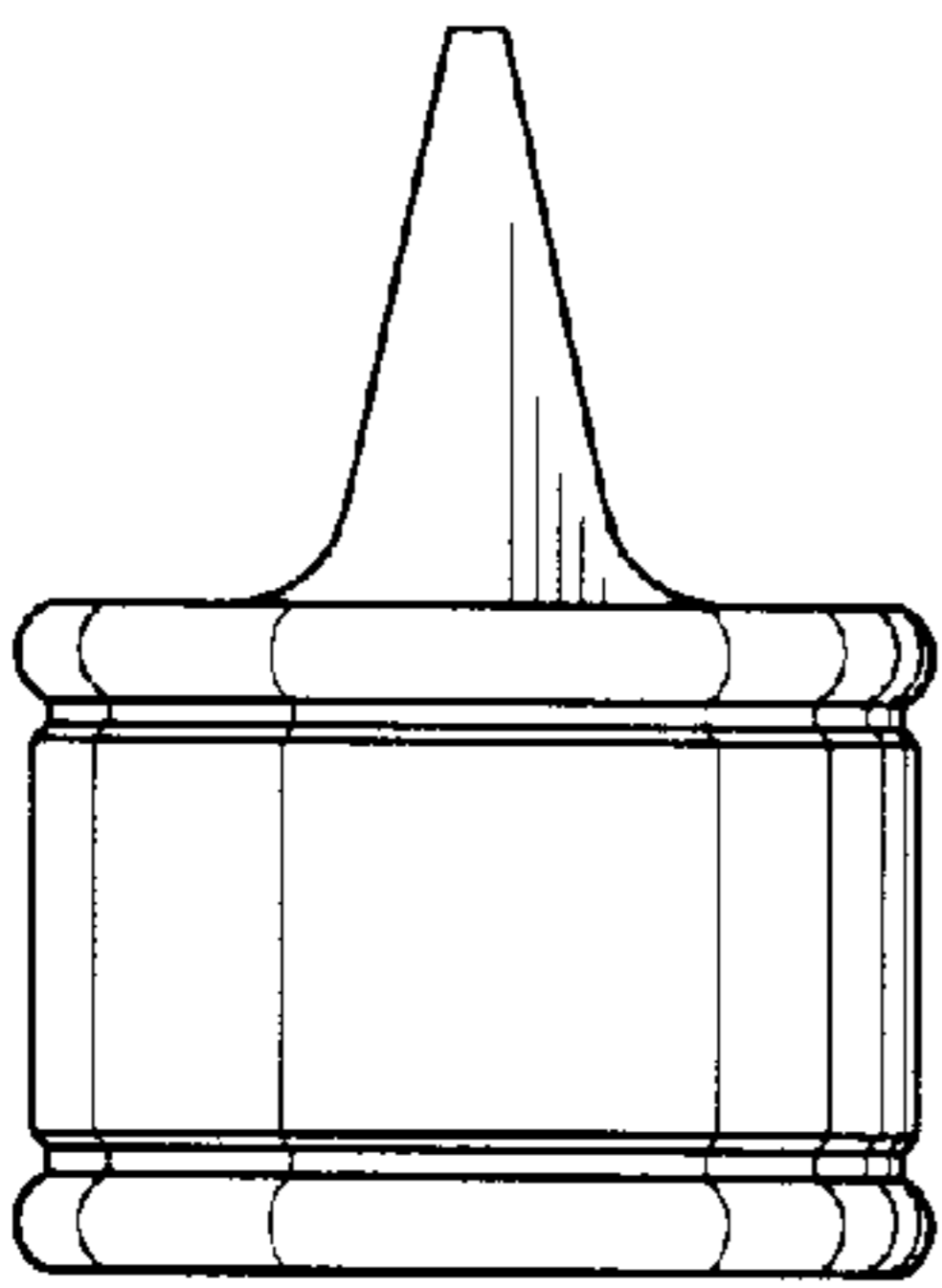


Figure 10

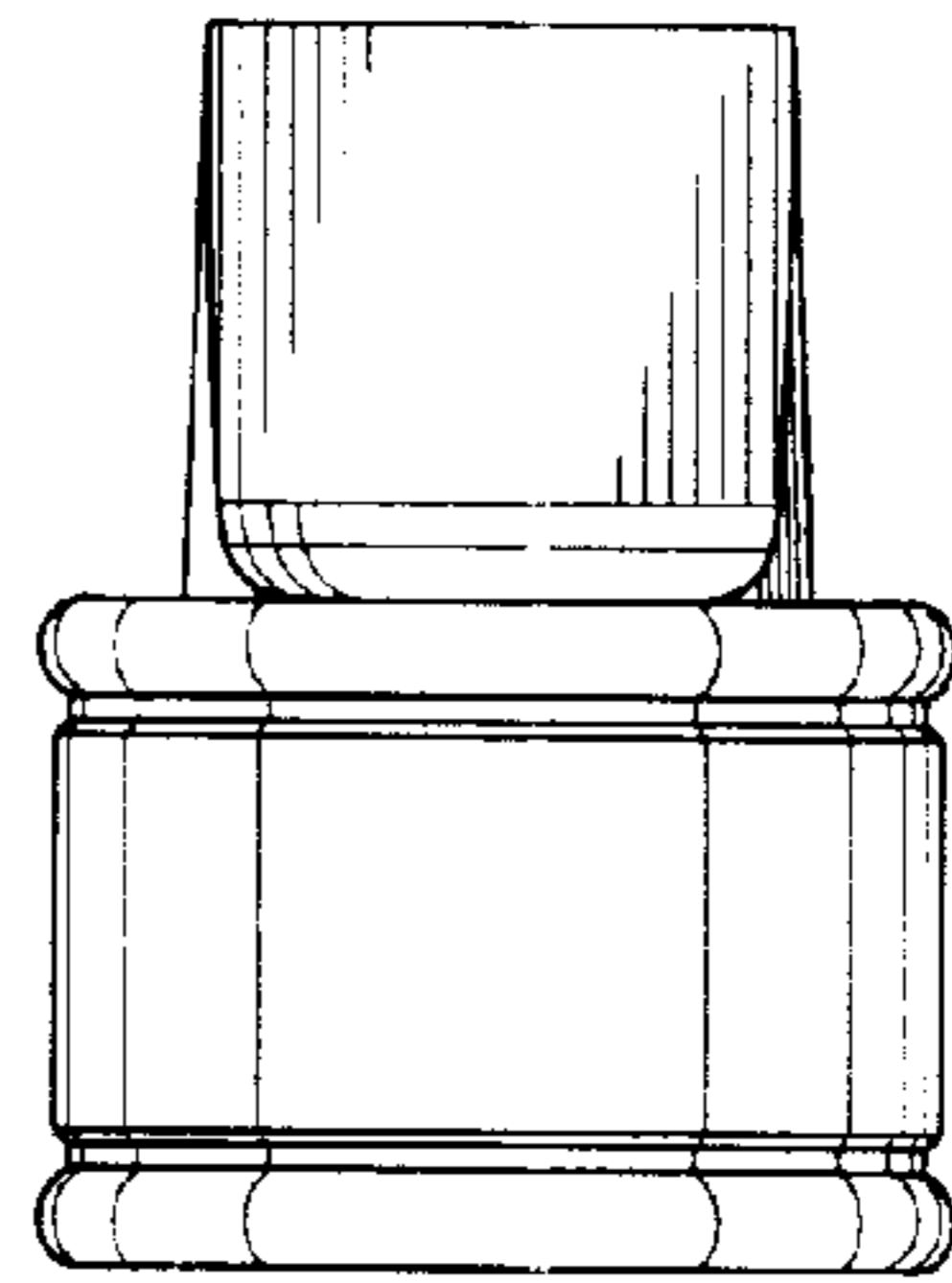


Figure 11

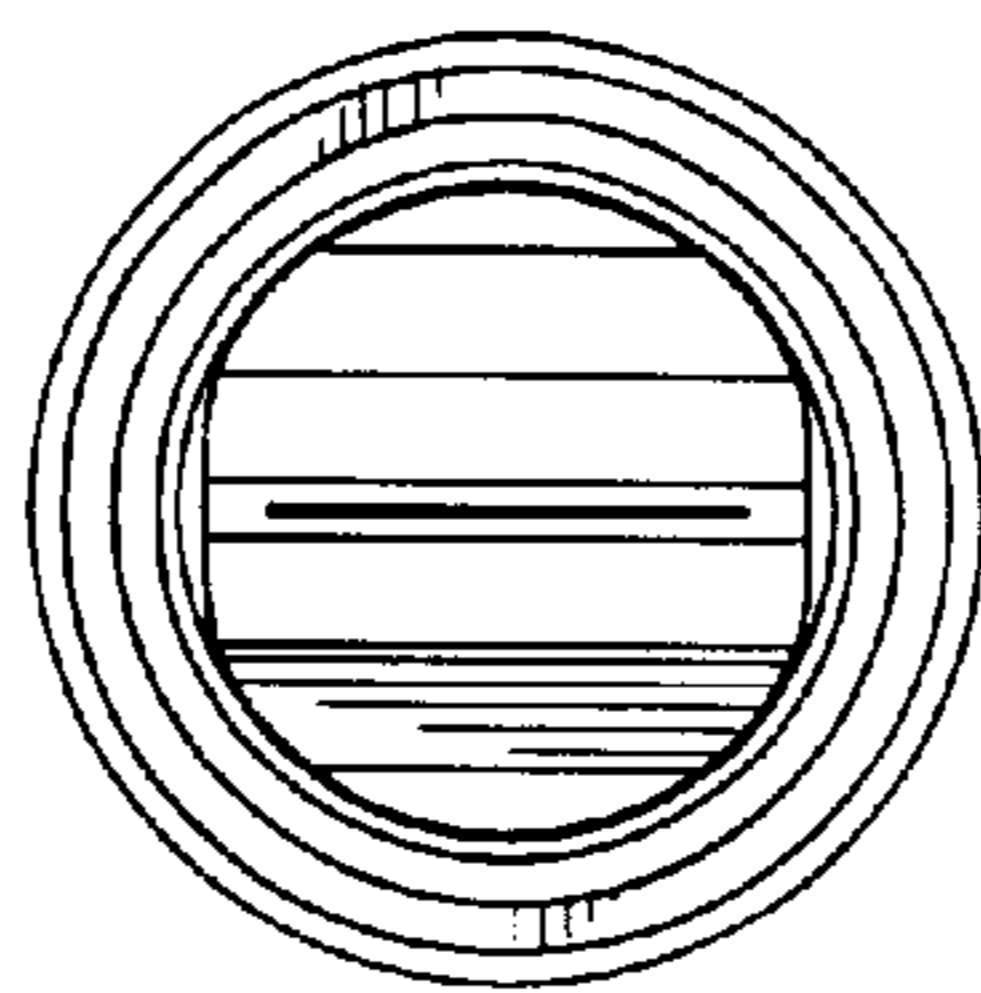


Figure 12

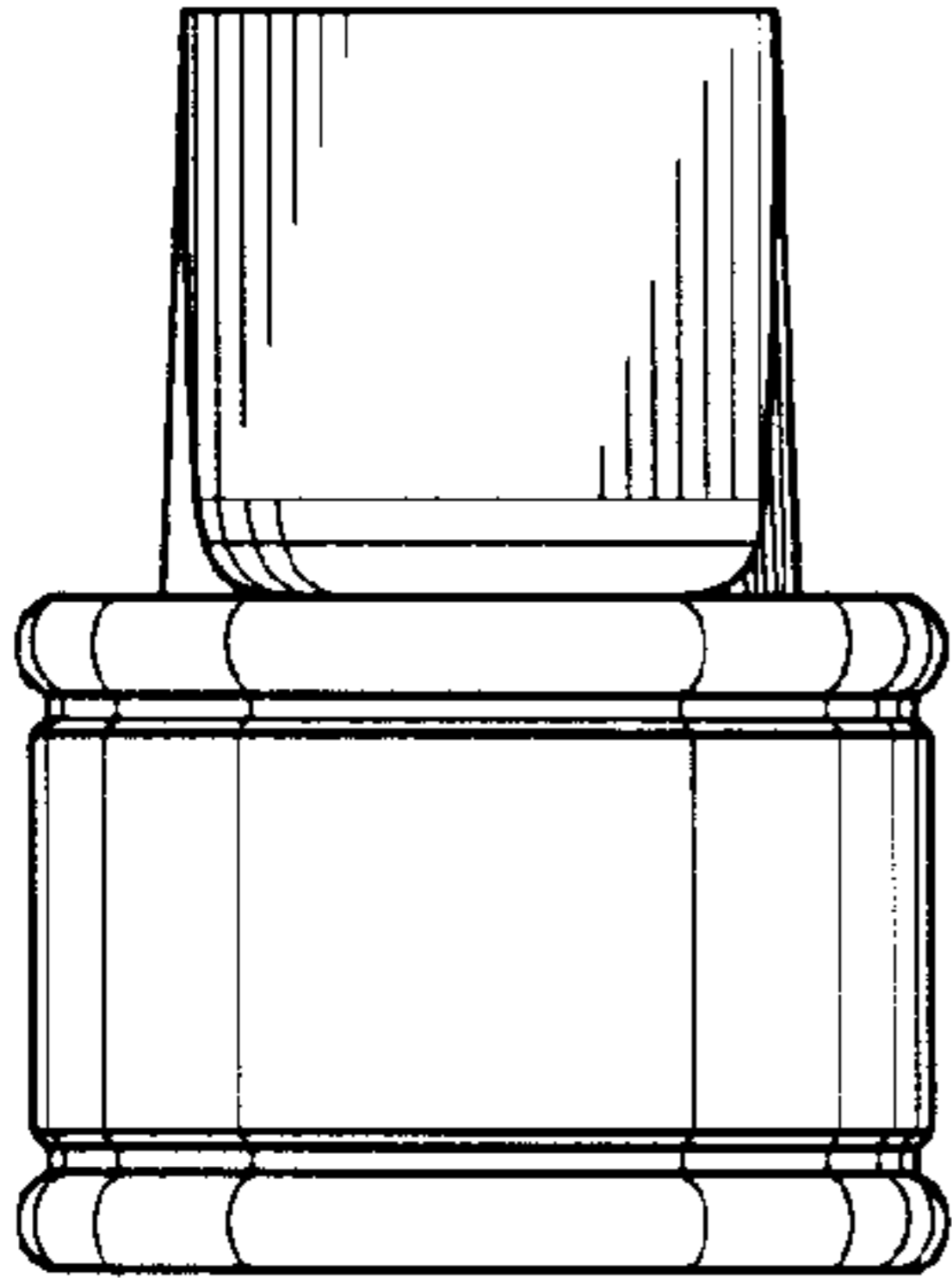


Figure 13

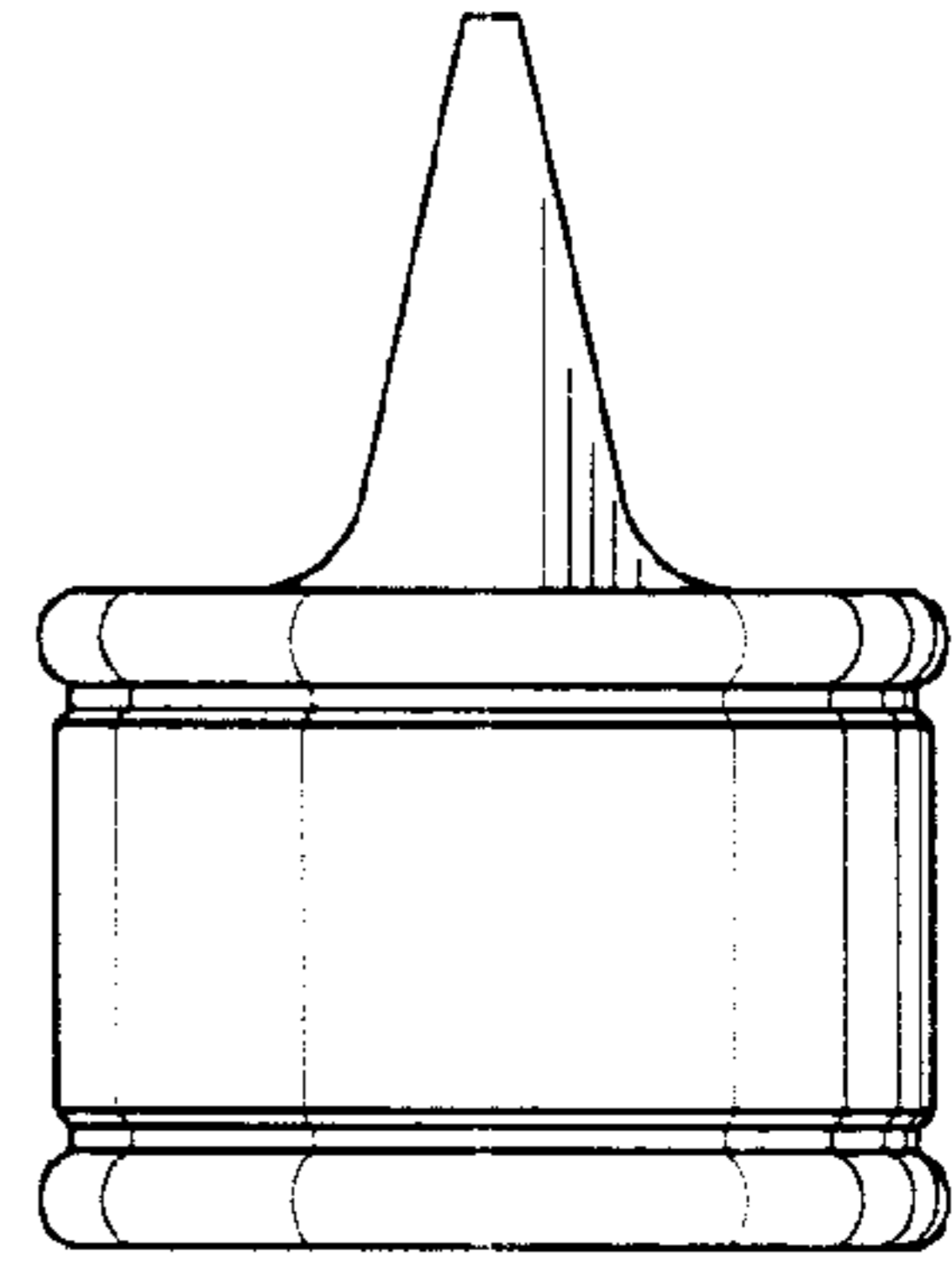


Figure 14

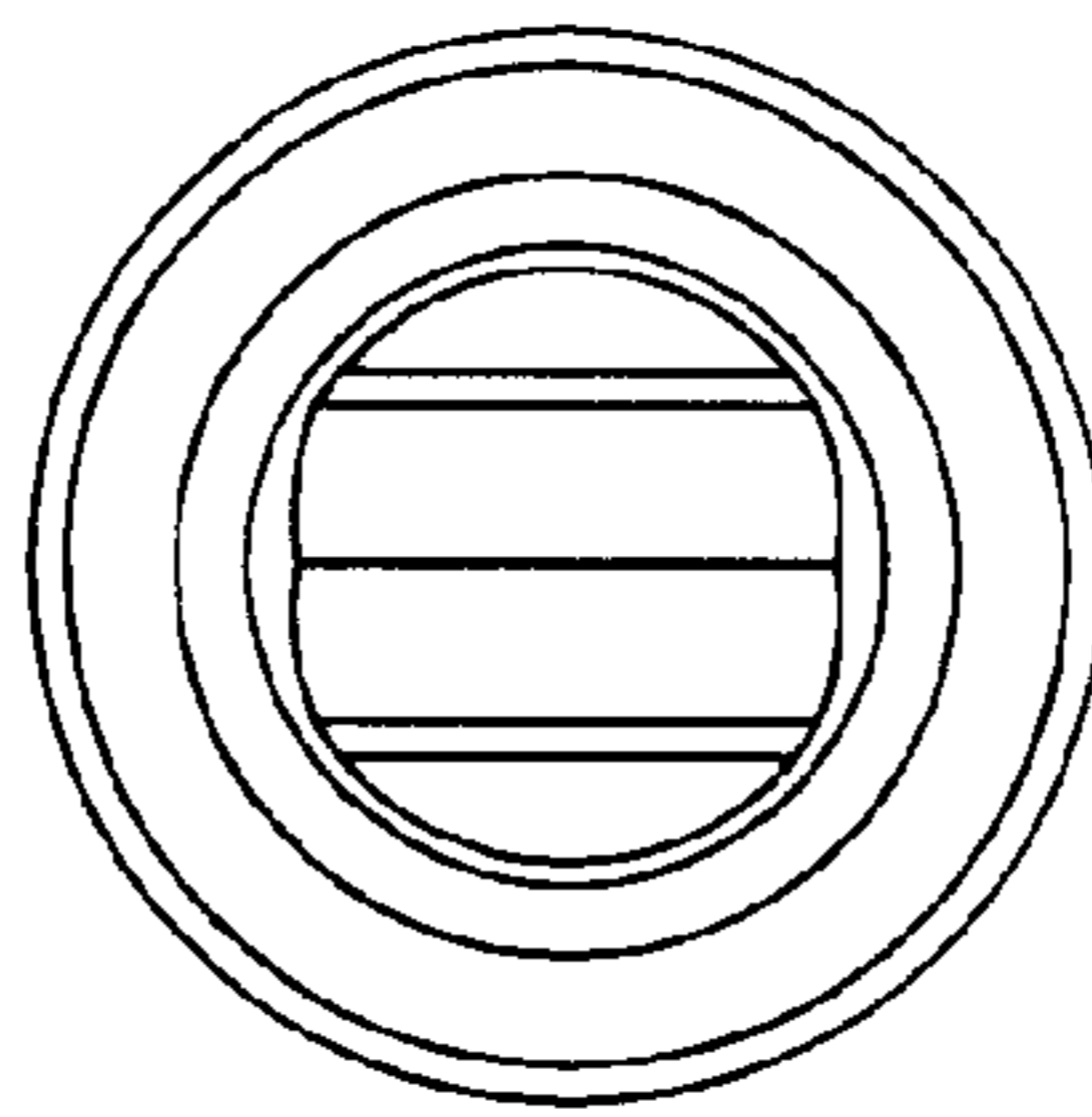


Figure 15