



US00D454623S

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

(10) **Patent No.:** **US D454,623 S**

(45) **Date of Patent:** **\*\* Mar. 19, 2002**

(54) **FLEXIBLE JOINT**

(75) **Inventors:** **Taichi Sato**, Nagaokakyo; **Yasushi Fujita**, Hyogo-ken, both of (JP)

(73) **Assignee:** **Waterworks Technology Development Organization Co., Ltd.**, Osaka (JP)

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

(21) **Appl. No.:** **29/121,220**

(22) **Filed:** **Apr. 4, 2000**

(51) **LOC (7) Cl.** ..... **23-01**

(52) **U.S. Cl.** ..... **D23/262; D8/382**

(58) **Field of Search** ..... **D8/382; D23/262-266; 403/169, 170, 173-178, 205, 300, 305, 306, 312; 285/223, 235**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

222,867	A	*	12/1879	Chamberlin	.....	285/223
D34,101	S	*	2/1901	Griffiths	.....	D23/262
D217,550	S	*	5/1970	Campbell	.....	D23/266
4,332,404	A	*	6/1982	Huffman	.....	285/223
5,133,578	A	*	7/1992	Whightsil, Sr. et al.	....	285/143
D358,469	S	*	5/1995	Mongeon	.....	D24/129
D392,372	S	*	3/1998	Sato et al.	.....	D23/264
D424,916	S	*	5/2000	Sato et al.	.....	D8/382
D424,917	S	*	5/2000	Sato et al.	.....	D8/382
D424,918	S	*	5/2000	Sato et al.	.....	D8/382
D424,919	S	*	5/2000	Sato et al.	.....	D8/382
D424,920	S	*	5/2000	Sato et al.	.....	D8/382
D425,406	S	*	5/2000	Sato et al.	.....	D8/382
D425,782	S	*	5/2000	Sato et al.	.....	D8/382

D426,143	S	*	6/2000	Sato et al.	.....	D8/382
D426,144	S	*	6/2000	Sato et al.	.....	D8/382
D426,145	S	*	6/2000	Sato et al.	.....	D8/382
D426,455	S	*	6/2000	Sato et al.	.....	D8/382
D426,456	S	*	6/2000	Sato et al.	.....	D8/382
D426,457	S	*	6/2000	Sato et al.	.....	D8/382
D427,508	S	*	7/2000	Sato et al.	.....	D8/382
D430,482	S	*	9/2000	Stout, Jr.	.....	D8/382

**FOREIGN PATENT DOCUMENTS**

JP 938464 11/1995

**OTHER PUBLICATIONS**

Analog 1 of 938464, Japan, Nov. 8, 1995.

\* cited by examiner

*Primary Examiner*—Alan P. Douglas

*Assistant Examiner*—Clare E. Heflin

(74) *Attorney, Agent, or Firm*—Knobbe, Martens, Olson & Bear, LLP

(57) **CLAIM**

The ornamental design for the flexible joint, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of a flexible joint.  
FIG. 2 is a rear view of the flexible joint.  
FIG. 3 is a top plan view of the flexible joint.  
FIG. 4 is a bottom plan view of the flexible joint.  
FIG. 5 is a left side view of the flexible joint.  
FIG. 6 is a right side view of the flexible joint; and,  
FIG. 7 is a perspective view of the flexible joint.

**1 Claim, 3 Drawing Sheets**

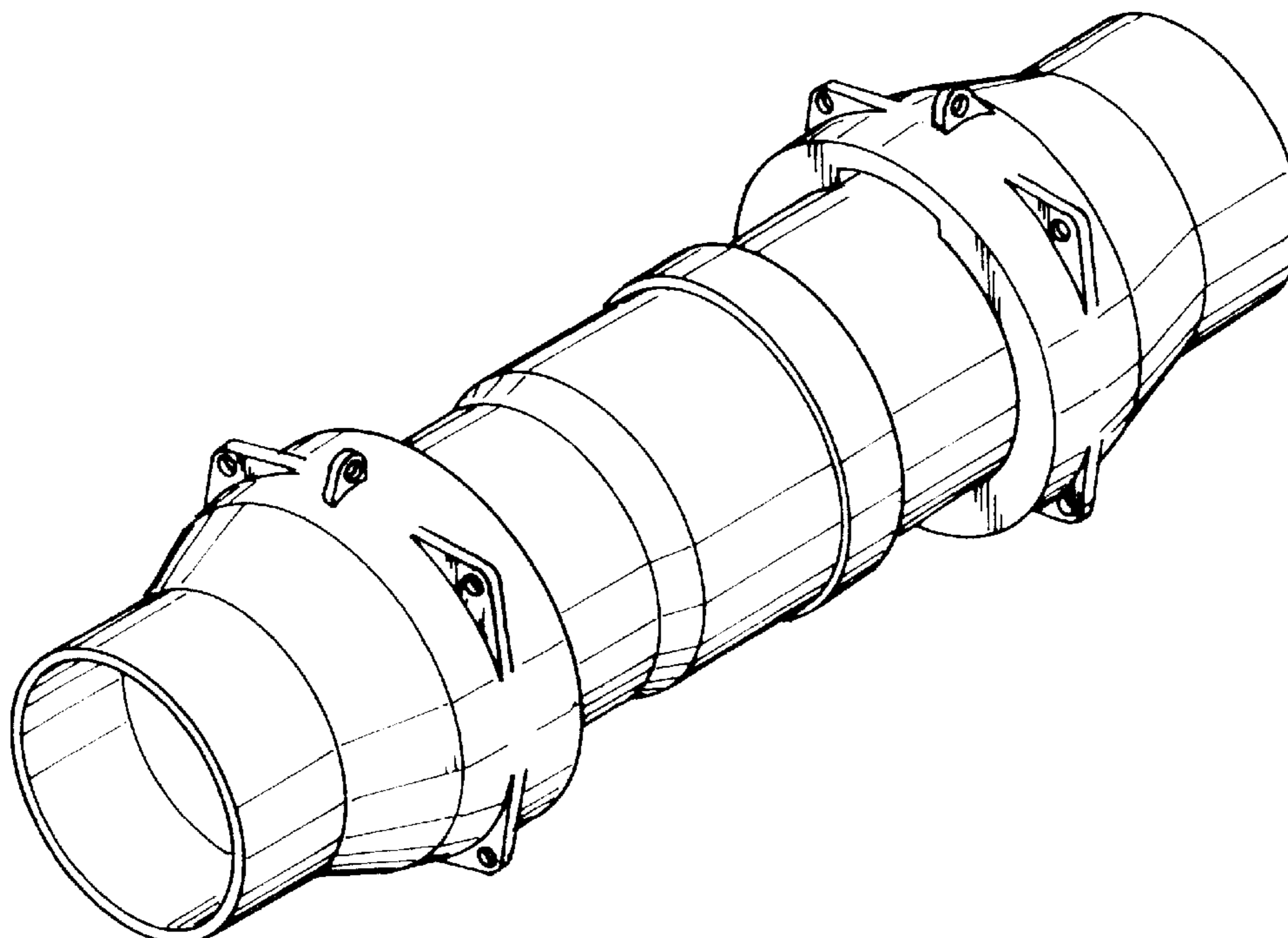


FIG.1

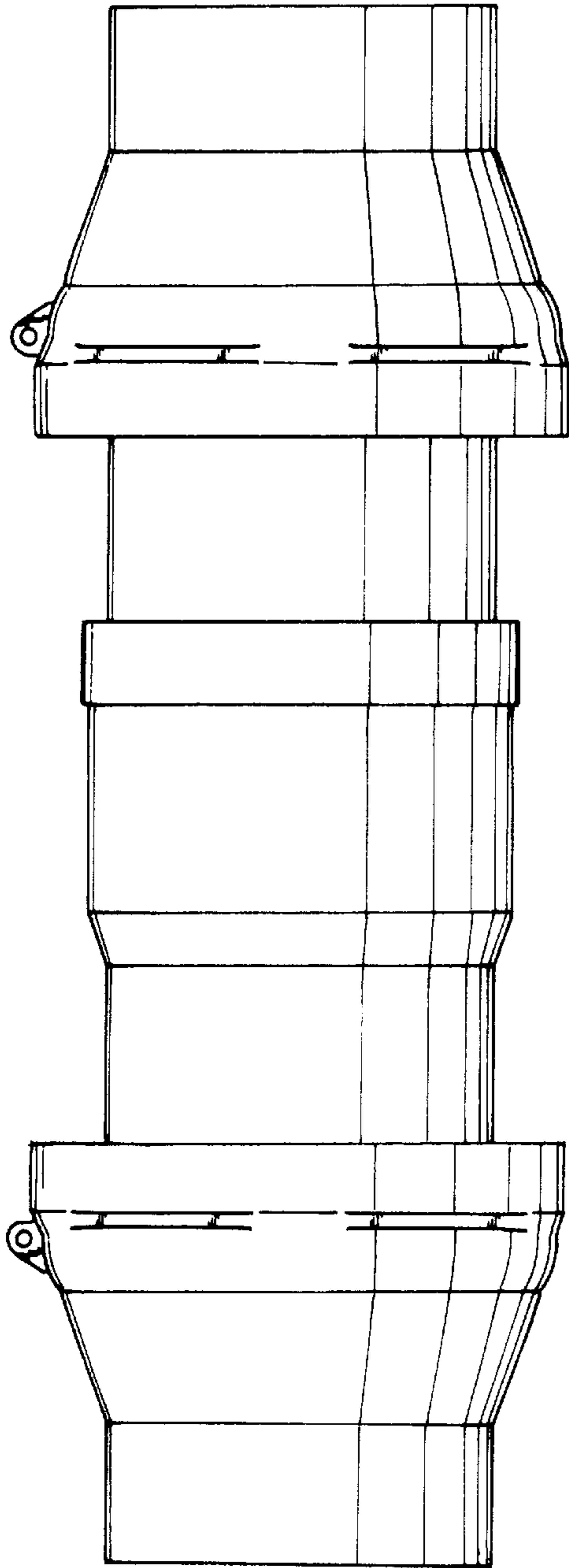


FIG.2

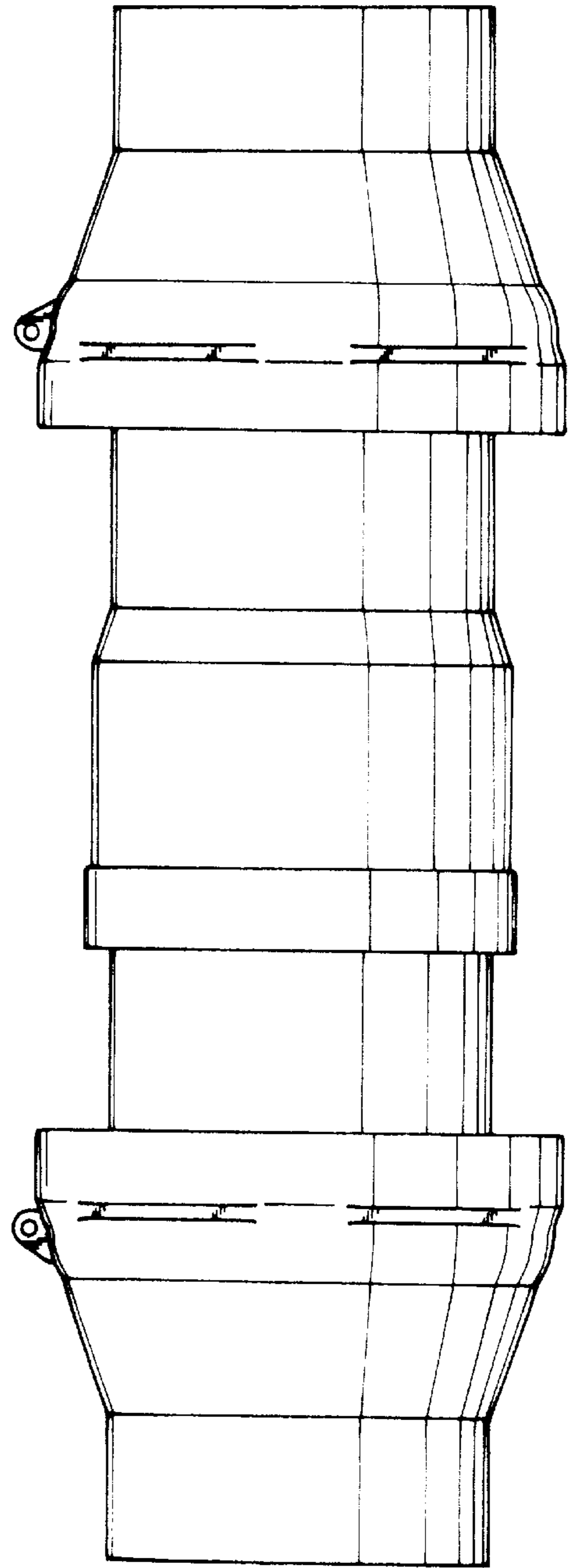


FIG. 3

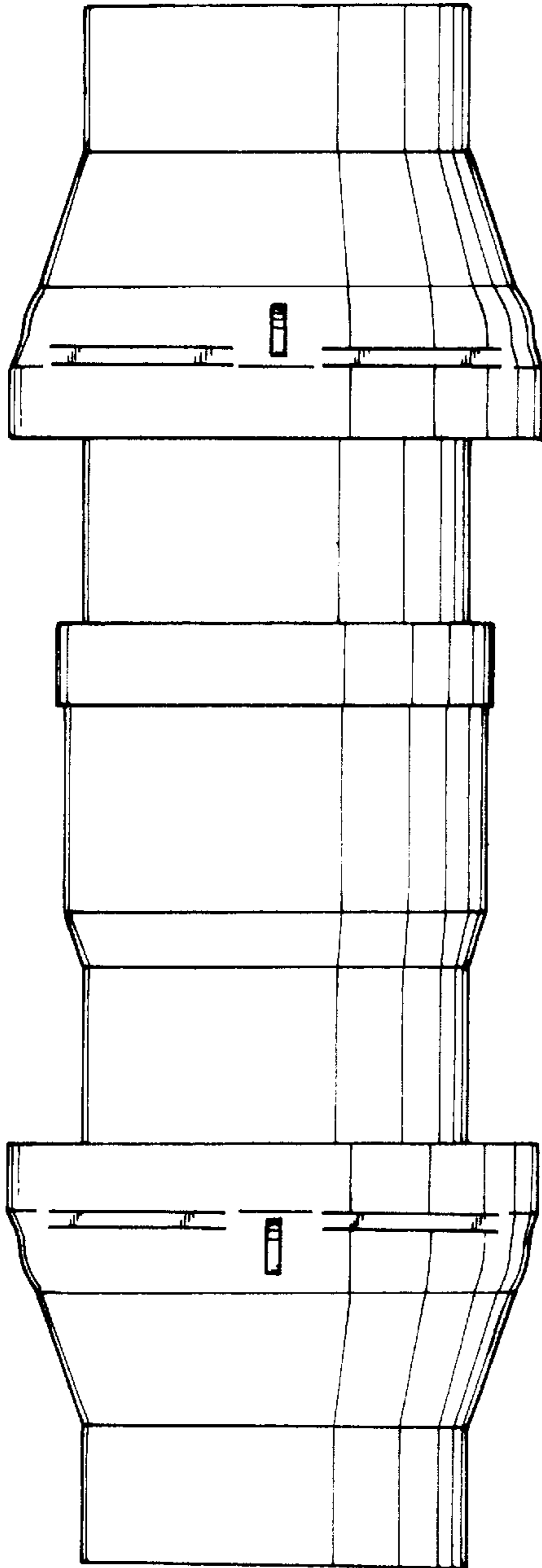


FIG. 4

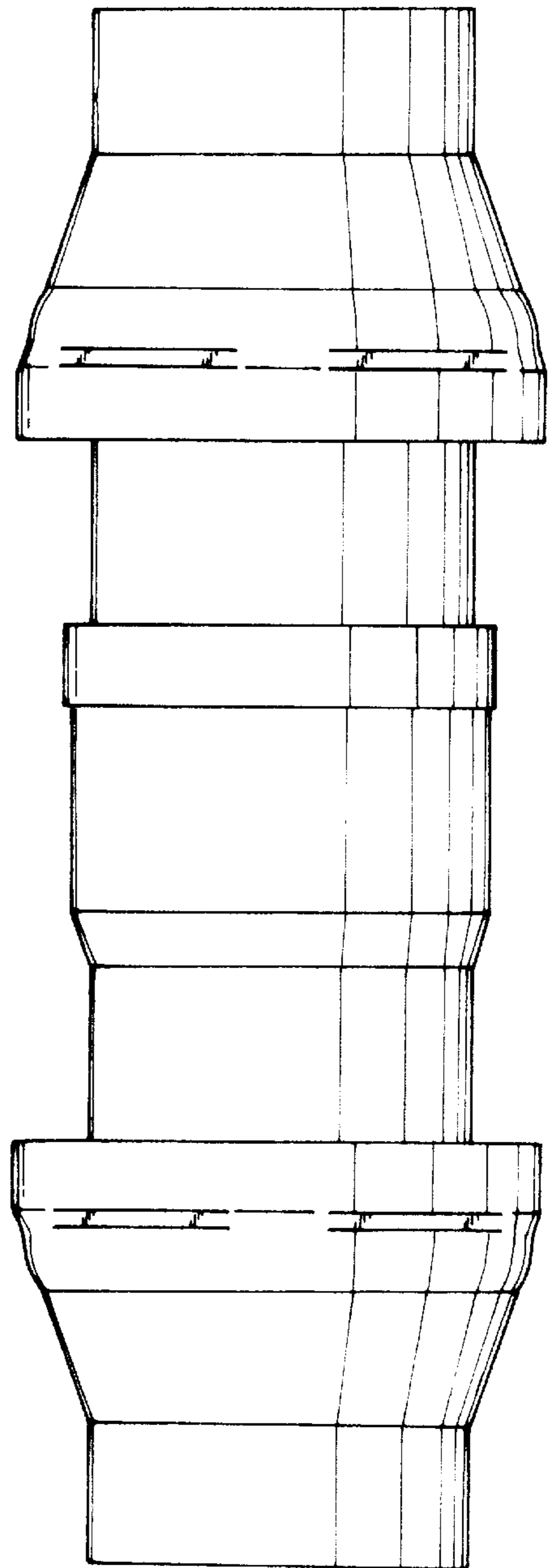


FIG. 5

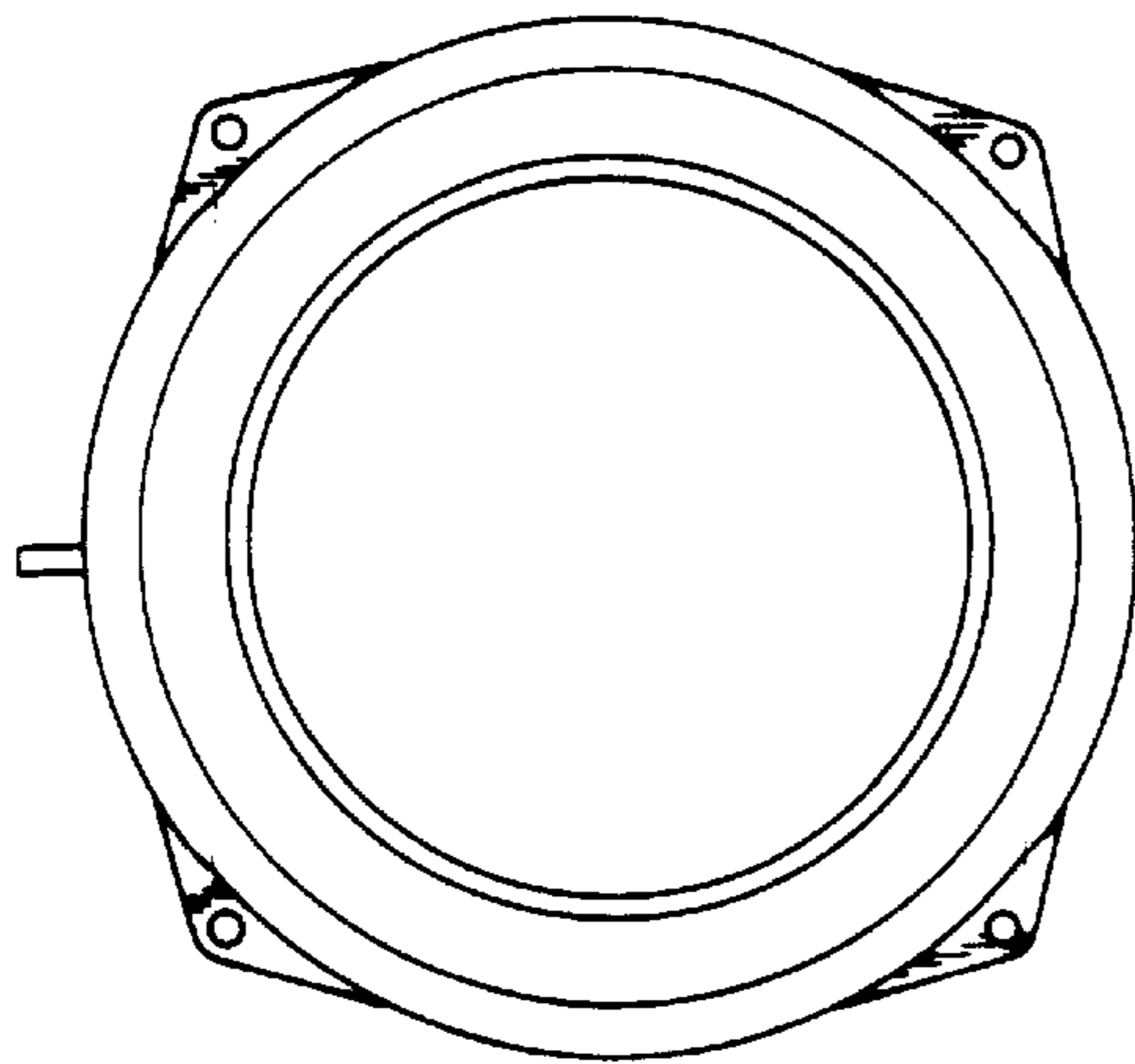


FIG. 6

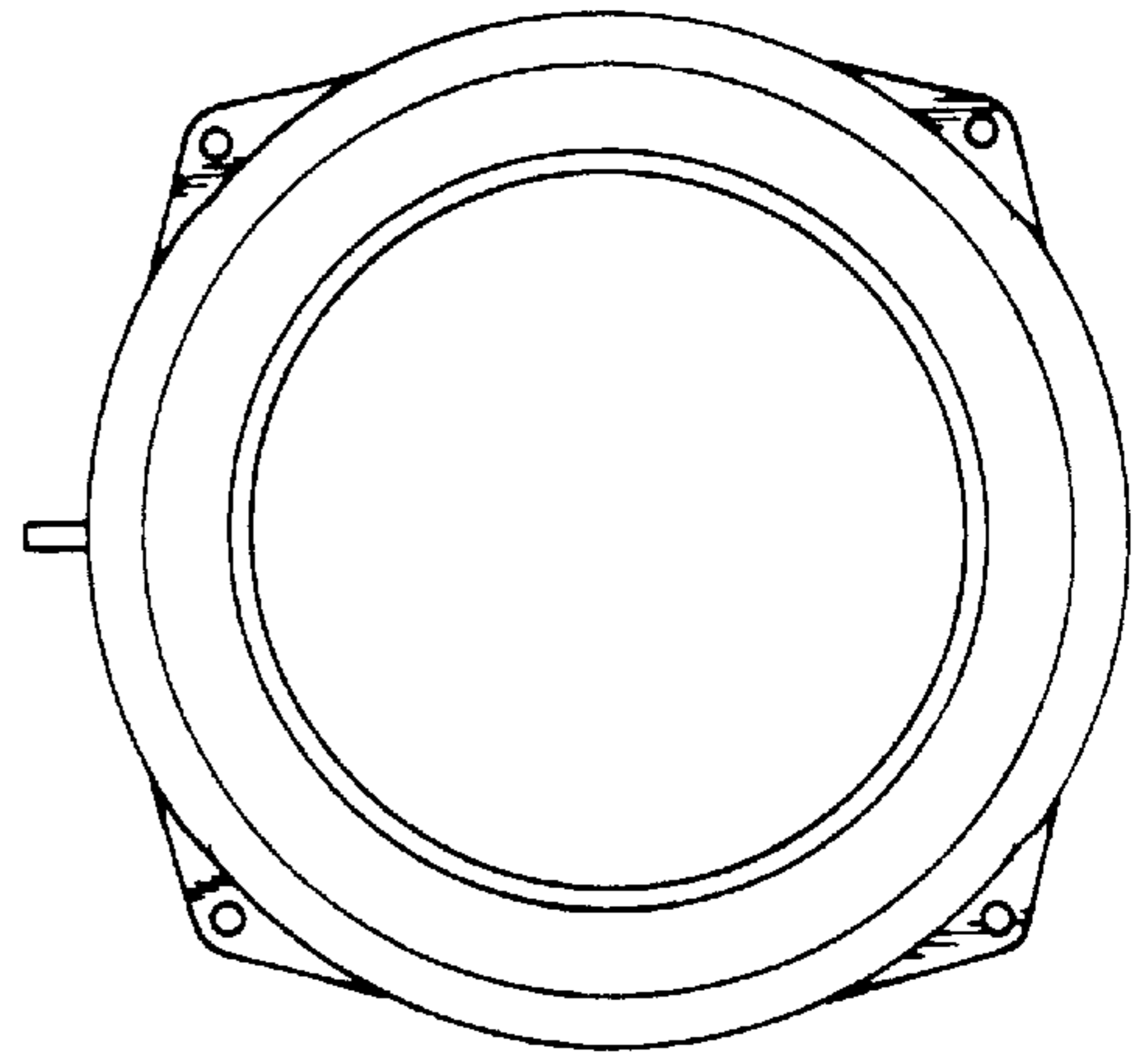


FIG. 7

