

[54] **COMBINED FLOW CONTROL VALVE AND NOZZLE**  
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 [\*\*] Term: **14 Years**  
 [21] Appl. No.: **255,525**  
 [22] Filed: **Oct. 7, 1988**

**Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 224,252, Jul. 26, 1988, and Ser. No. 224,253, Jul. 26, 1988, each is a continuation of Ser. No. 860,758, May 5, 1986, abandoned, and Ser. No. 860,759, May 5, 1986, abandoned, each is a continuation-in-part of Ser. No. 461,872, Jan. 28, 1983, Pat. No. D. 285,478, and Ser. No. 461,873, Jan. 28, 1983, Pat. No. D. 285,479.

[52] **U.S. Cl.** ..... **D23/245**

[58] **Field of Search** ..... **D23/223-254;**  
 239/396, 569, 575, 589

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

D. 183,042	6/1958	Fuglie et al. ....	D91/3
D. 254,146	2/1980	Koenig .....	D23/19
D. 254,322	2/1980	Koenig .....	D23/19
D. 285,478	9/1986	Hengesbach .....	D23/19
D. 285,479	9/1986	Hengesbach .....	D23/20
D. 288,229	2/1987	Beal et al. ....	D23/43
336,602	2/1886	Tomlinson .	
370,836	10/1887	Wilkins .	
511,728	12/1893	Deming .	
564,500	7/1896	Benedict et al. .	
676,526	6/1901	Anderson .	
915,694	3/1909	Pendergrass .	
949,489	2/1910	Mastin .	
1,605,617	11/1926	Ruemelin .	
1,743,537	1/1930	Freese .	
2,072,555	3/1937	Hengesbach et al. ....	122/144
2,157,269	5/1939	Richter .....	158/27.4
2,293,390	8/1942	Hengesbach .....	299/84
2,333,727	9/1945	Lucas .....	47/49
2,366,969	1/1945	Kiggins .....	299/140
2,421,103	5/1947	Wadsworth .....	285/209
2,421,104	5/1947	Wadsworth .....	285/97.5
2,564,938	8/1951	Warren .....	285/95
2,890,067	6/1959	Morin .....	285/166
2,929,406	3/1960	Anderson .....	137/615
3,116,882	1/1964	Vork .....	239/587
3,202,360	8/1965	O'Brien .....	239/119
3,319,893	5/1967	Rodgers et al. ....	239/393
3,475,039	10/1969	Ortloff .....	285/45

3,556,411	1/1971	Nord et al. ....	239/581
3,632,046	1/1972	Hengesbach .....	239/318
3,711,028	1/1973	Hengesbach .....	239/288.5
3,756,273	9/1973	Hengesbach .....	137/540
3,955,763	5/1976	Pyle et al. ....	239/119
4,035,004	7/1977	Hengesbach .....	285/166
4,206,877	6/1980	Hoza, III .....	239/524
4,449,696	5/1984	Hengesbach .....	251/231
4,629,121	12/1986	Hengesbach .....	239/119

**FOREIGN PATENT DOCUMENTS**

874866	7/1971	Canada .
937262	11/1973	Canada .
952559	8/1974	Canada .
998716	10/1976	Canada .
1029422	4/1978	Canada .
1040236	10/1978	Canada .
1045657	1/1979	Canada .
2266070	10/1976	France .

**OTHER PUBLICATIONS**

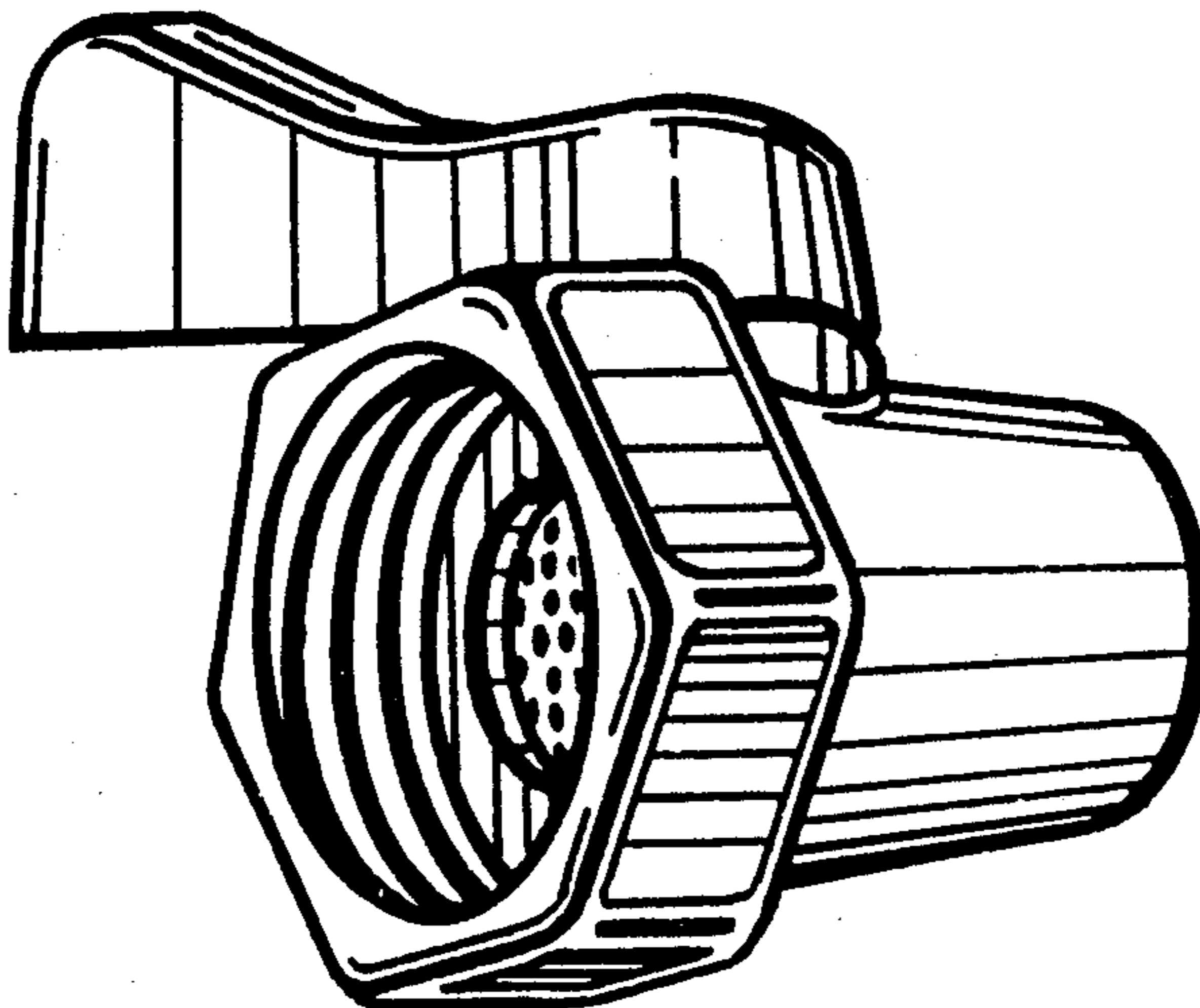
Brochure, Tri-Con, Inc., 4 pages, dated 1/1/1977, entitled: We Make the System.  
 Brochure, Spraying Systems Co., Catalog 27, pp. 75-79, 1978, entitled: Spray Nozzles and Accessories.  
 Brochure, Spraying Systems Co., Bulletin 179F, 7 pages, 1971, entitled: Spray Nozzles, Spray Guns, Valves and Accessories.  
*Primary Examiner*—James R. Largen  
*Attorney, Agent, or Firm*—David A. Burge

[57] **CLAIM**

The ornamental design for a combined flow control valve and nozzle, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a combined flow control valve and nozzle embodying my new design; FIG. 2 is a left end elevational view thereof; FIG. 3 is a right end elevational view thereof; FIG. 4 is a top plan view thereof; FIG. 5 is a bottom plan view thereof; FIG. 6 is an enlarged cross-sectional view taken on line 6-6 of FIG. 4; FIG. 7 is another enlarged cross-sectional view thereof with the ball valve rotated 180 degrees from that shown in FIG. 6; and, FIG. 8 is a third enlarged cross-sectional view thereof with the ball valve rotated 90 degrees from that shown in FIG. 7.



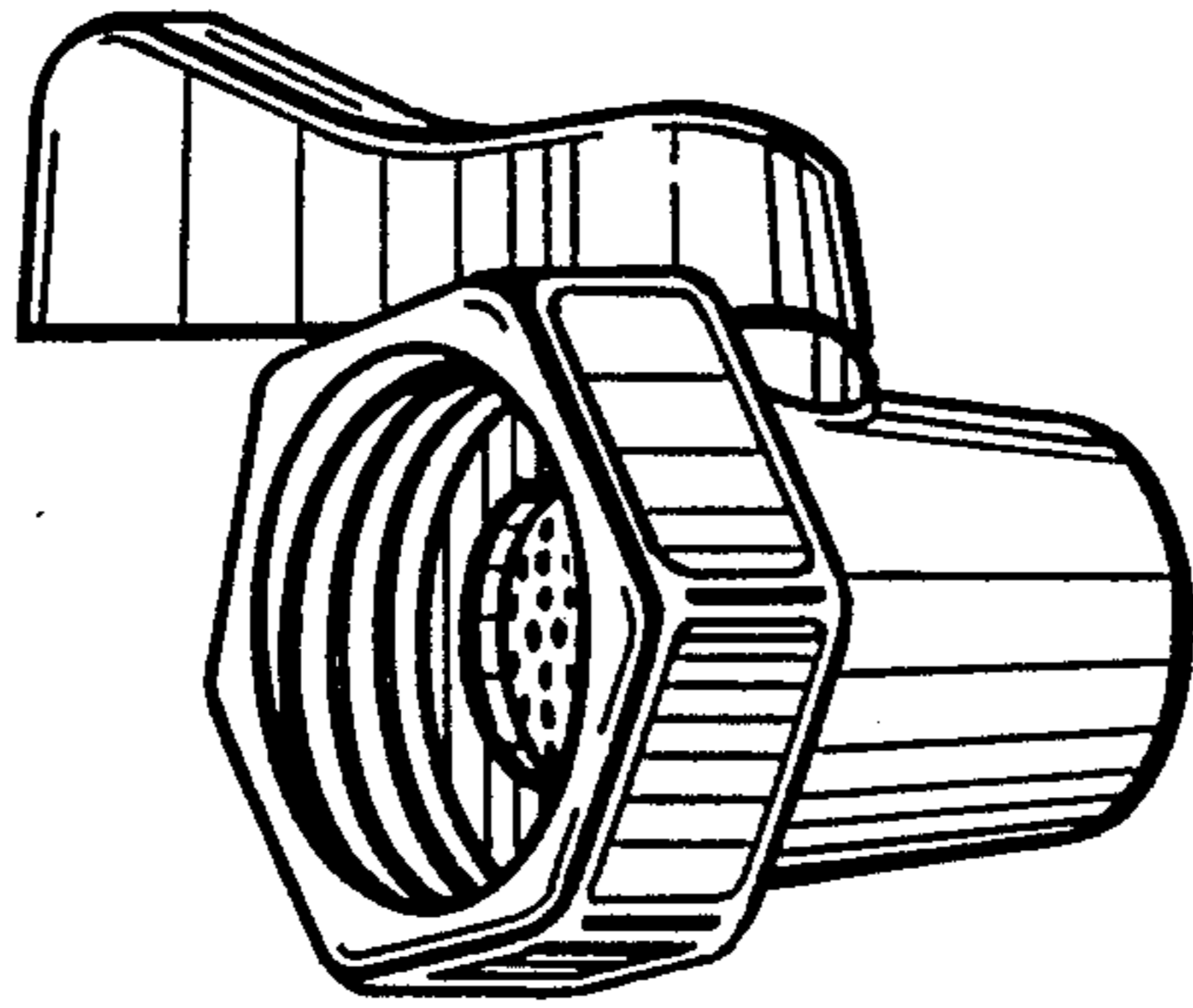


FIG. 1

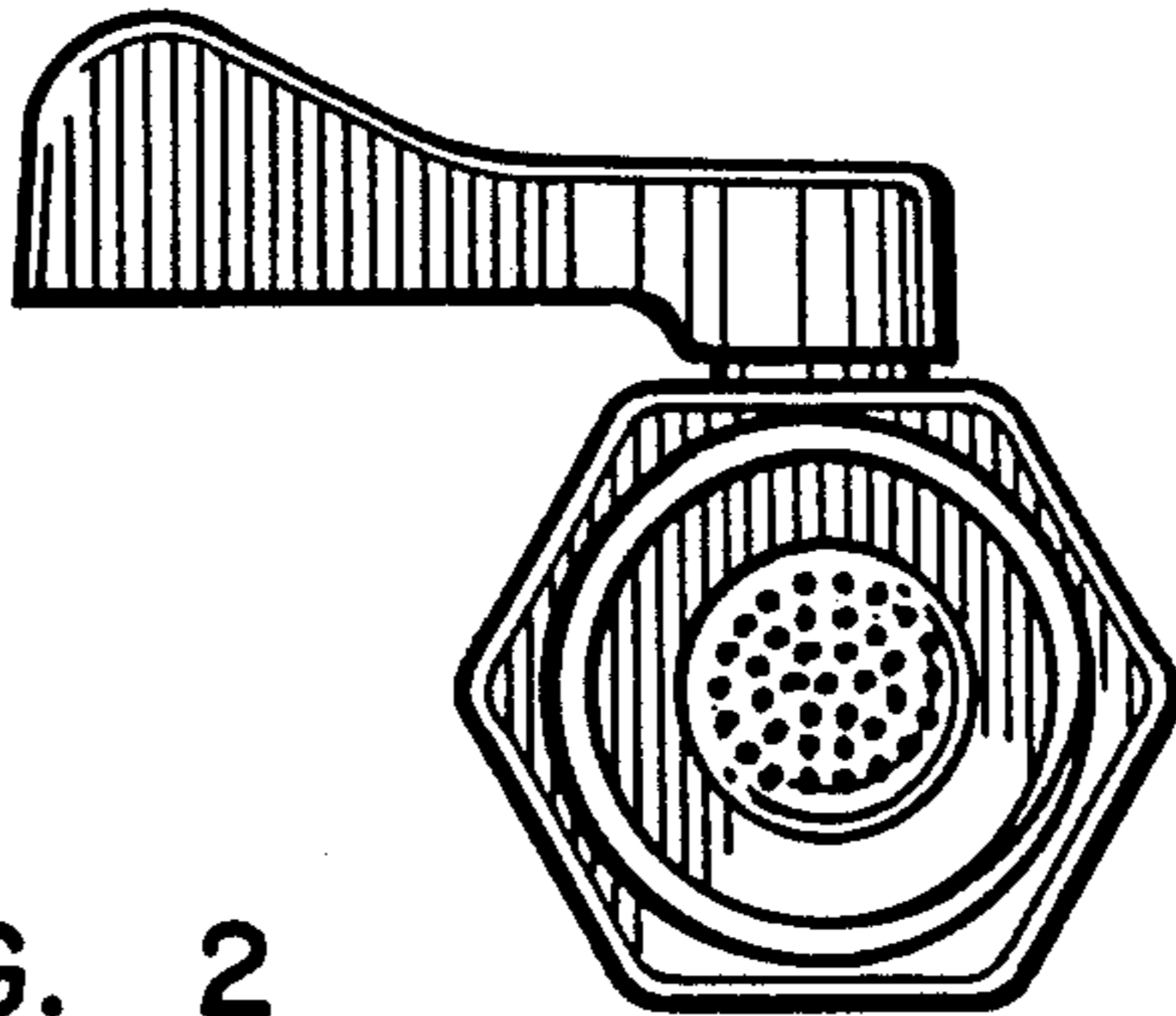


FIG. 2

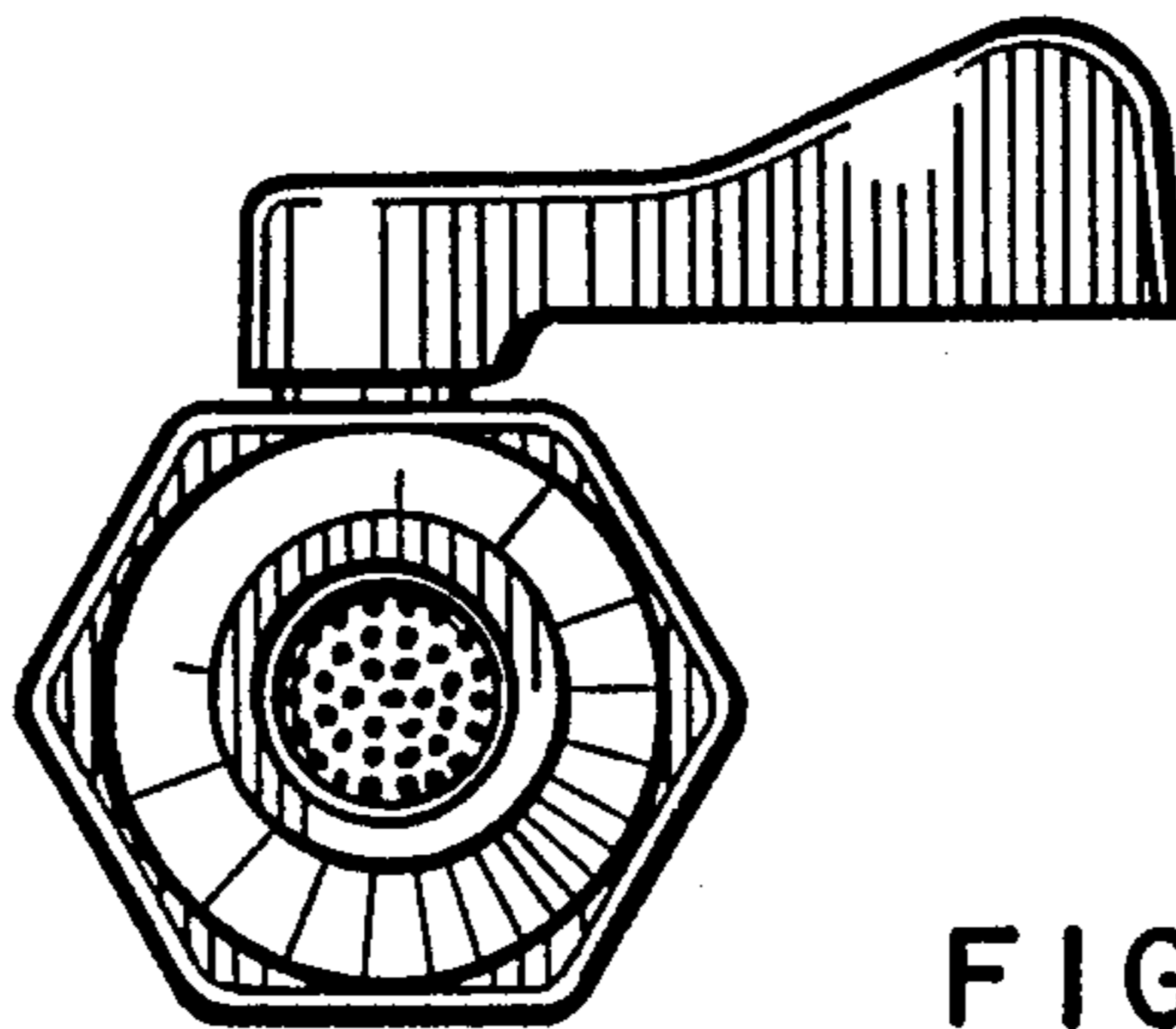


FIG. 3

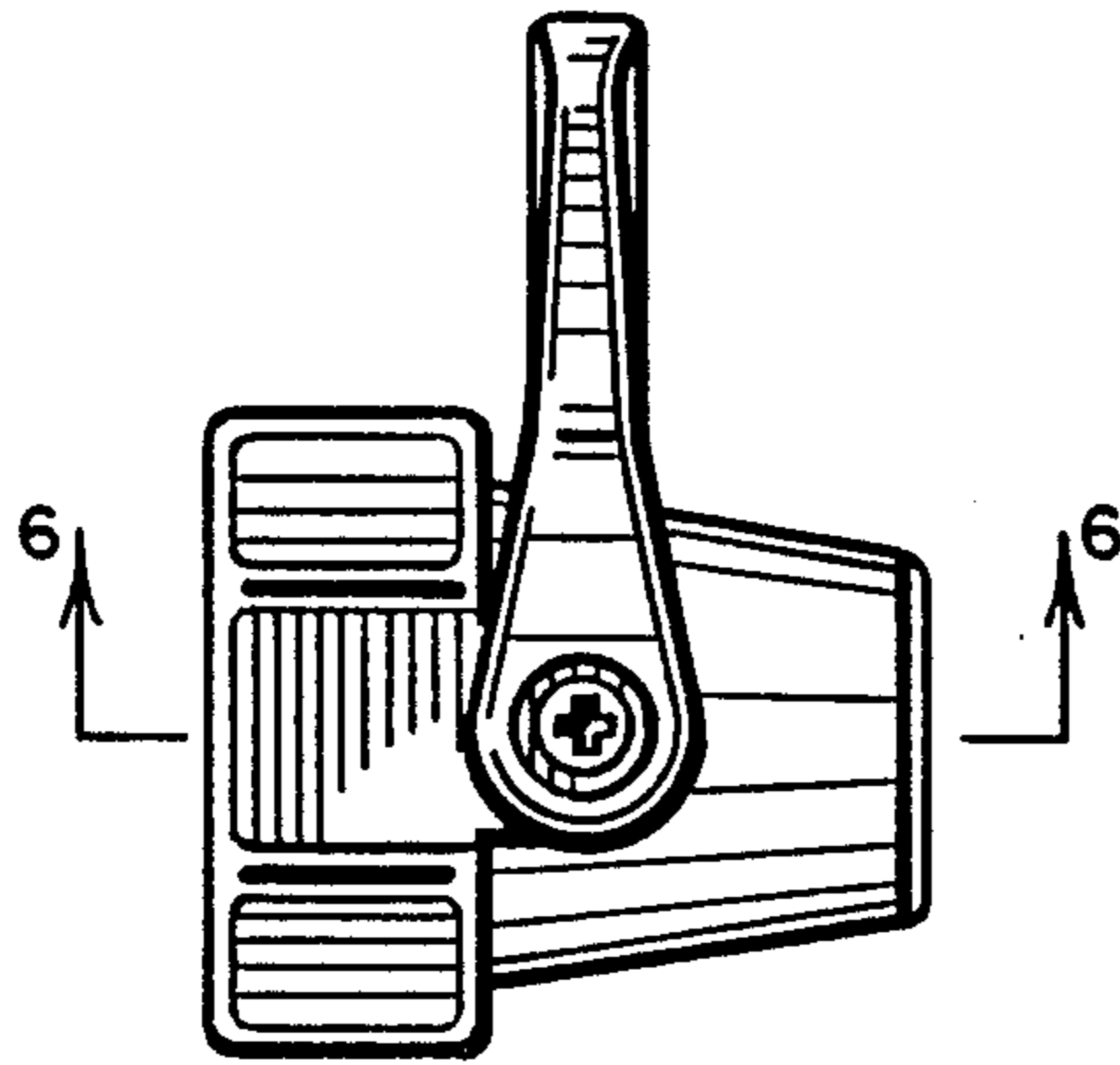


FIG. 4

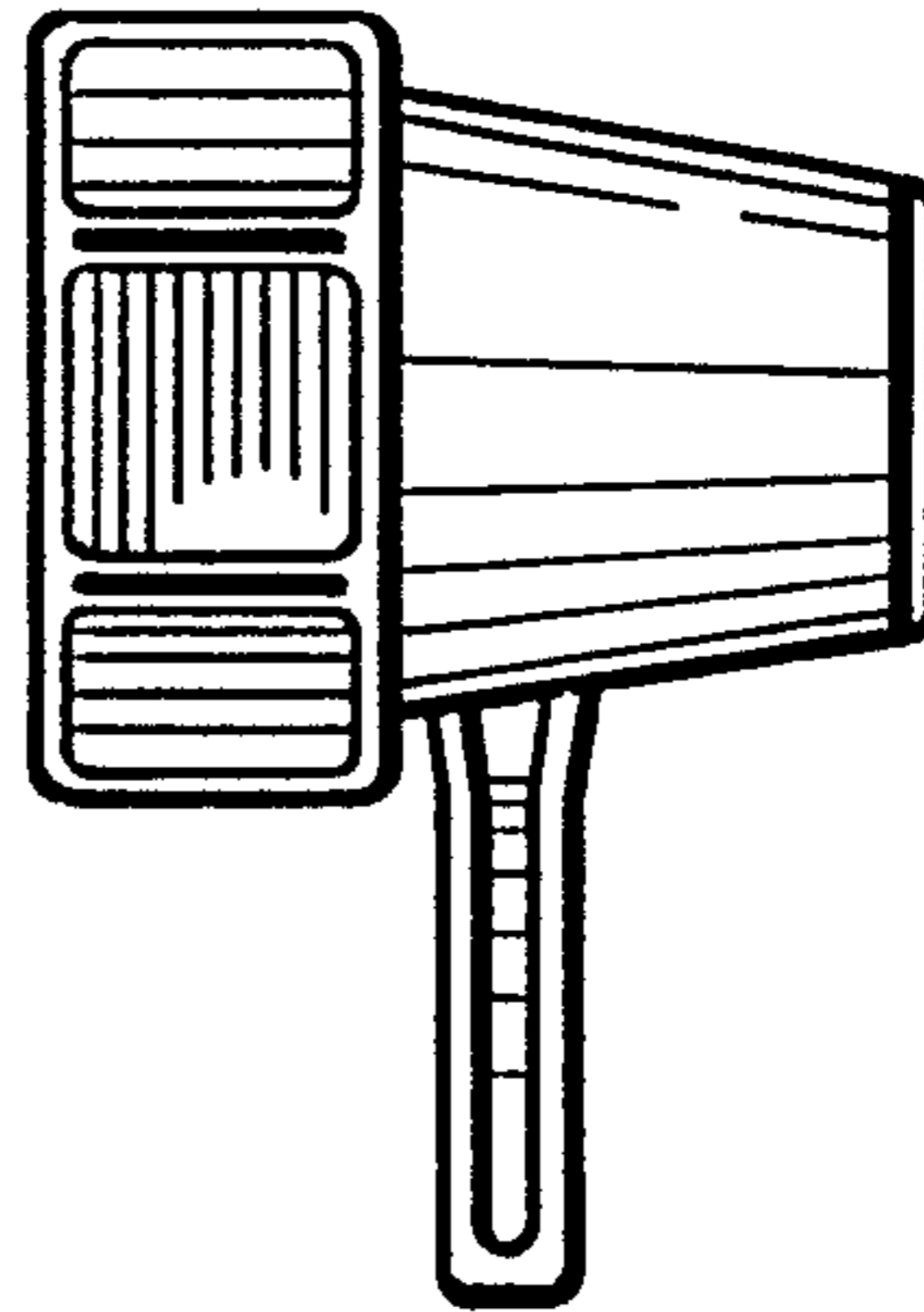


FIG. 5

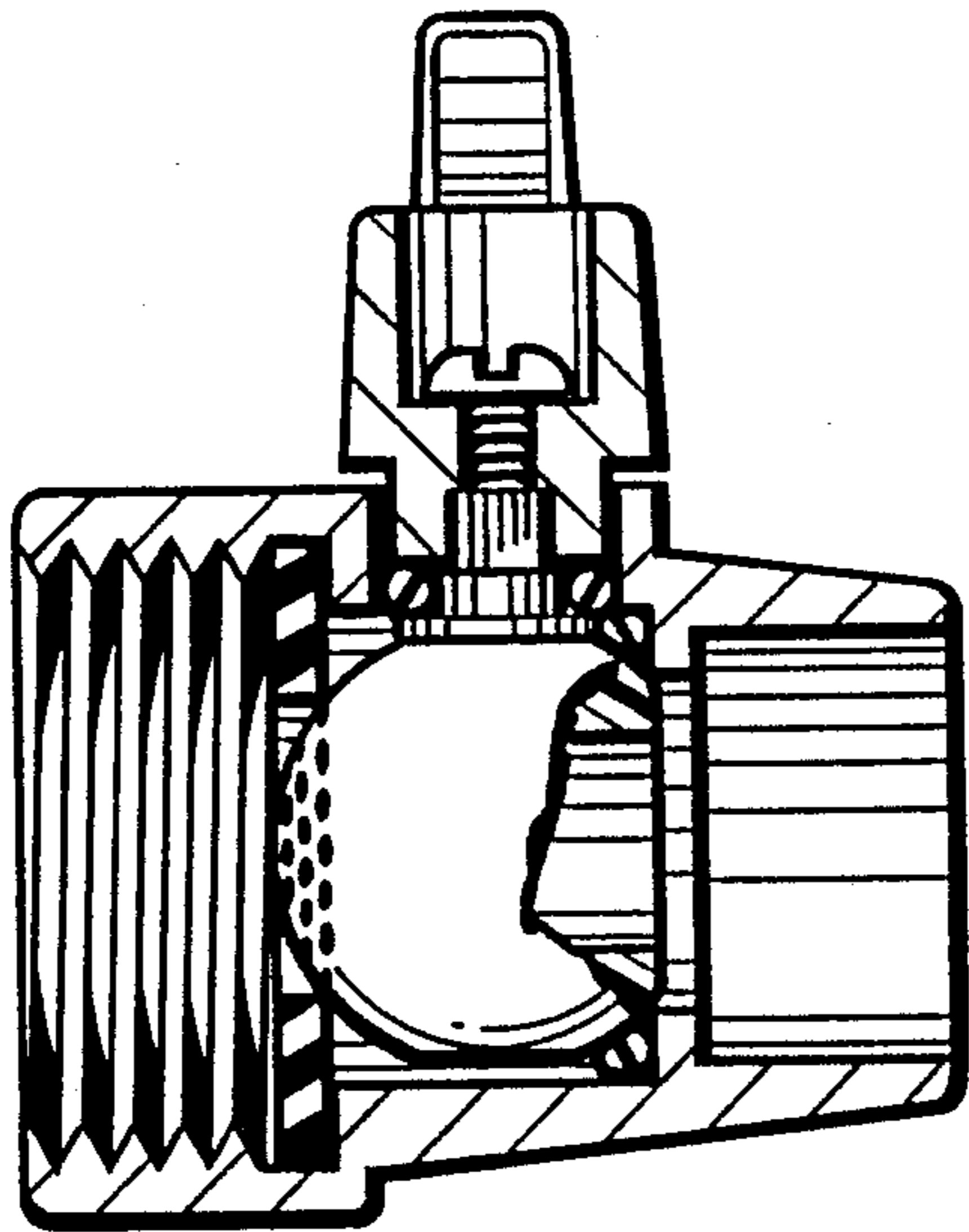


FIG. 6

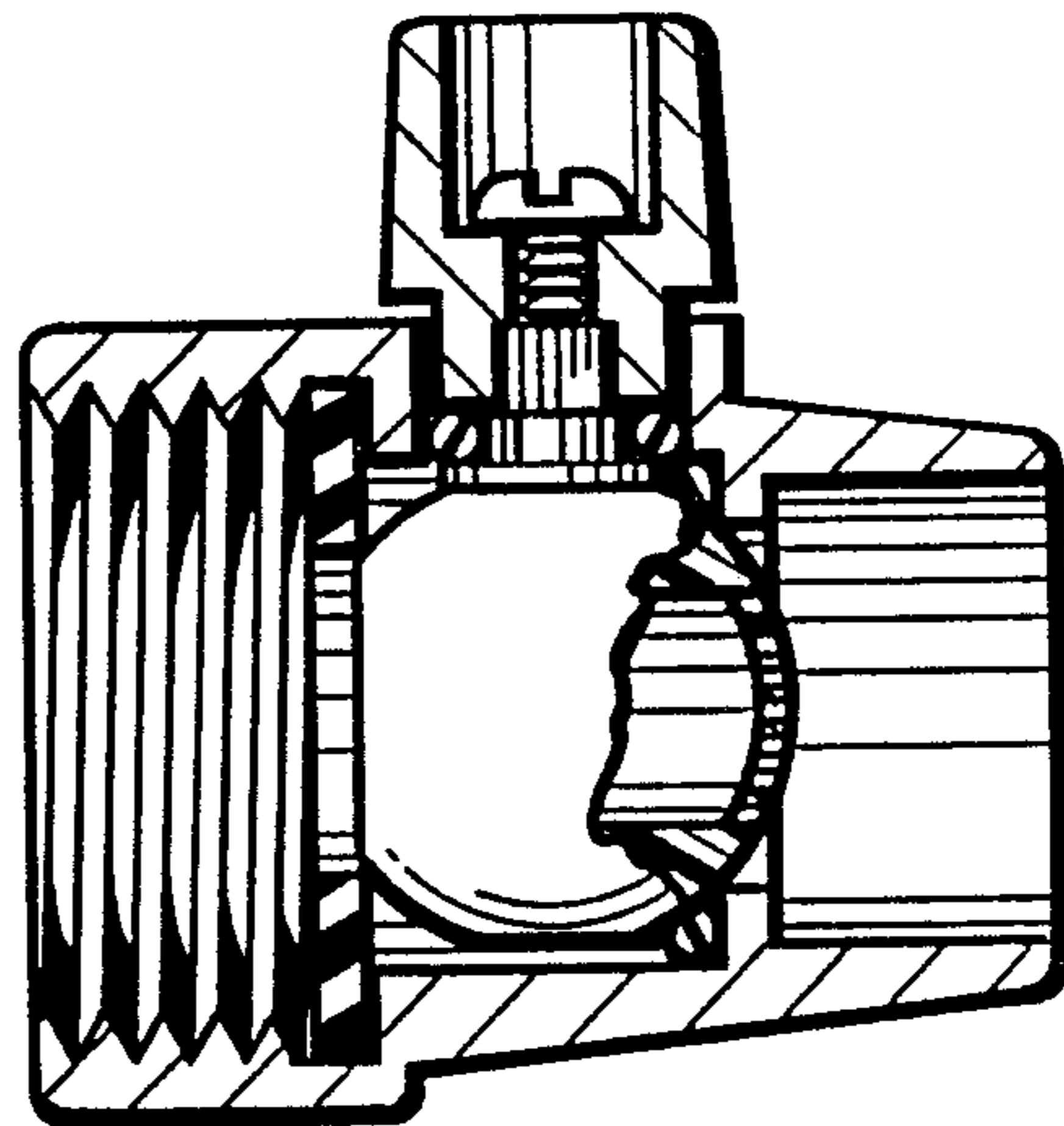


FIG. 7

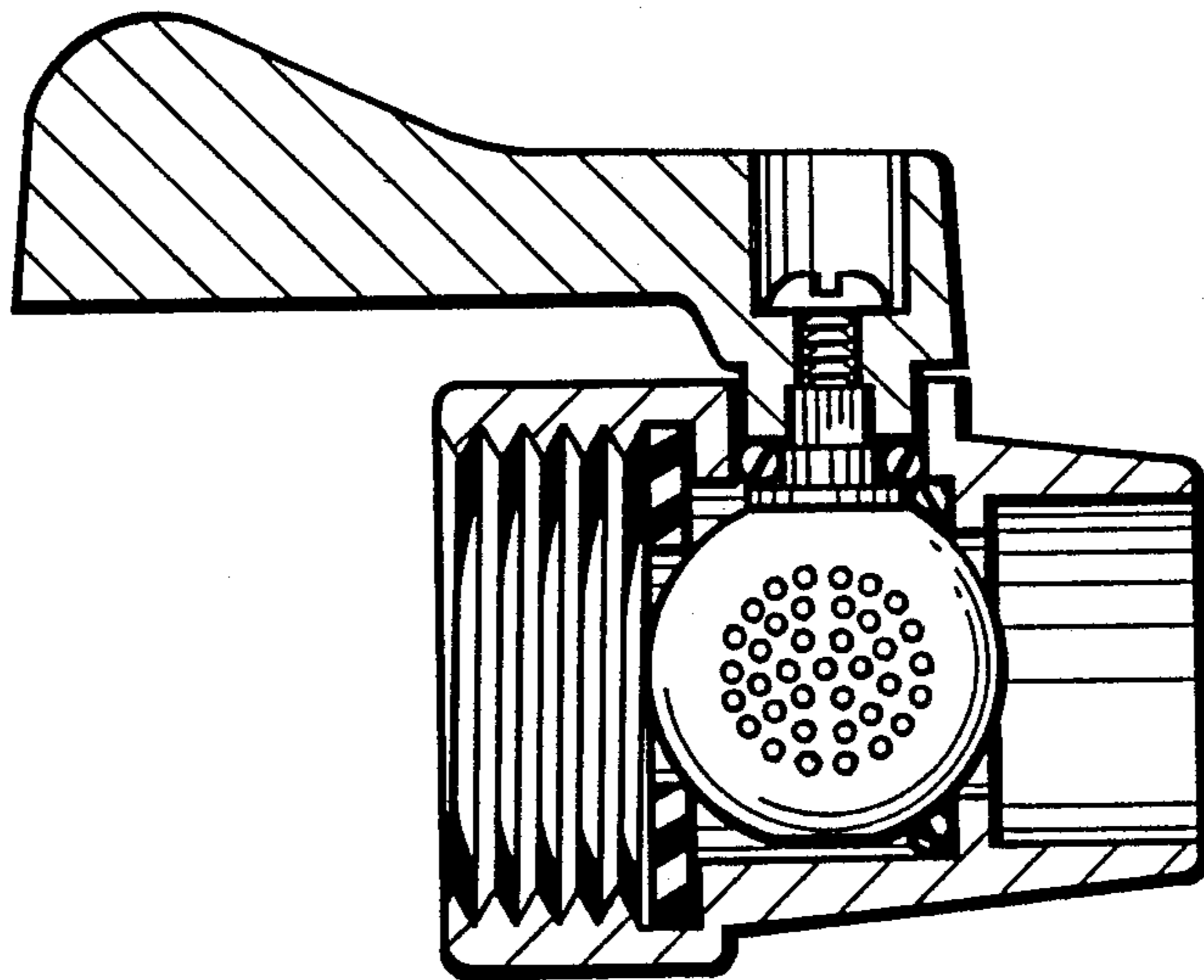


FIG. 8