

US00D400970S

# United States Patent [19]

[11] **Patent Number: Des. 400,970**

Voo

[45] **Date of Patent: \*\*Nov. 10, 1998**

## [54] ONE-QUARTER TURN STRAIGHT BALL SHUTOFF VALVE

*Attorney, Agent, or Firm—James G. O’Neill*

[75] Inventor: **David C. P. Voo**, Monarch Beach, Calif.

### [57] CLAIM

The ornamental design for a one-quarter turn straight ball shutoff valve as shown and described.

[73] Assignee: **Bestwill Corporation**, San Clemente, Calif.

### DESCRIPTION

[\*\*] Term: **14 Years**

FIG. 1 is a top plan view of one embodiment of a one-quarter turn straight ball shutoff valve of my new design; FIG. 2 is a left end view of FIG. 1; FIG. 3 is a front elevational view of FIG. 1; FIG. 4 is a right end view of FIG. 1; FIG. 5 is a rear elevational view of FIG. 1; FIG. 6 is a bottom plan view of FIG. 1; FIG. 7 is a rear elevational view of a further embodiment of a one-quarter turn straight ball shutoff valve of my new design; the undisclosed ends being similar to the first disclosed embodiment, except for the appearance of an unthreaded, rather than a threaded left end outlet; FIG. 8 is a front elevational view of FIG. 7; FIG. 9 is a top plan view FIG. 7; FIG. 10 is a bottom plan view of FIG. 7; FIG. 11 is a top plan view of a still further embodiment of a one-quarter turn straight ball shutoff valve of my new design; FIG. 12 is a bottom plan view of FIG. 11; FIG. 13 is a front elevational view of FIG. 11; FIG. 14 is a rear elevational view of FIG. 11; FIG. 15 is a left end view of FIG. 13; FIG. 16 is a right end view of FIG. 13; and, FIG. 17 is a cross-sectional view taken along line 17—17 of FIG. 13, showing the lower surface of the lever operator.

[21] Appl. No.: **77,226**

[22] Filed: **Sep. 29, 1997**

[51] **LOC (6) Cl.** ..... **23-01**

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

[58] **Field of Search** ..... D23/233, 235, D23/245, 247, 248, 249; 251/315.14, 310, 309

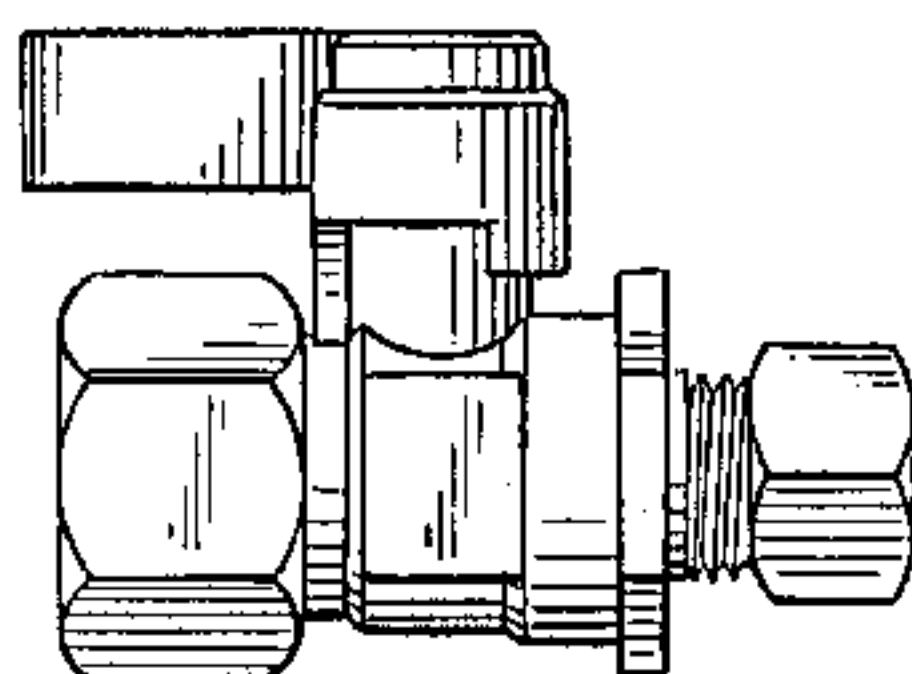
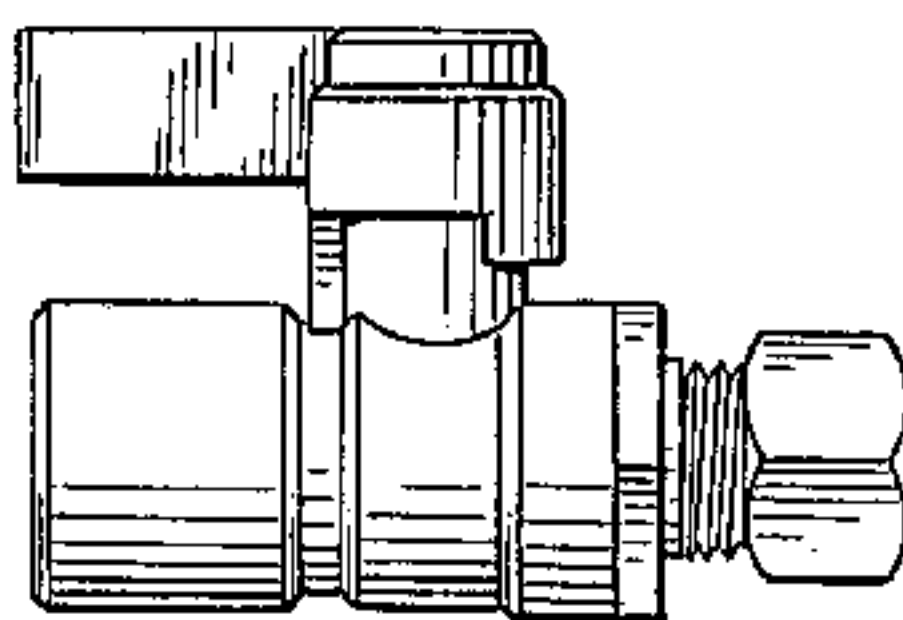
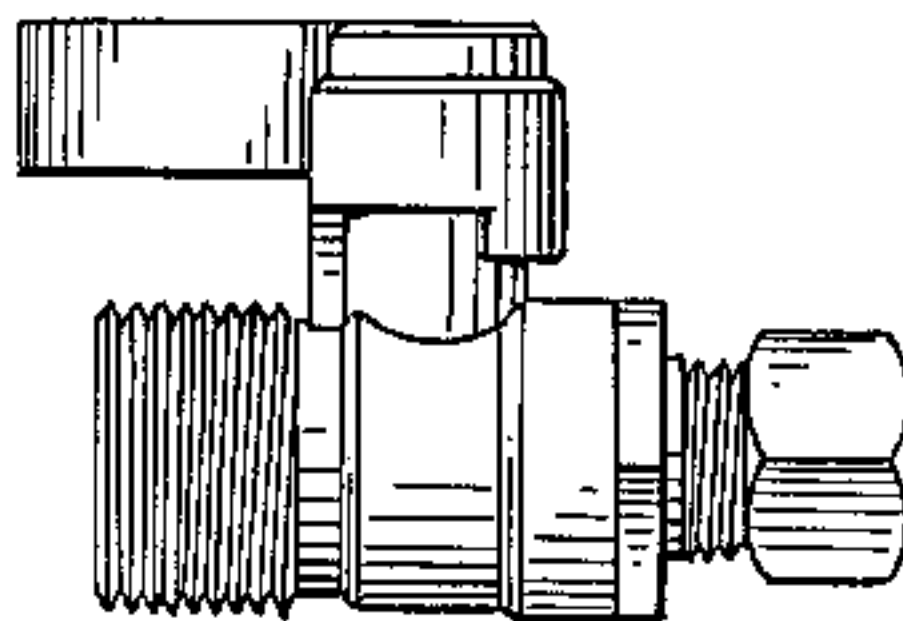
### [56] References Cited

#### U.S. PATENT DOCUMENTS

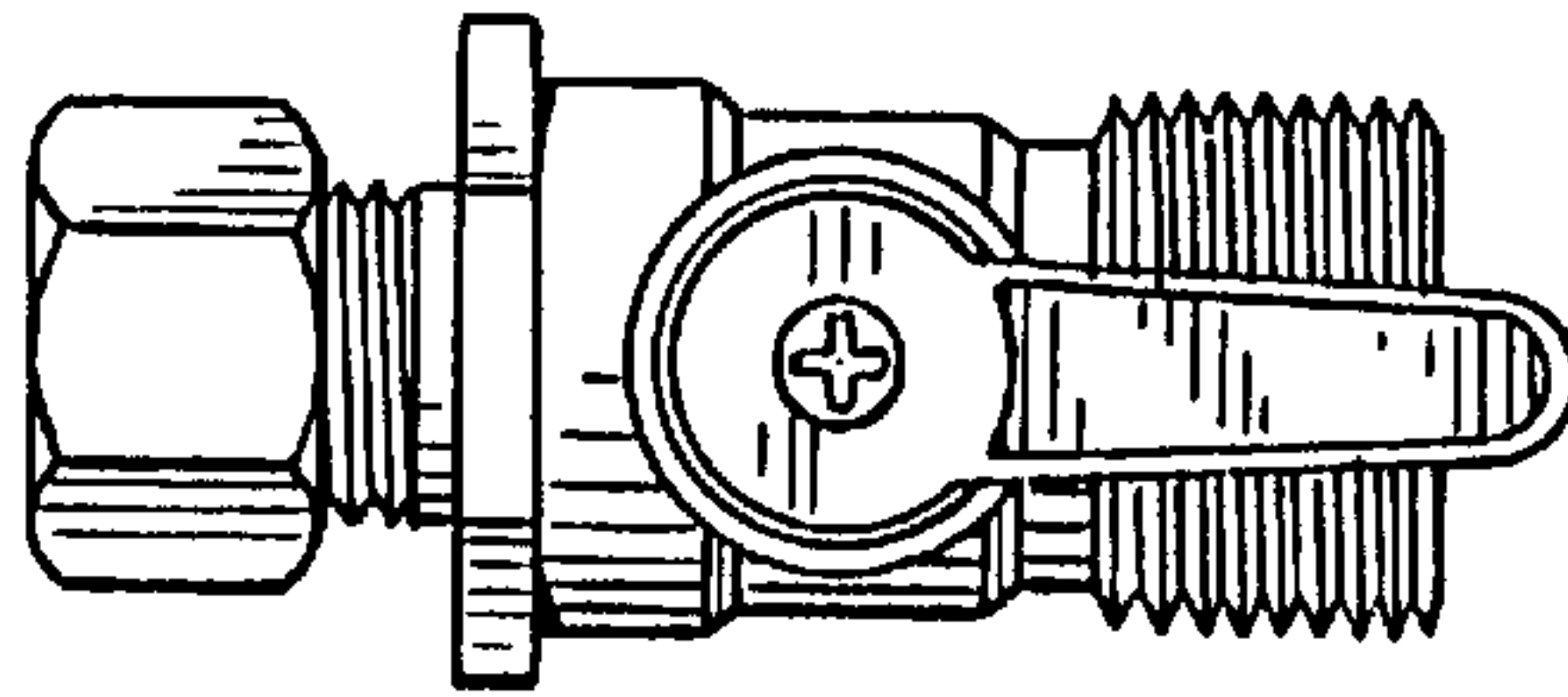
D. 237,968	12/1975	Olsou	.....	D23/233
D. 318,903	8/1991	Lenberg	.....	D23/245
D. 321,928	11/1991	Milo	.....	D23/245
D. 331,964	12/1992	Hengesback	.....	D23/245
D. 359,103	6/1995	Bouc et al.	.....	D23/233
3,964,728	6/1976	Filder	.....	251/310
4,218,042	8/1980	Eckel	.....	251/315
5,102,098	4/1992	Daghe et al.	.....	251/315
5,201,493	4/1993	Kim	.....	251/315

*Primary Examiner—Alan P. Douglas*  
*Assistant Examiner—Robin V. Taylor*

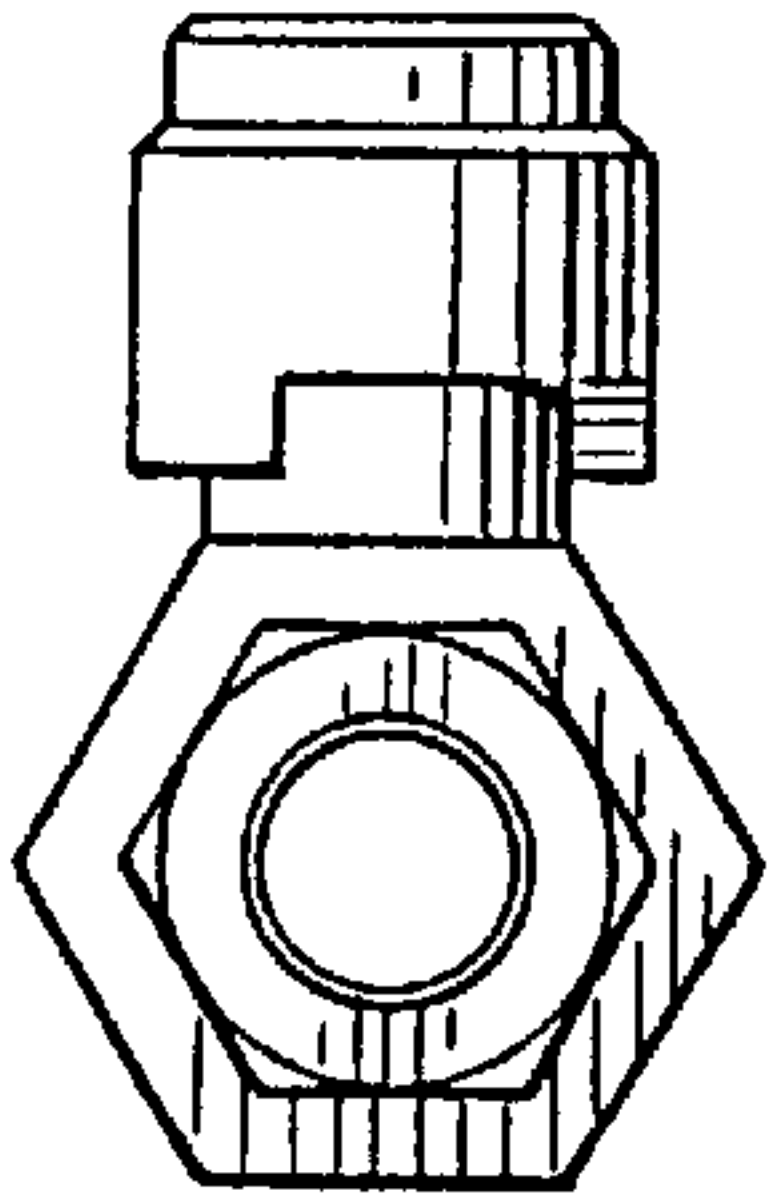
**1 Claim, 2 Drawing Sheets**



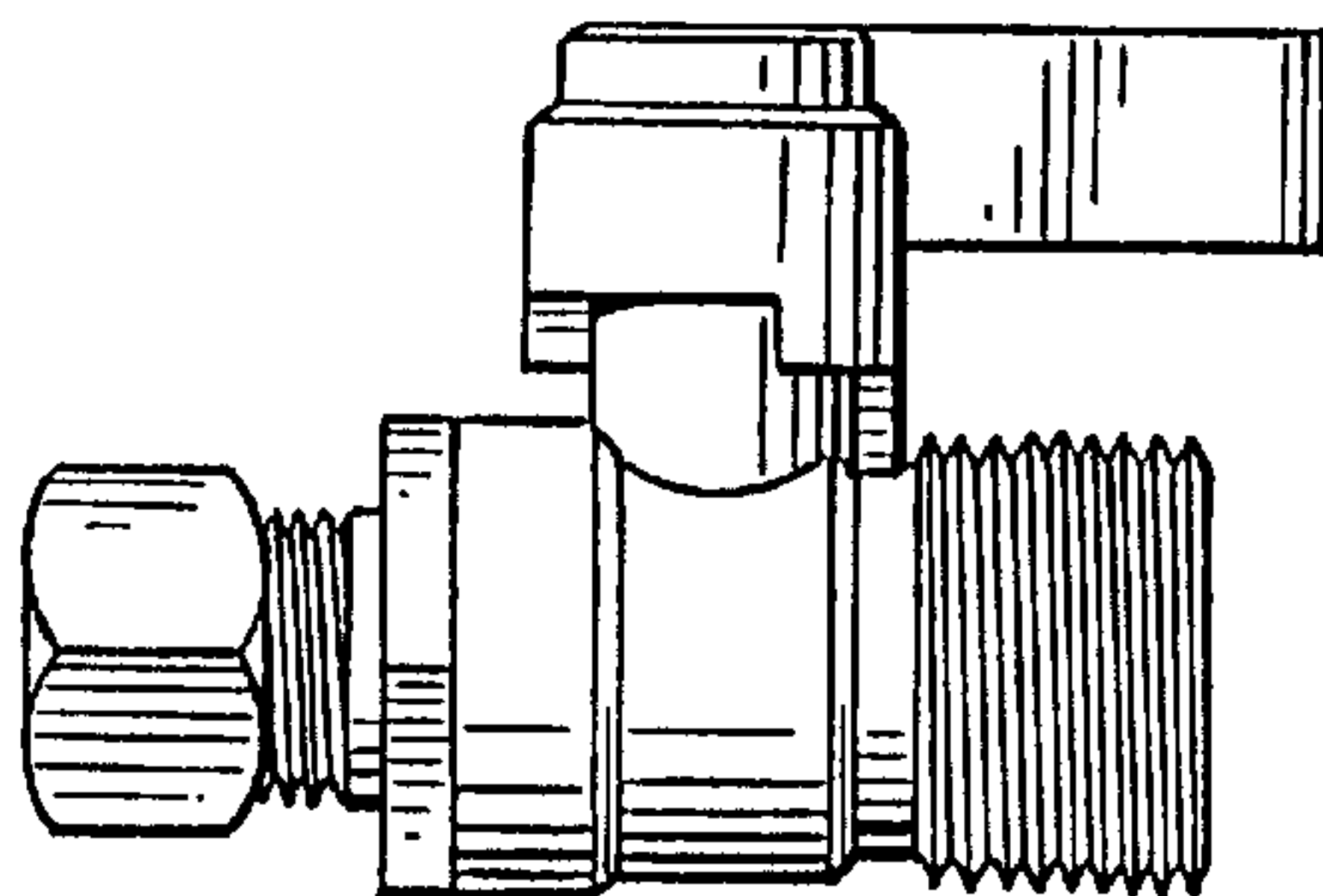
*FIG. 1*



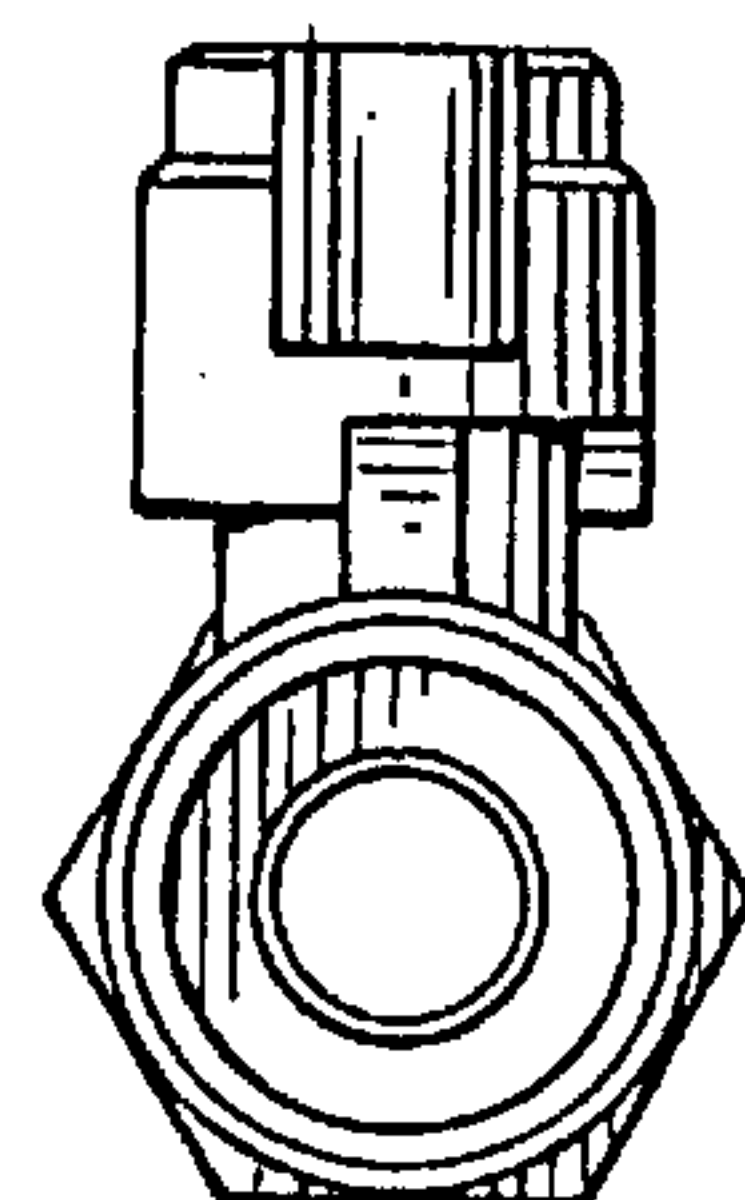
*FIG. 2*



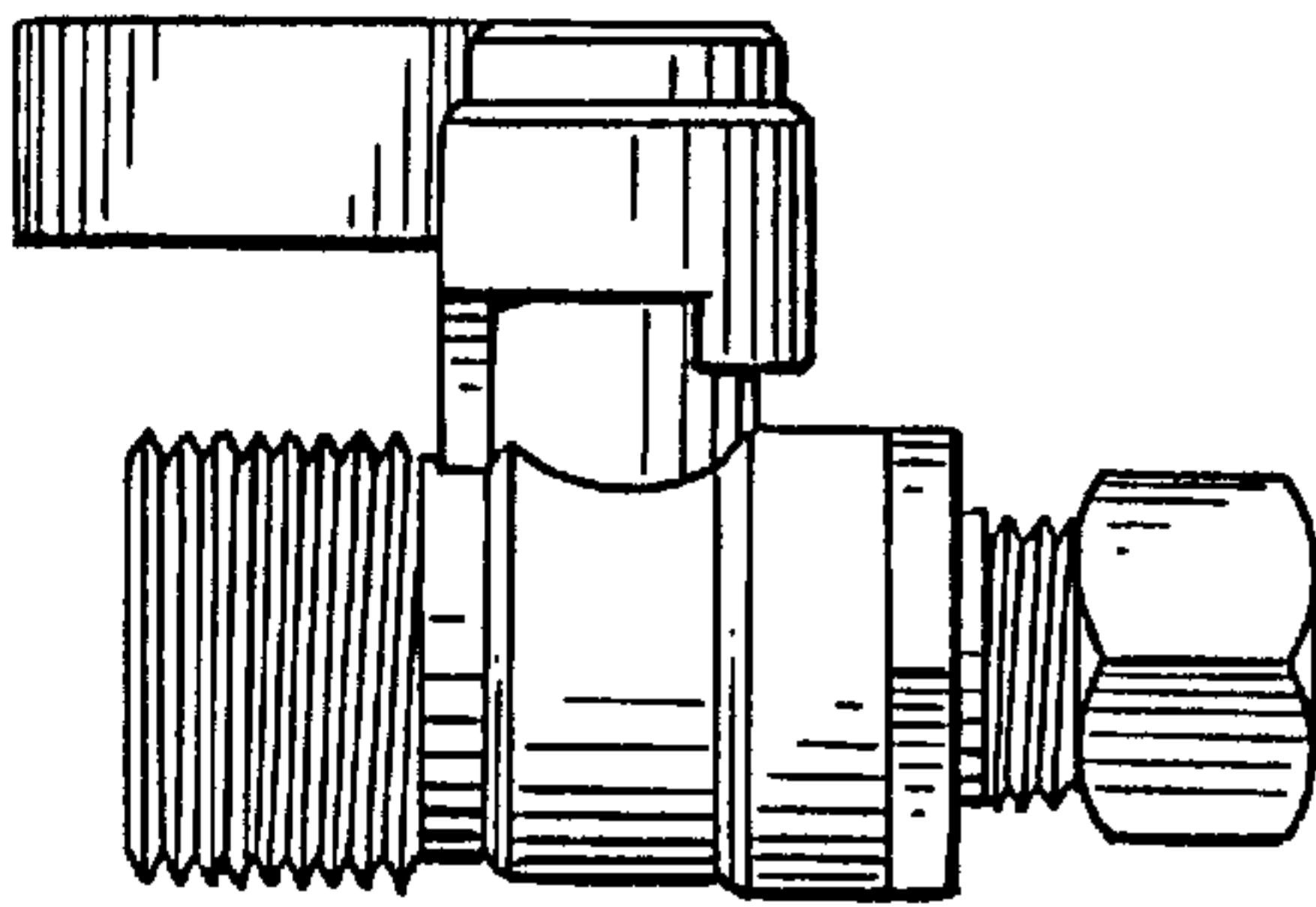
*FIG. 3*



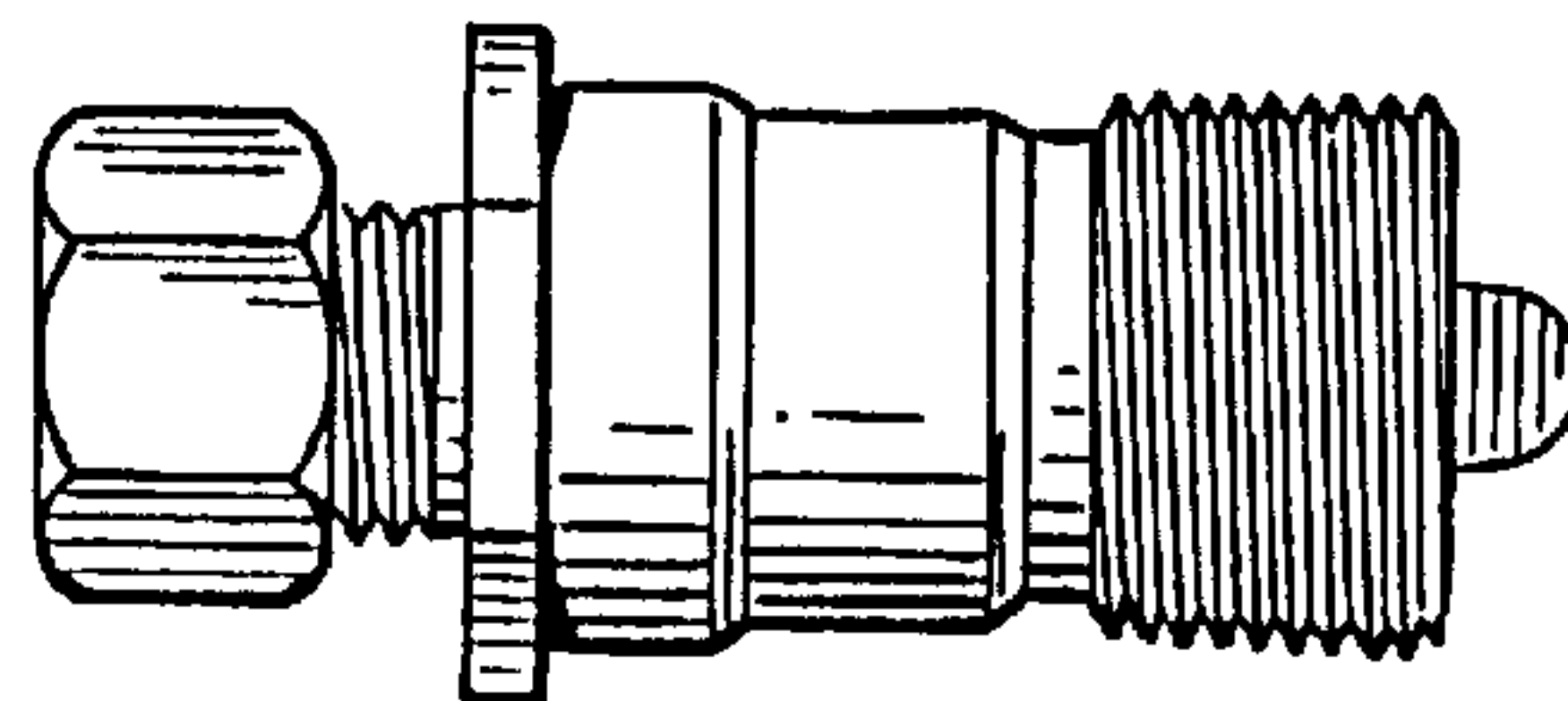
*FIG. 4*



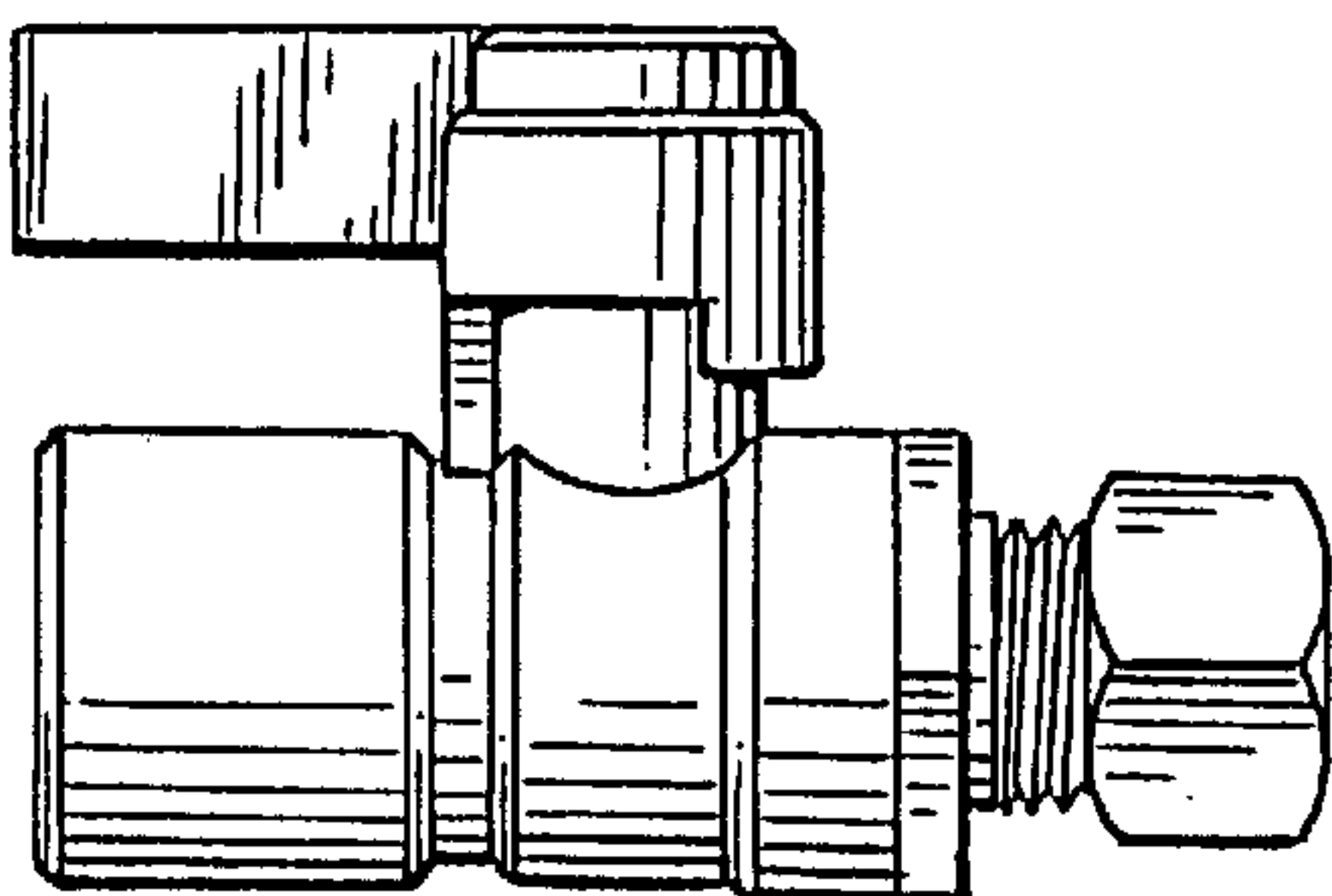
*FIG. 5*



*FIG. 6*



*FIG. 7*



*FIG. 8*

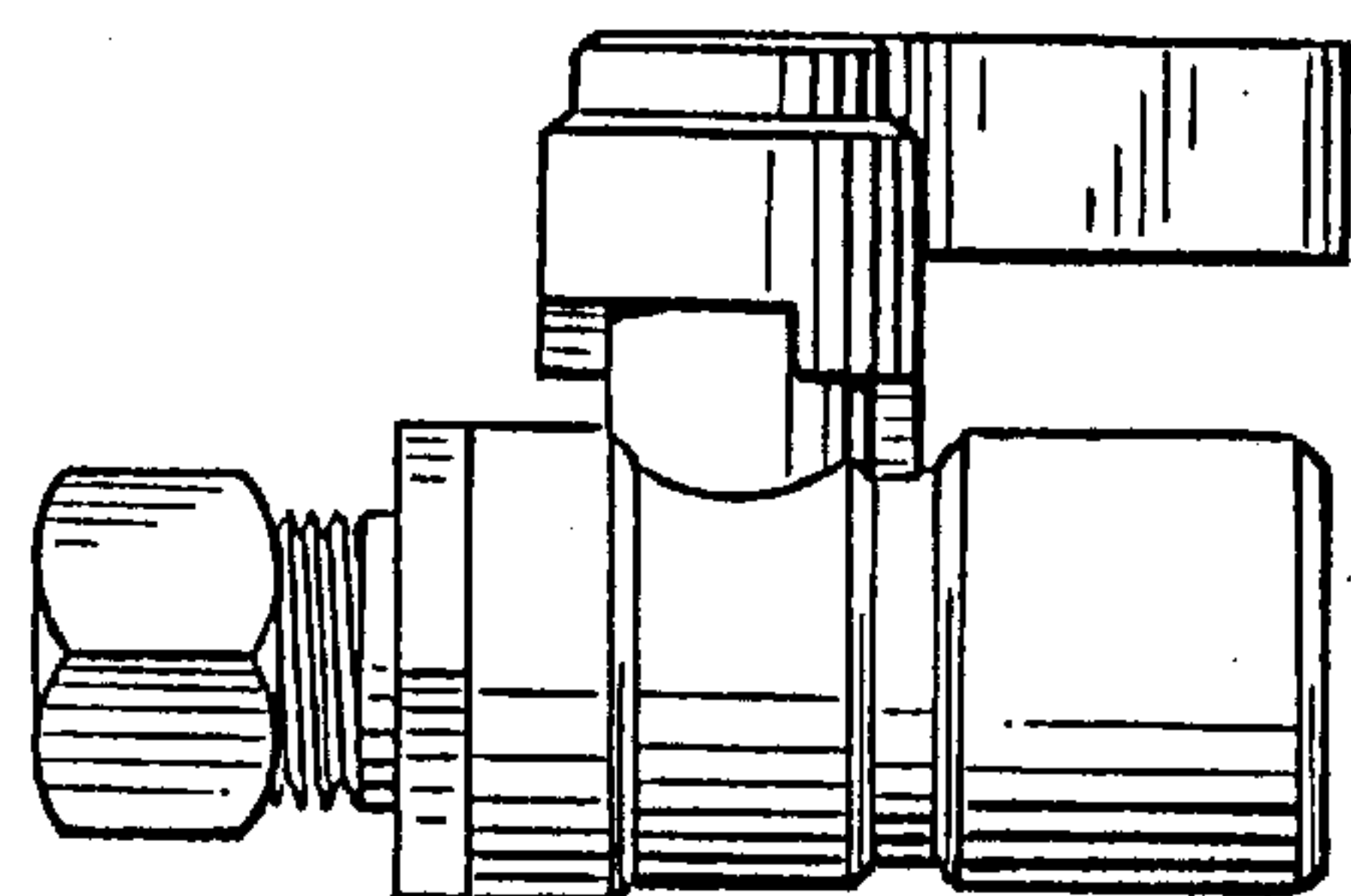


FIG. 9

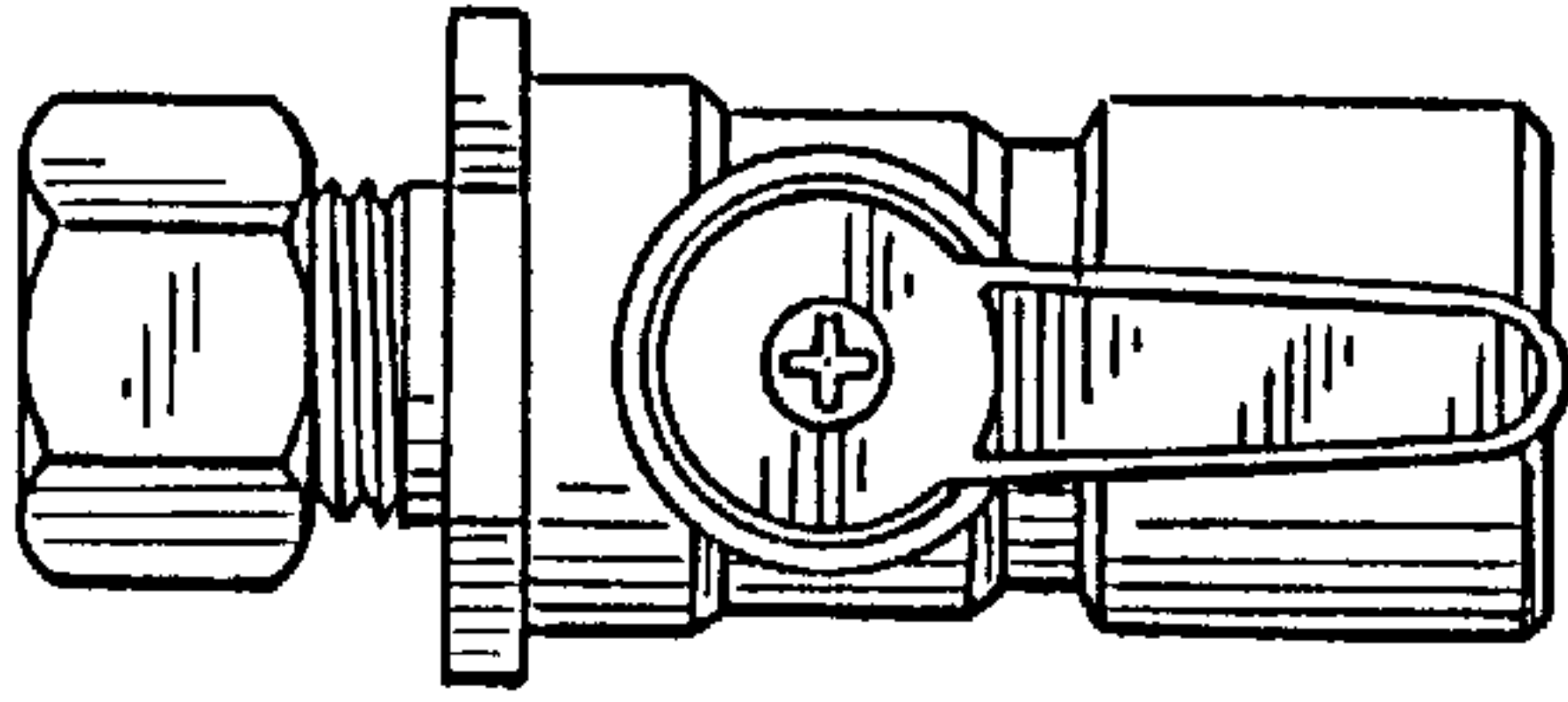


FIG. 10

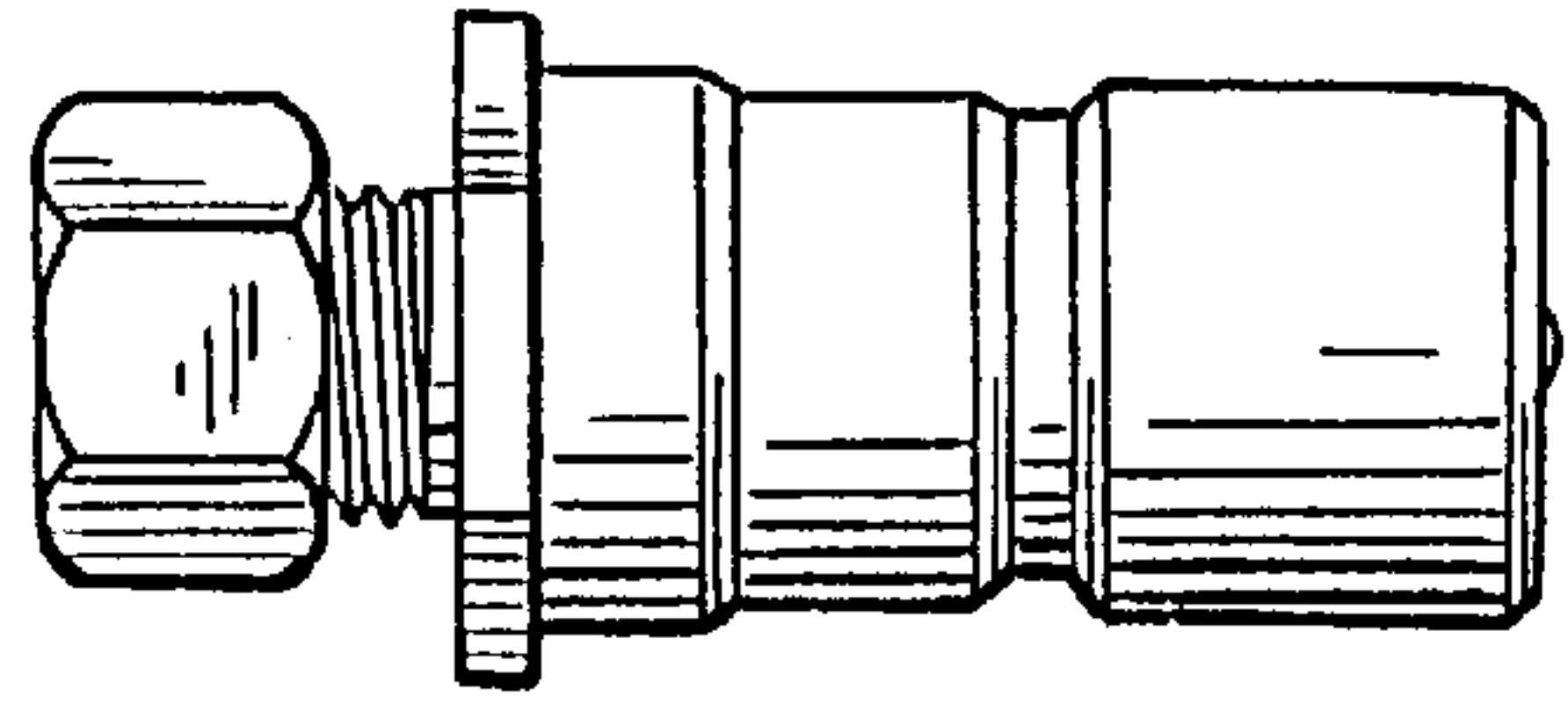


FIG. 11

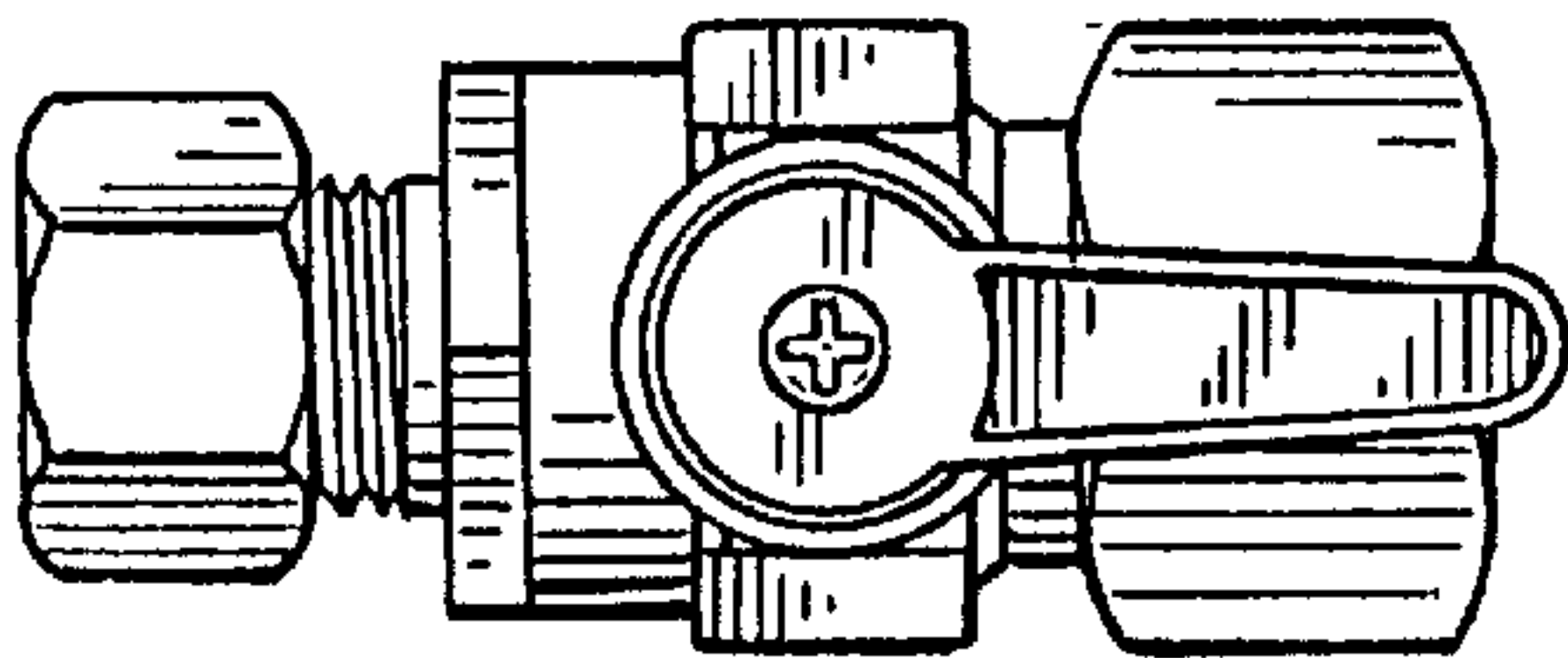


FIG. 12

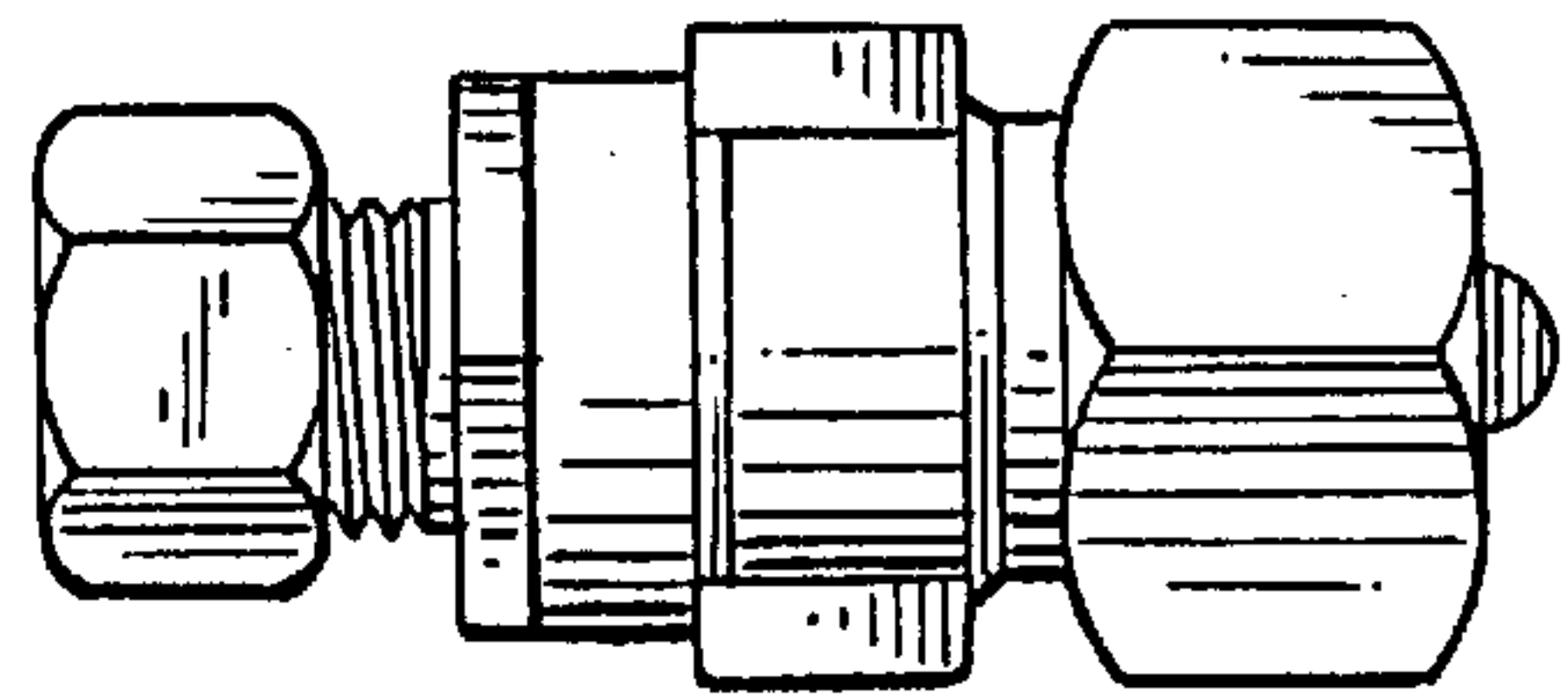


FIG. 13

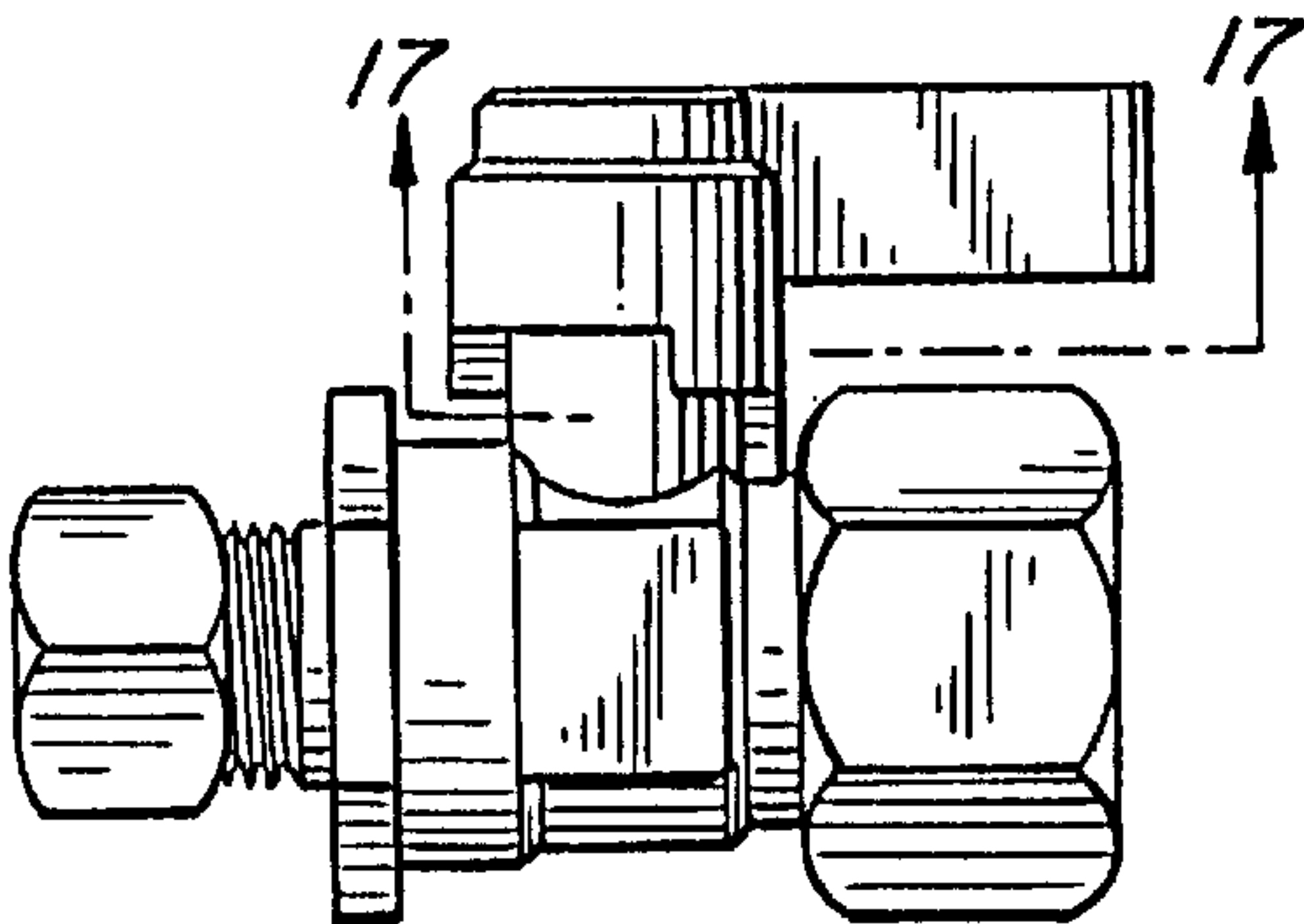


FIG. 14

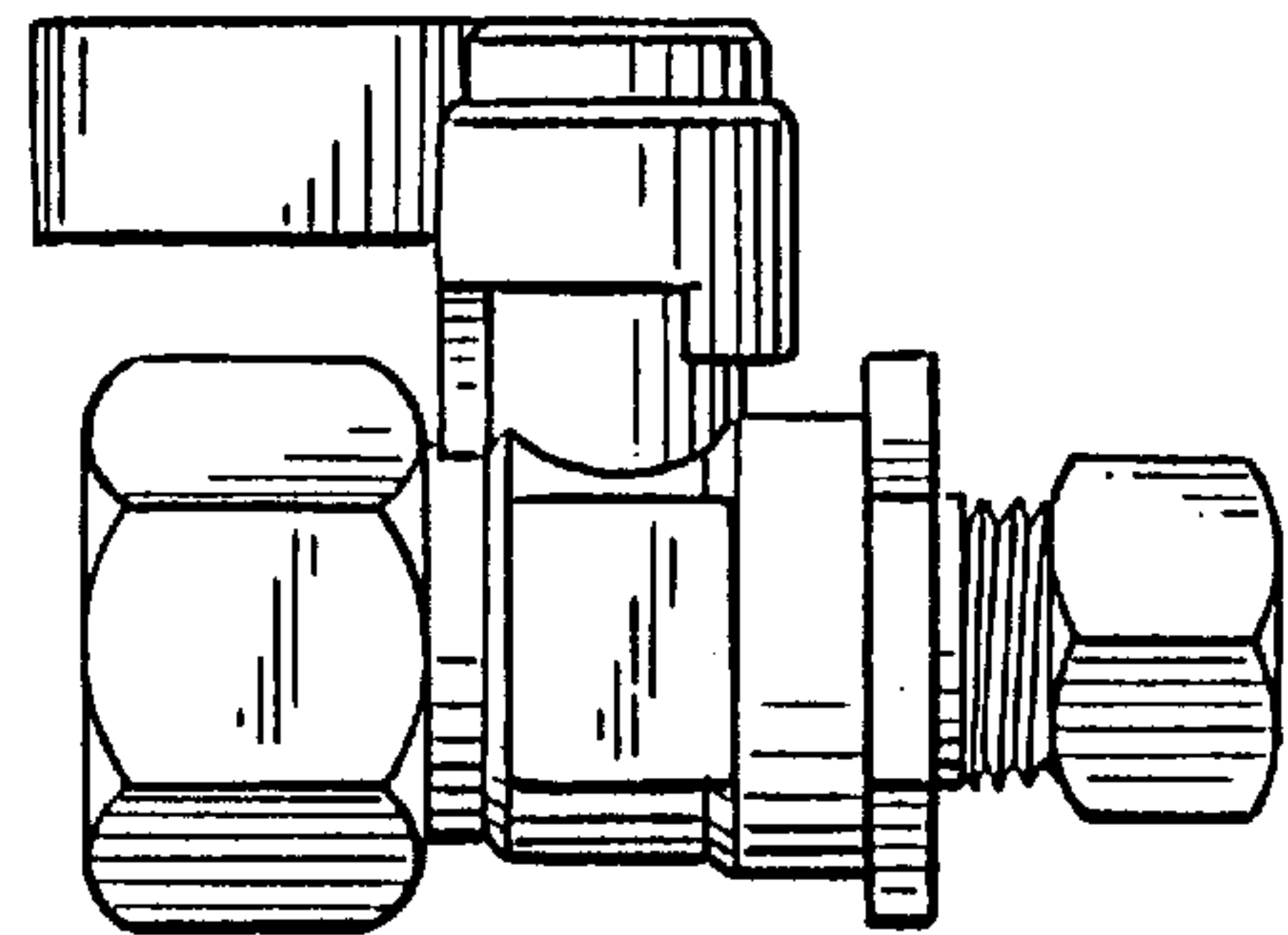


FIG. 15

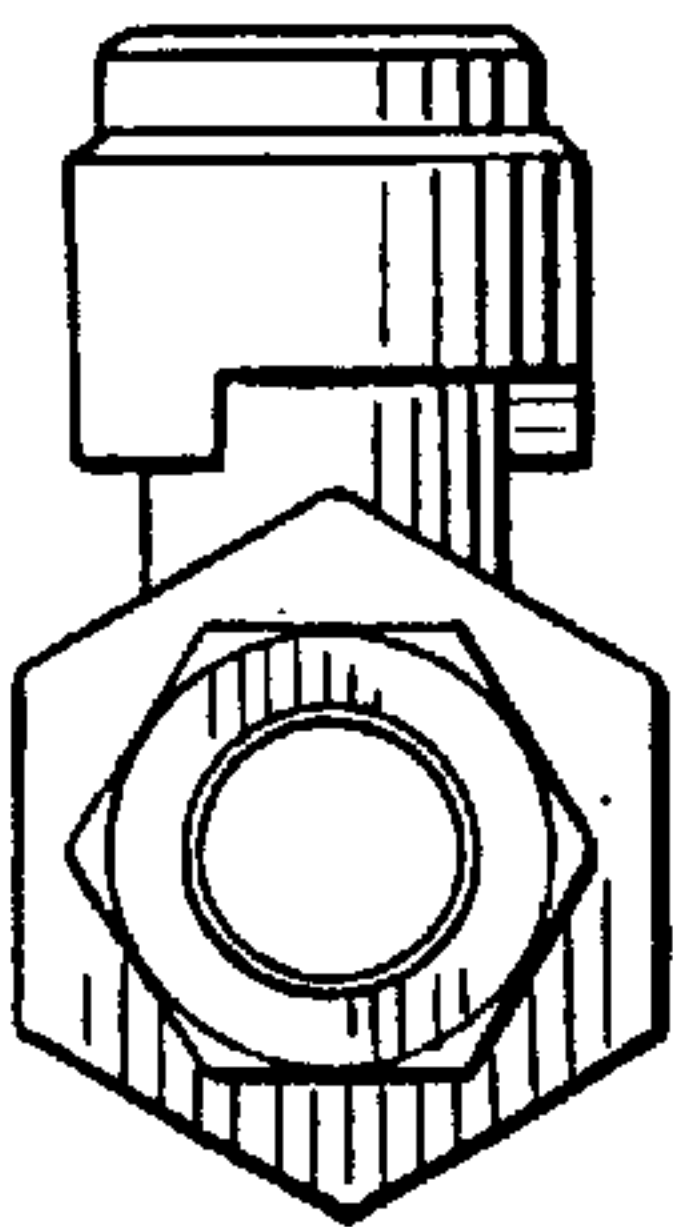


FIG. 16

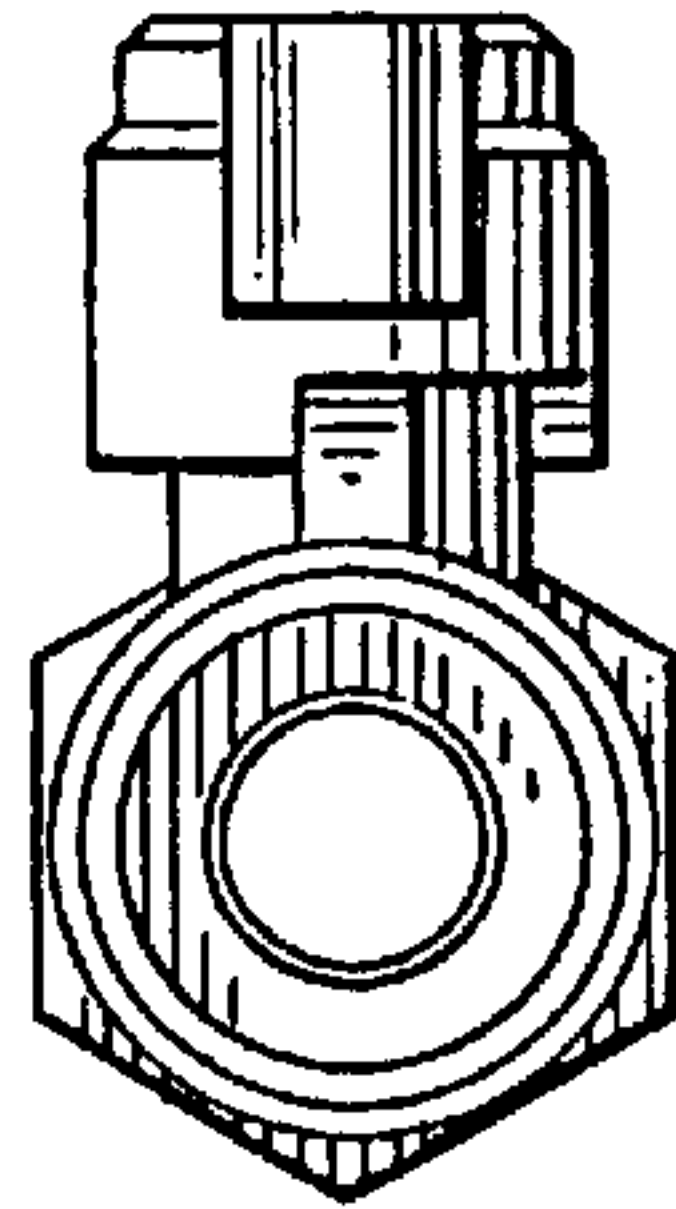


FIG. 17

