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United States Patent [19]

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Voo

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

[54] ONE-QUARTER TURN STRAIGHT BALL SHUTOFF VALVE

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[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**

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

1 Claim, 2 Drawing Sheets

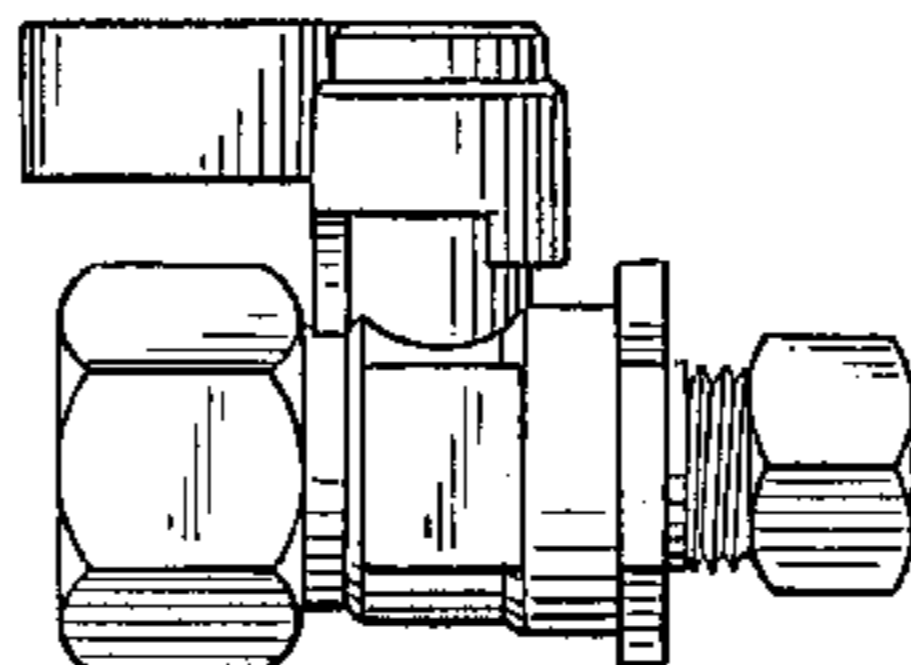
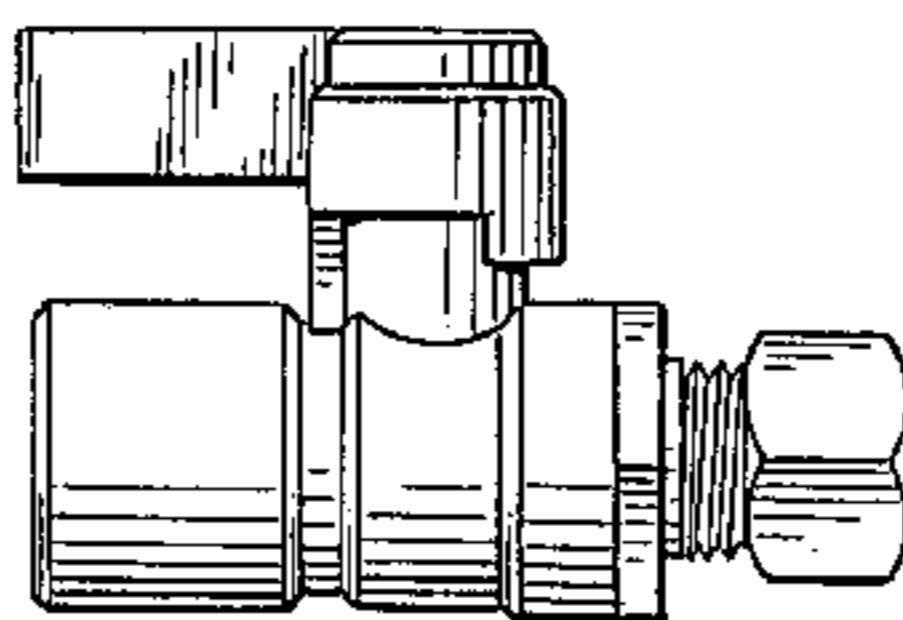
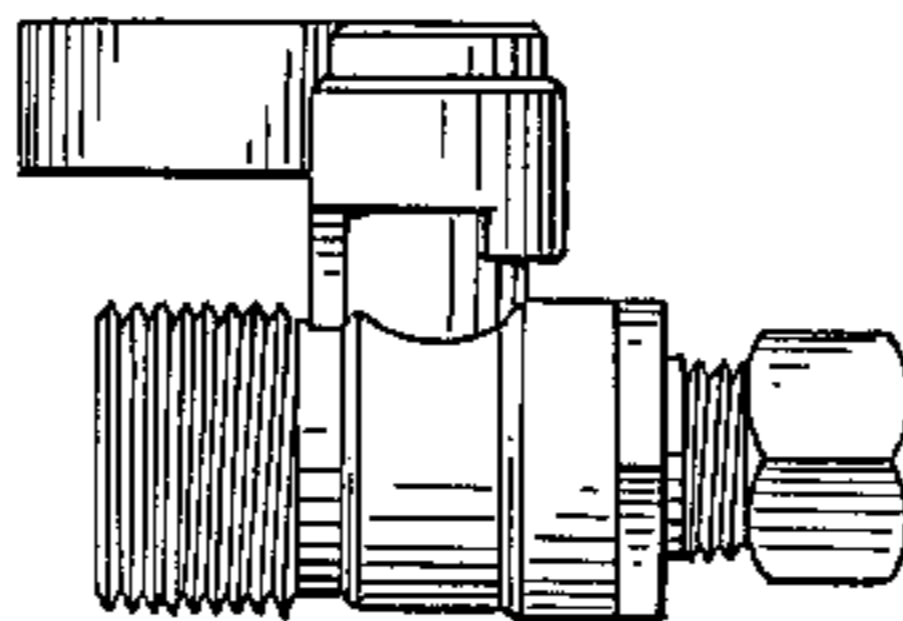


FIG. 1

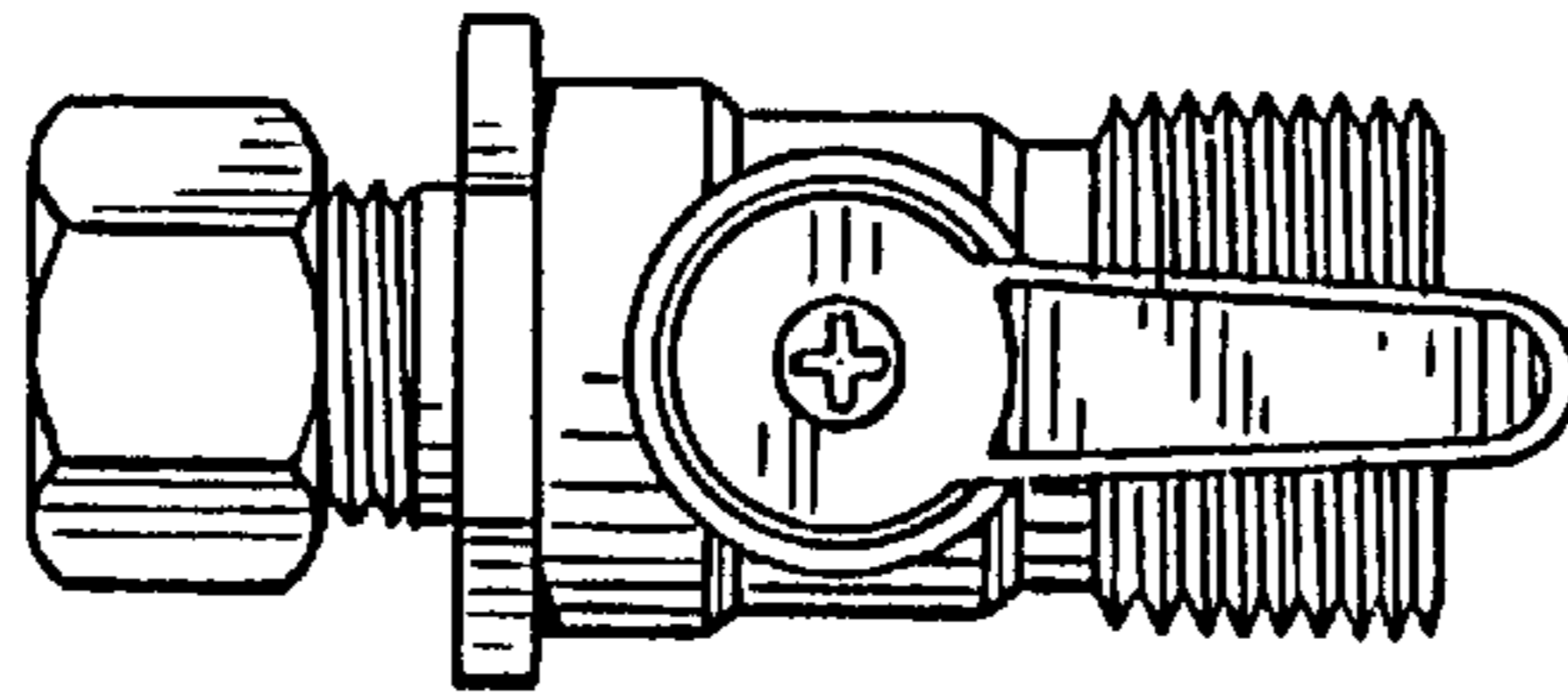


FIG. 2

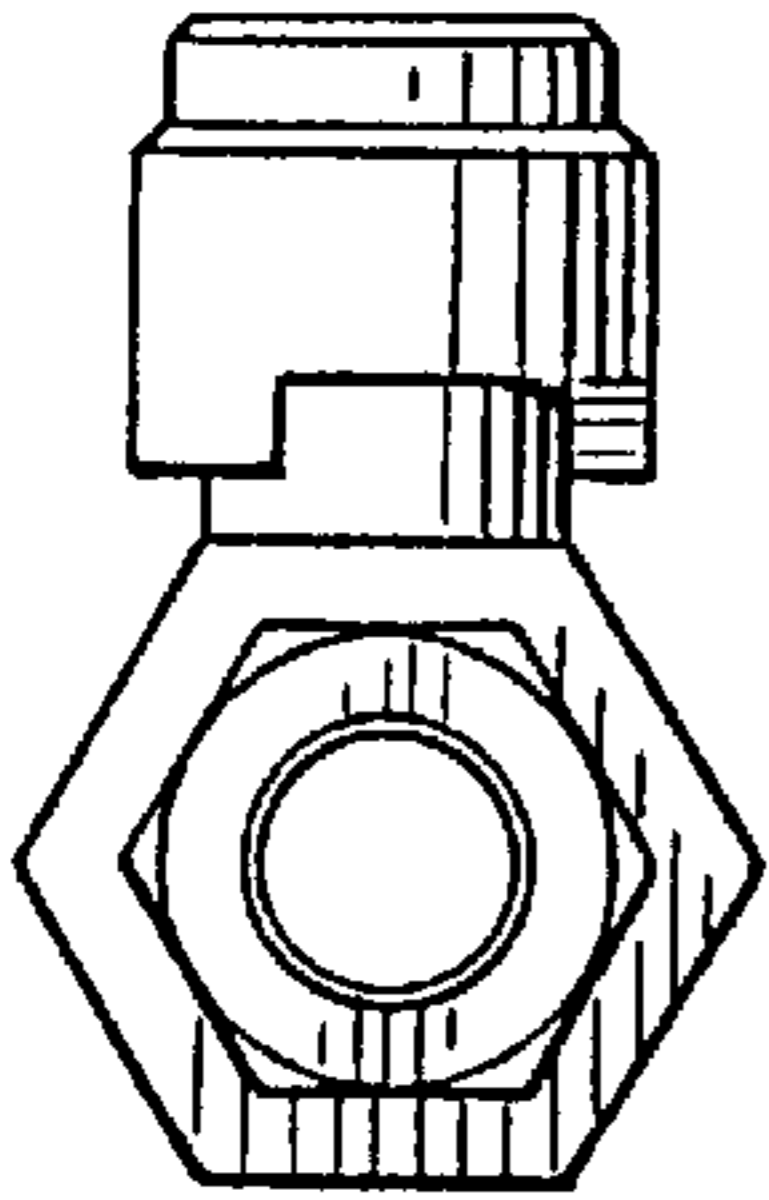


FIG. 3

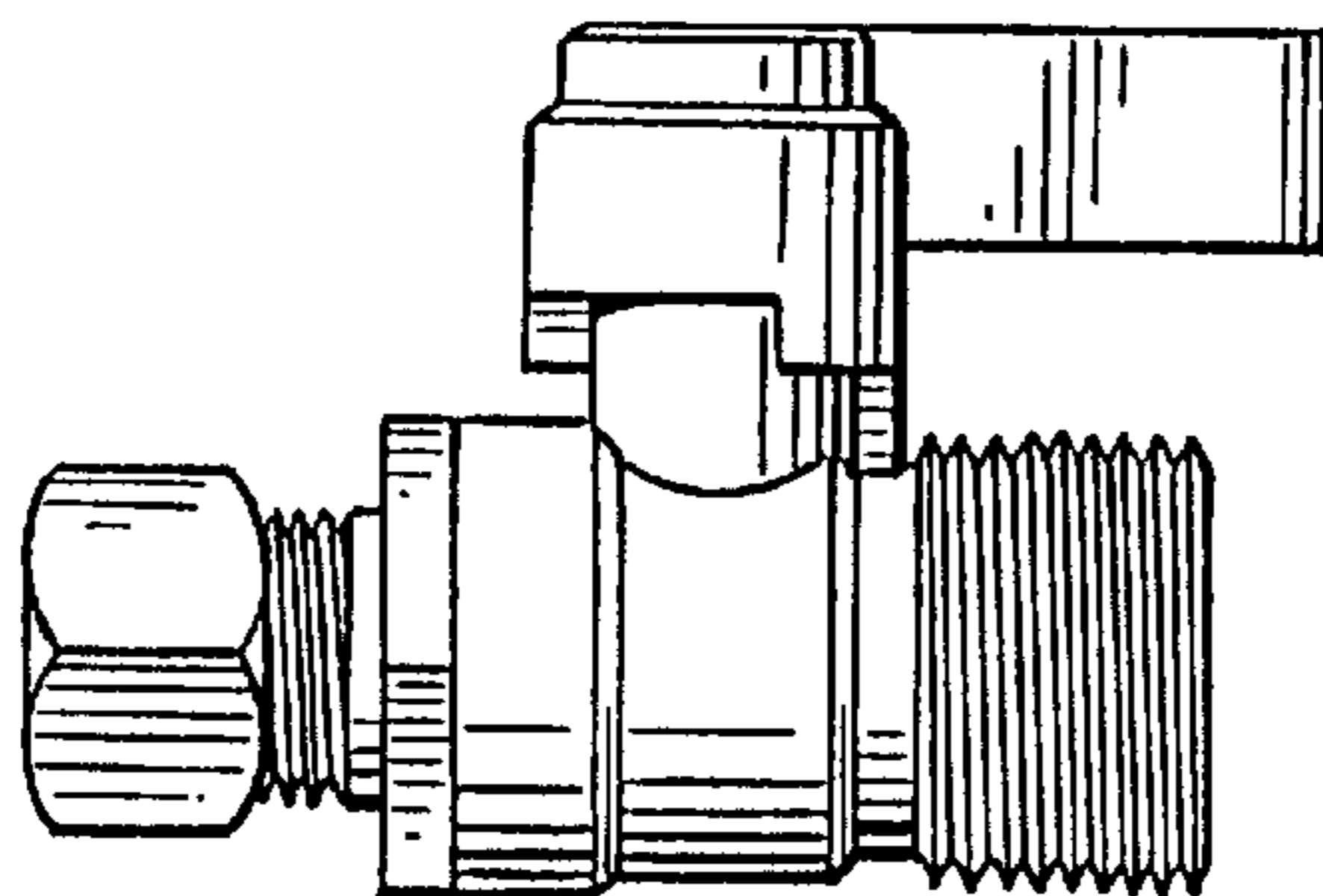


FIG. 4

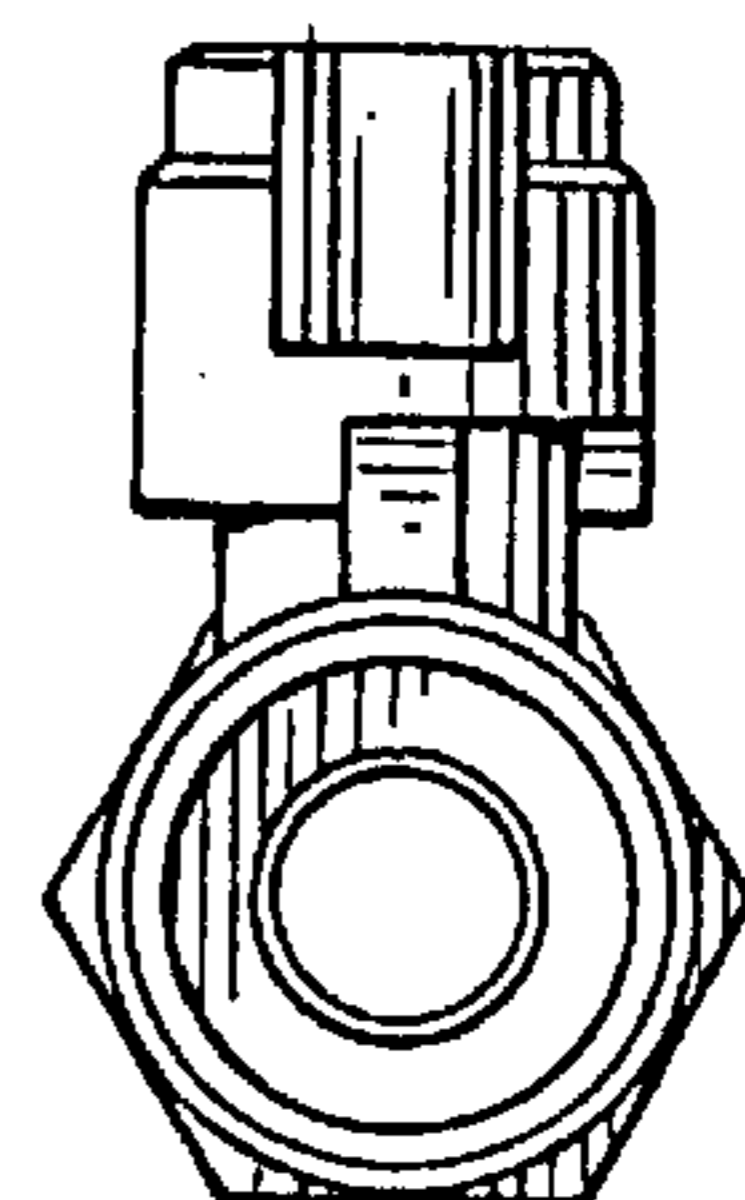


FIG. 5

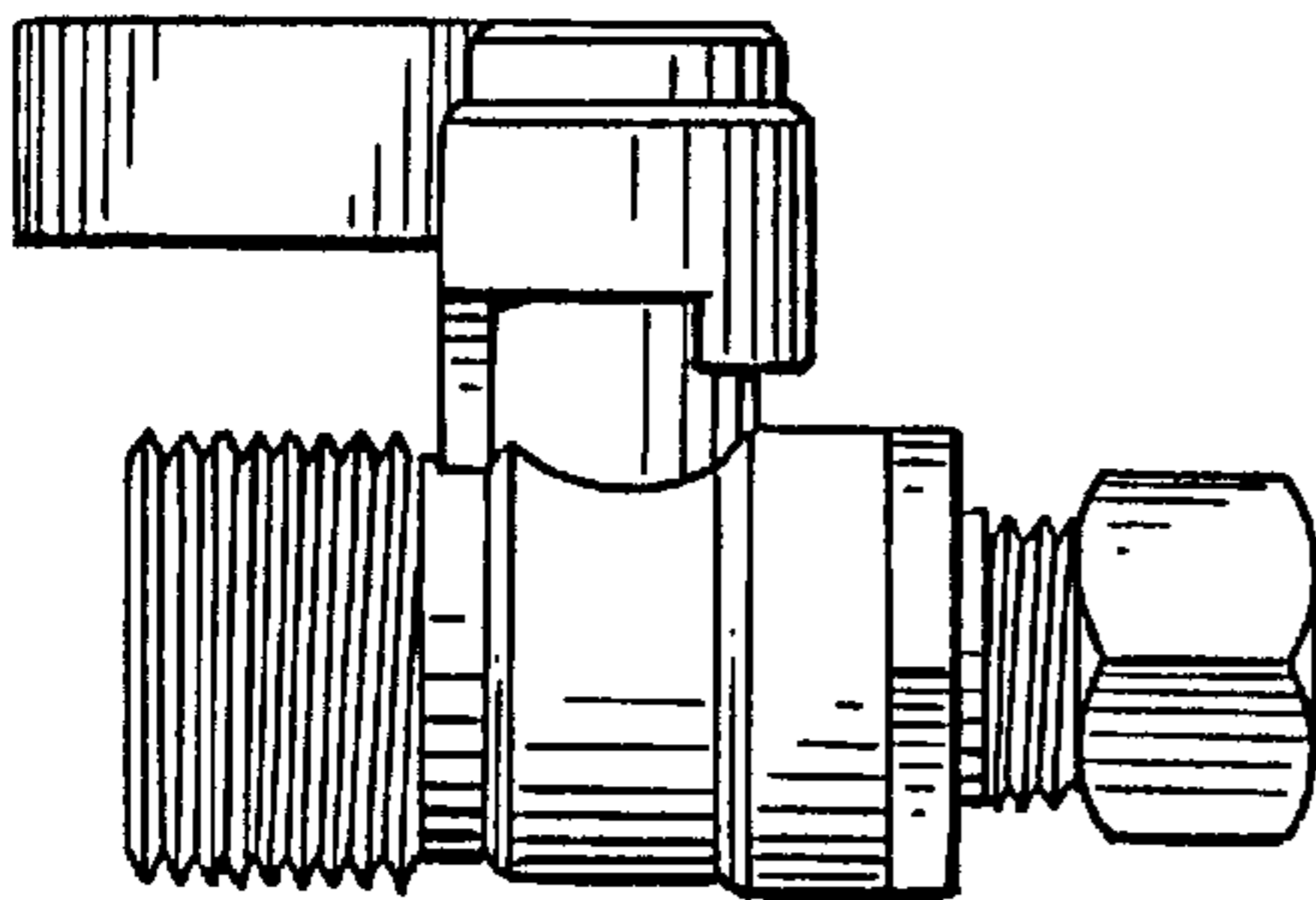


FIG. 6

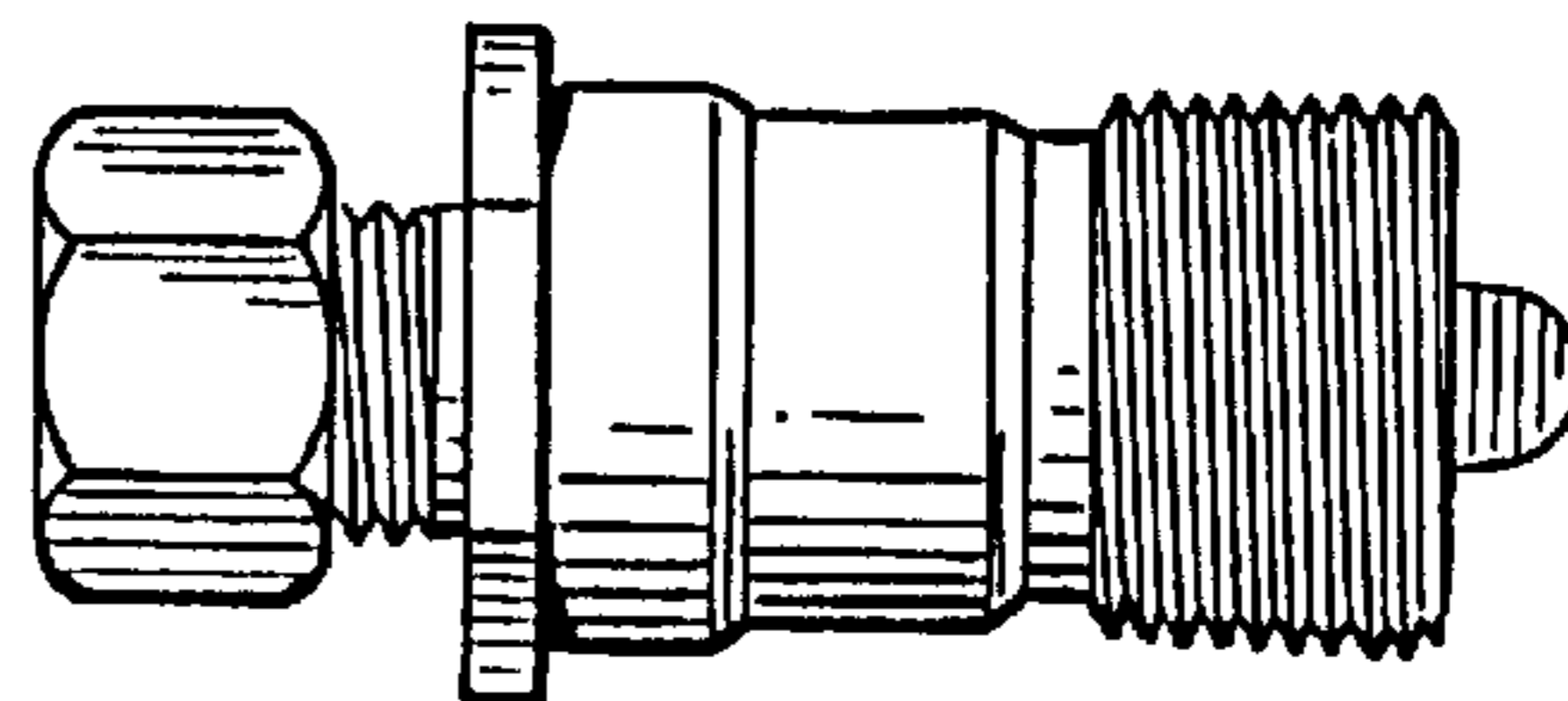


FIG. 7

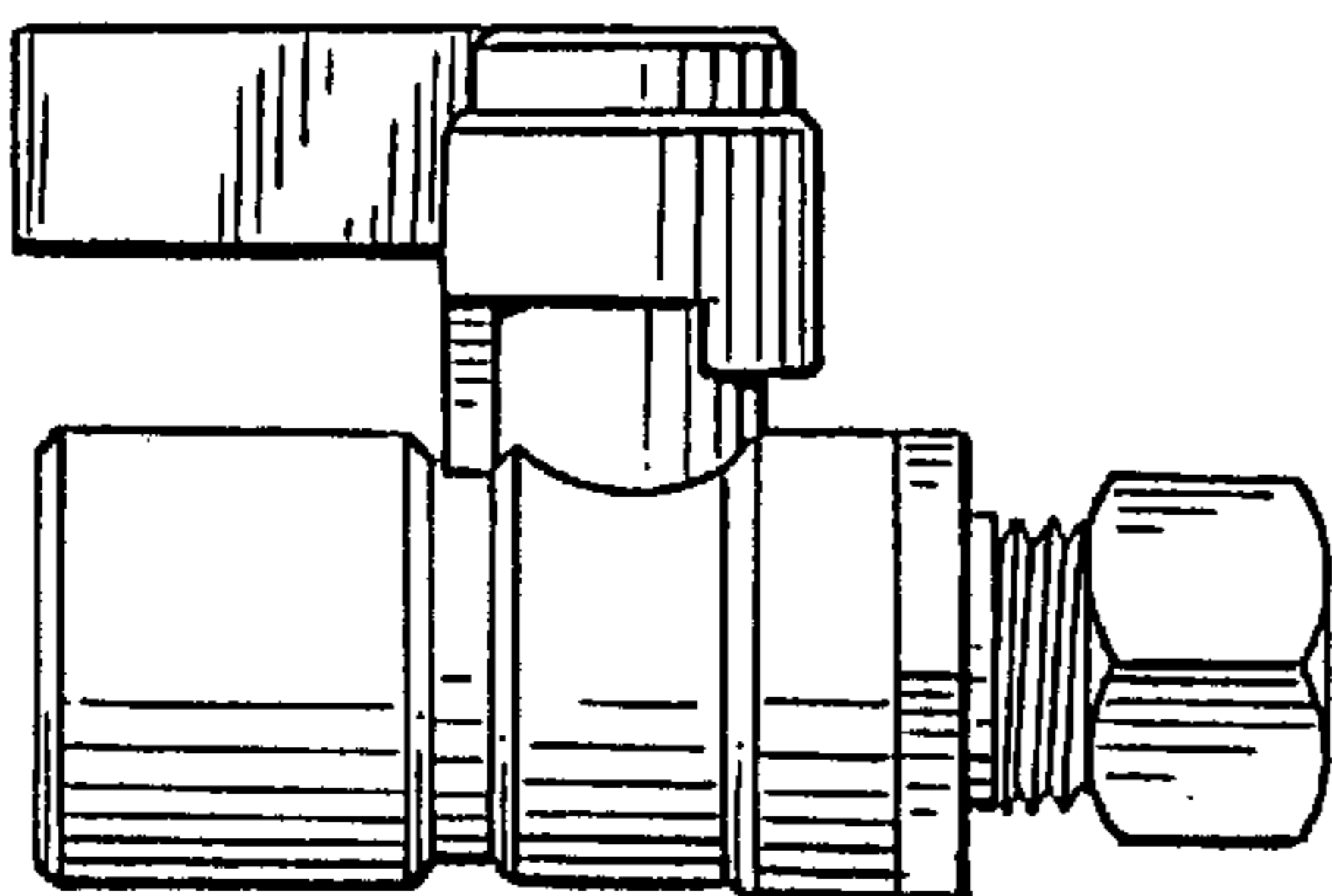


FIG. 8

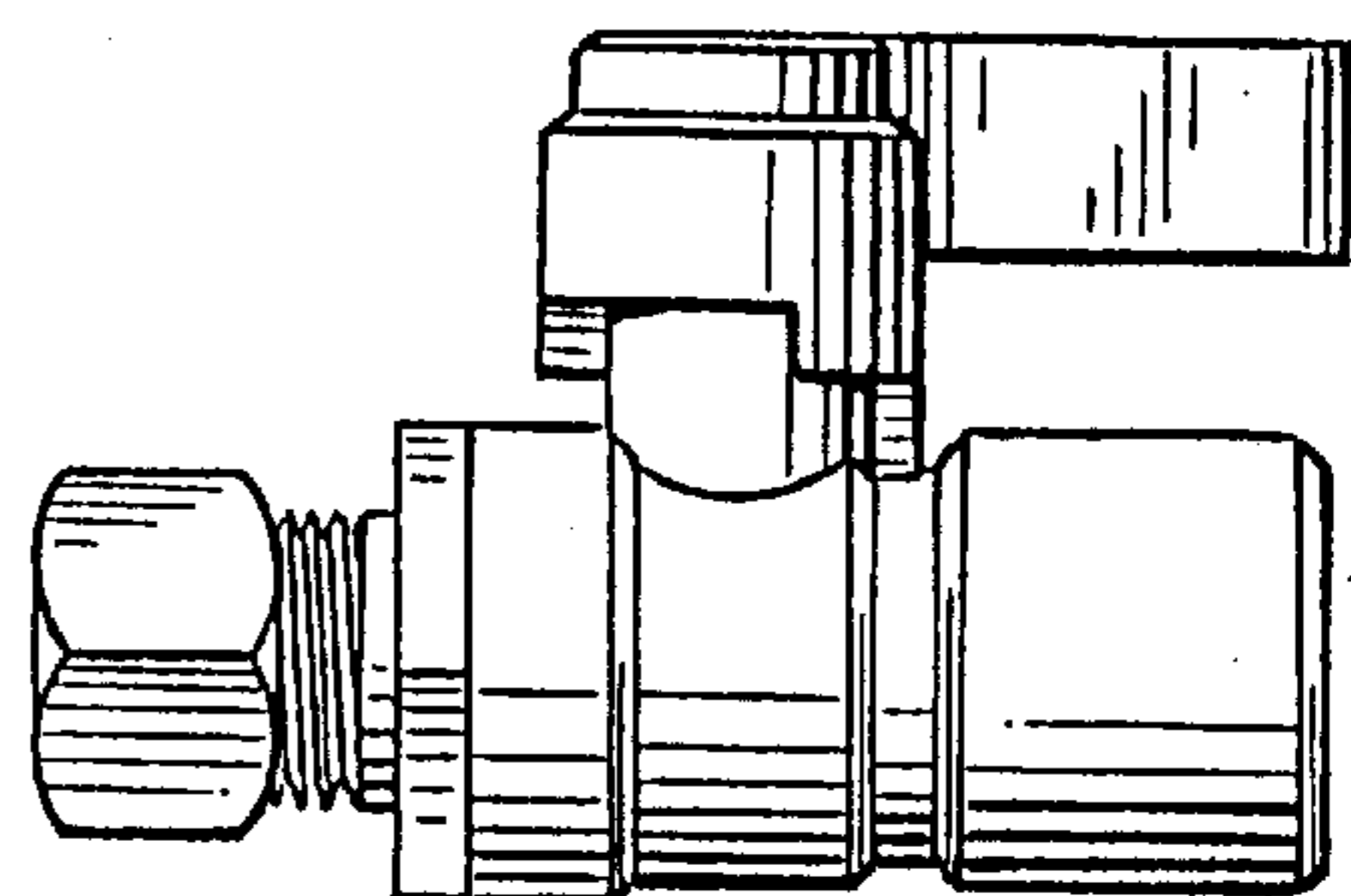


FIG. 9

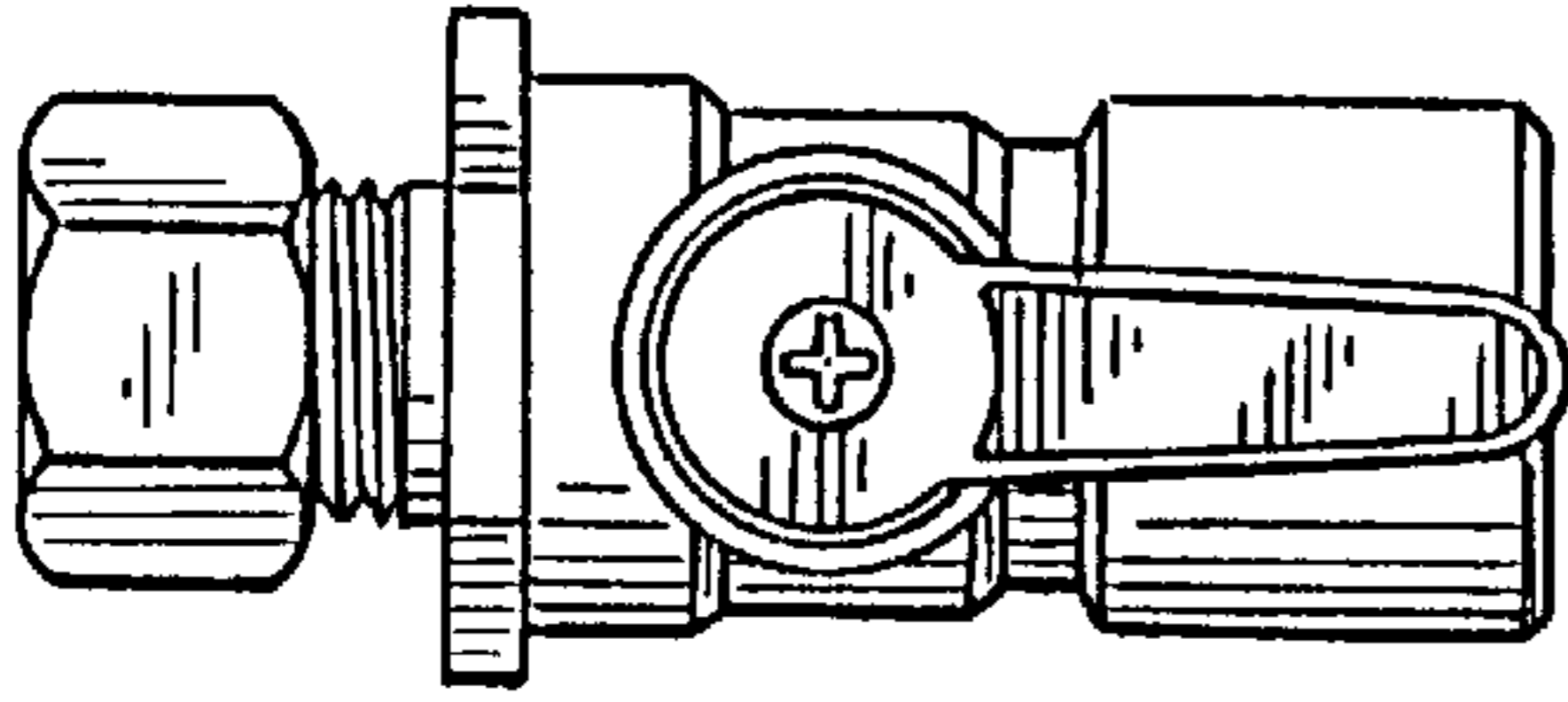


FIG. 10

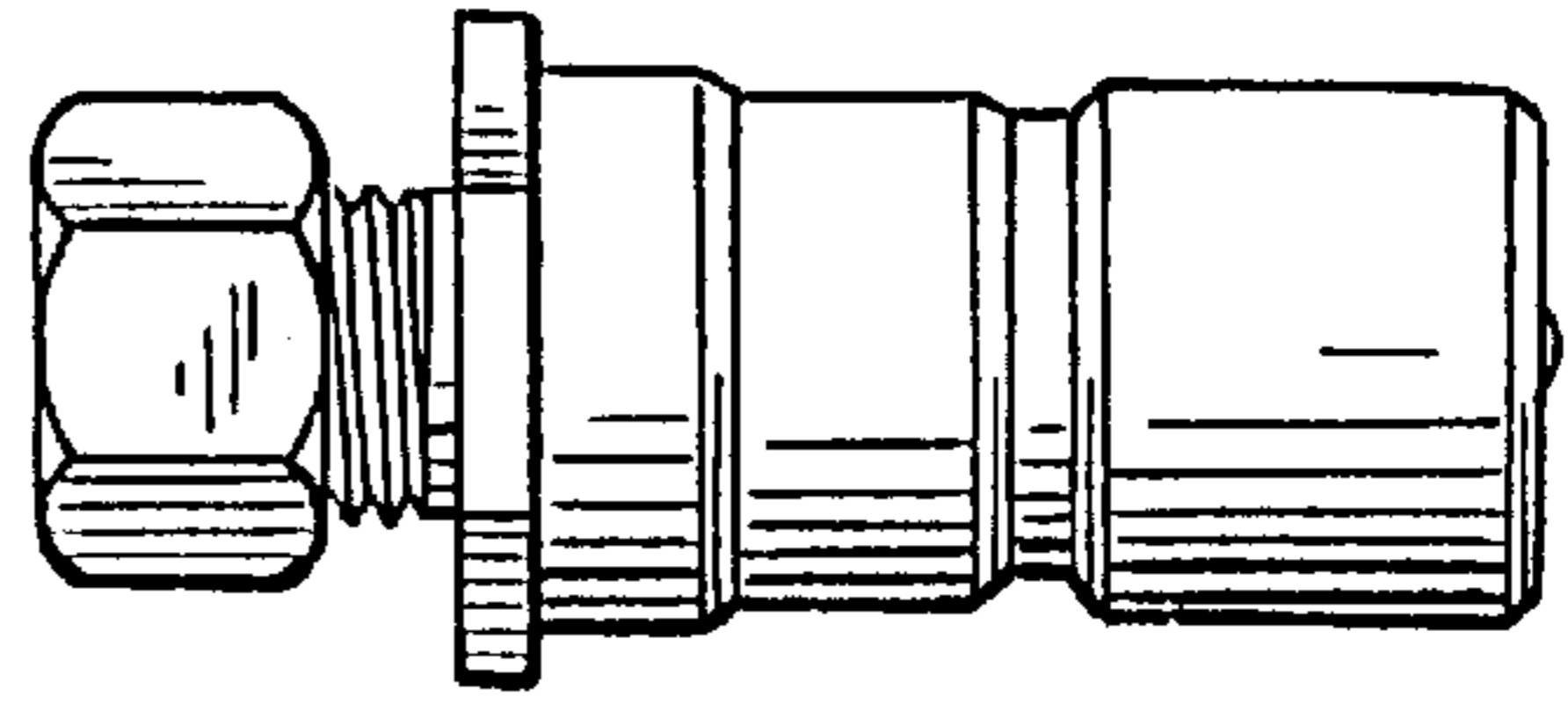


FIG. 11

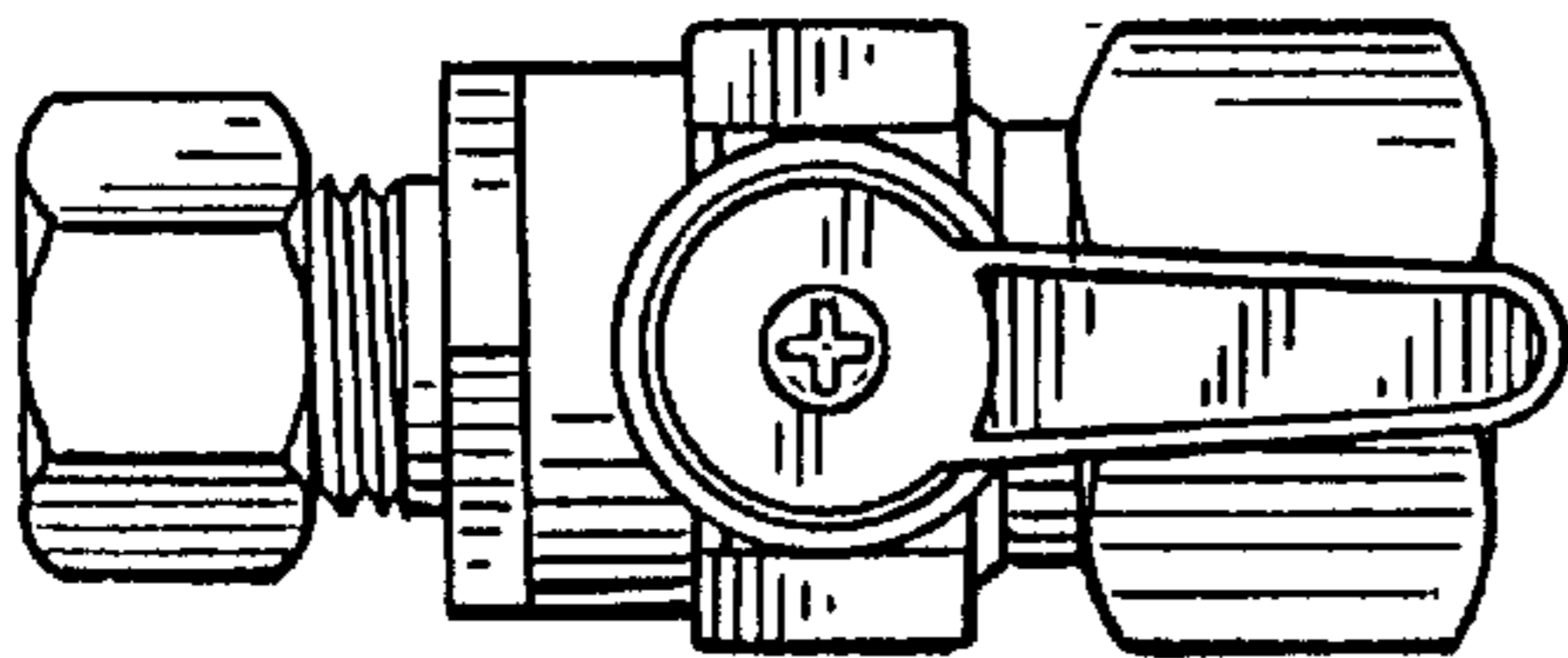


FIG. 12

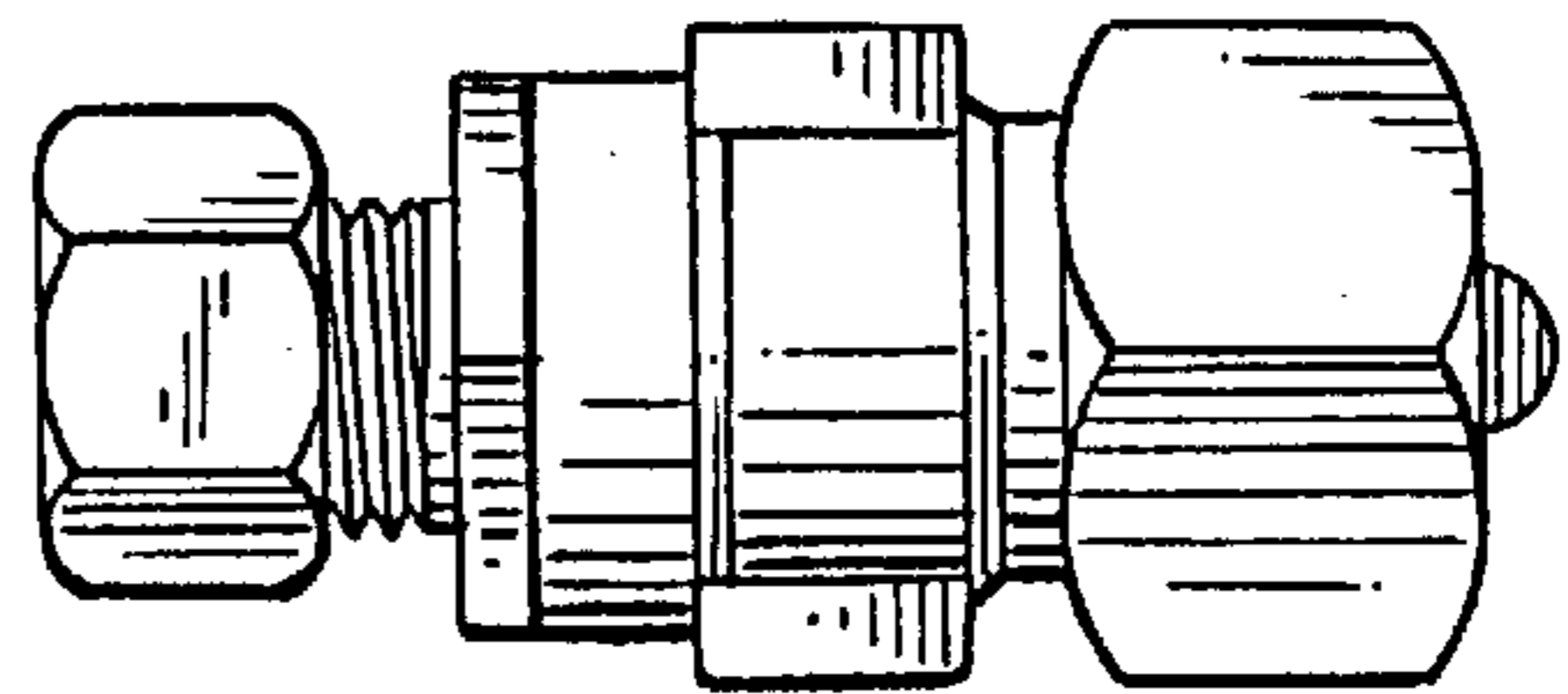


FIG. 13

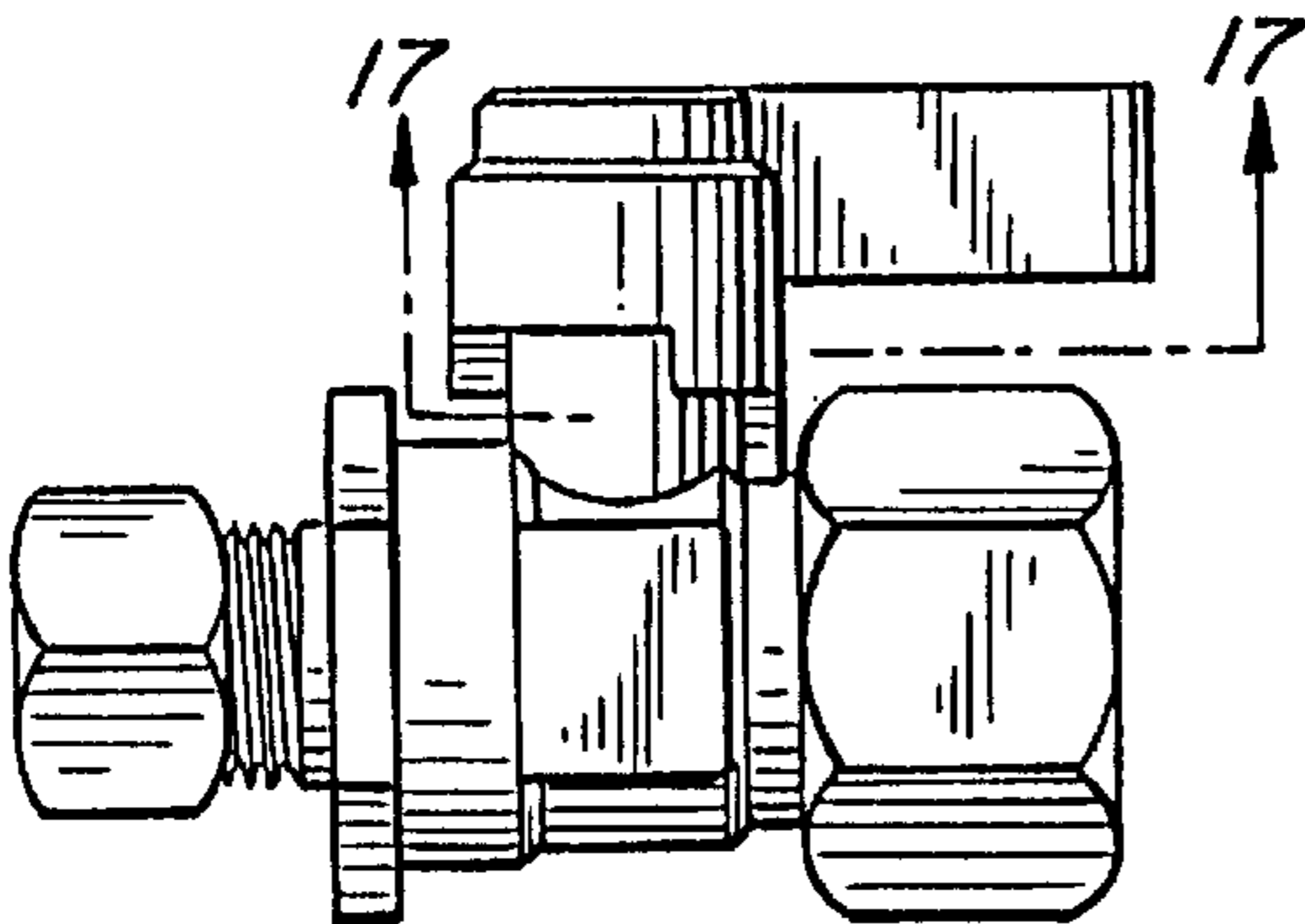


FIG. 14

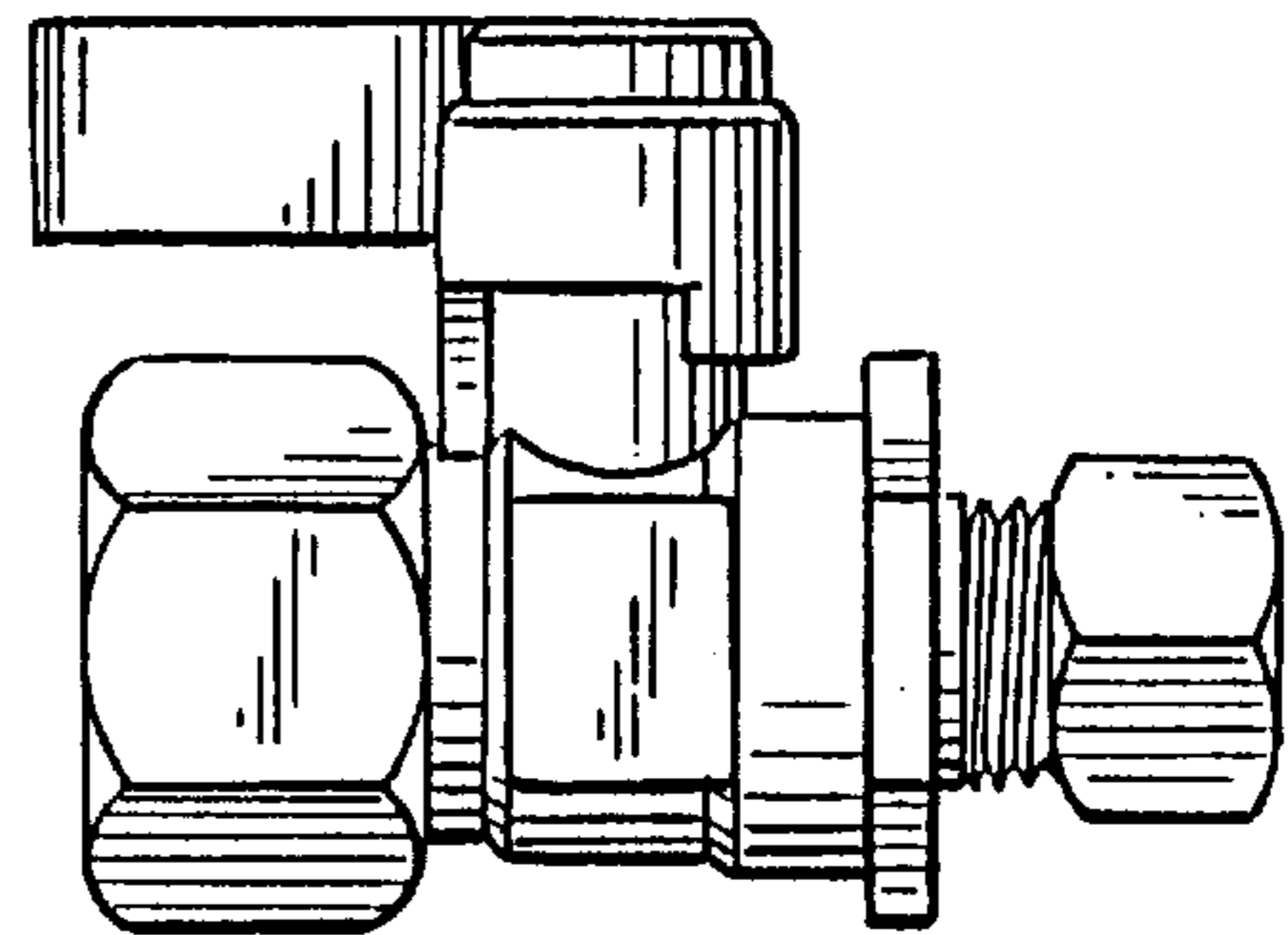


FIG. 15

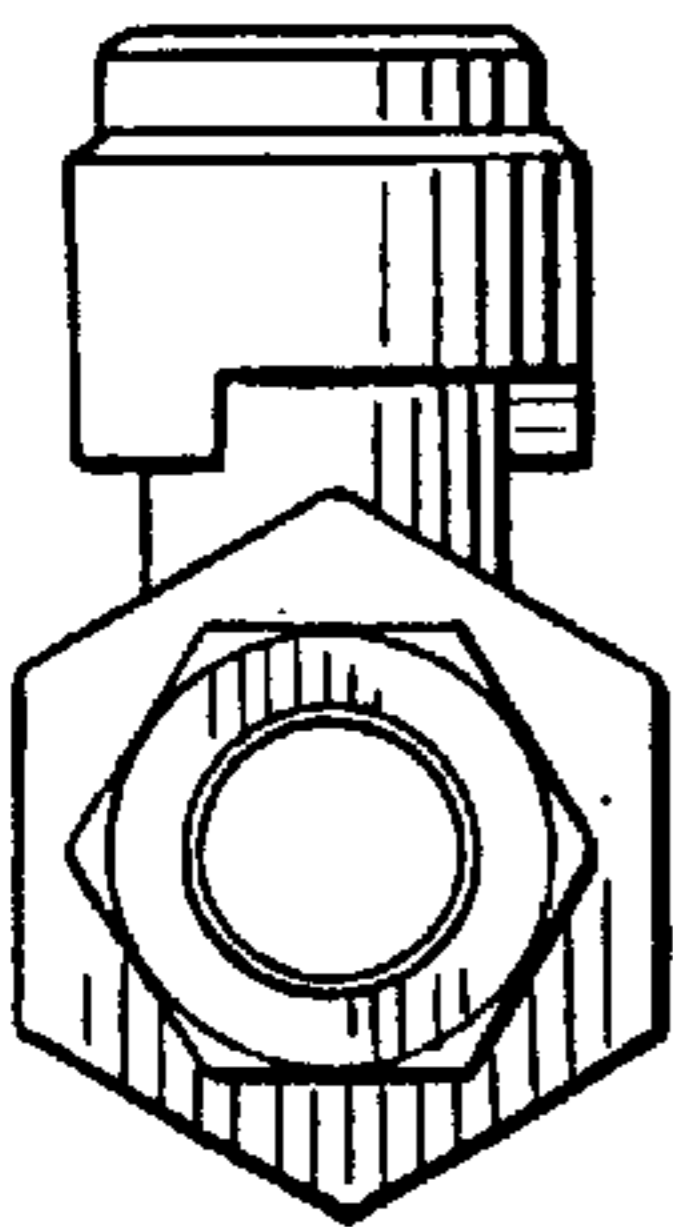


FIG. 16

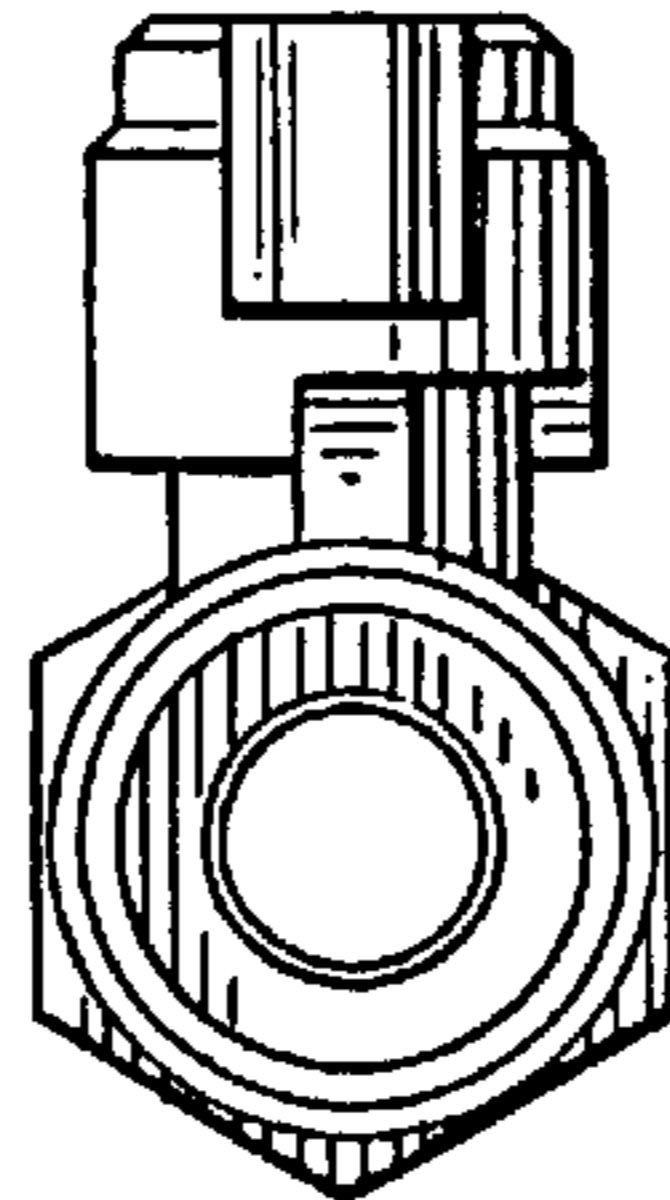


FIG. 17

