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United States Patent [19]

Voo

[11] **Patent Number: Des. 412,561**

[45] **Date of Patent: ** Aug. 3, 1999**

[54] **ONE-QUARTER TURN ANGLED BALL SHUTOFF VALVE**

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

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

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

[21] Appl. No.: **29/078,077**

[22] Filed: **Oct. 16, 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, 309, 310

[56] **References Cited**

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Assistant Examiner—Robin V. Taylor
Attorney, Agent, or Firm—James G. O'Neill

[57] **CLAIM**

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

DESCRIPTION

FIG. **1** is a left end view of a first embodiment of a one-quarter turn angled ball shutoff valve of my new design;
FIG. **2** is a front elevational view of my new design;
FIG. **3** is a right end view of FIG. **2**;
FIG. **4** is a top plan view of FIG. **2**;

FIG. **5** is a bottom plan view of FIG. **2**;

FIG. **6** is a rear elevational view of FIG. **2**;

FIG. **7** is a front elevational view of a second embodiment of a one-quarter turn angled 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 right end outlet;

FIG. **8** is a top plan view of FIG. **7**;

FIG. **9** is a bottom plan view FIG. **7**;

FIG. **10** is a rear elevational view of FIG. **7**;

FIG. **11** is a left end view of a third embodiment of a one-quarter turn angled ball shutoff valve of my new design;

FIG. **12** is a front elevational view of FIG. **11**;

FIG. **13** is a right end view of FIG. **12**;

FIG. **14** is a top plan view of FIG. **12**;

FIG. **15** is a bottom plan view of FIG. **12**;

FIG. **16** is a rear elevational view of FIG. **12**;

FIG. **17** is a left end view of a fourth embodiment of a one-quarter turn angled ball shutoff valve of my new design; the undisclosed right end being similar to the third disclosed embodiment in FIG. **13**;

FIG. **18** is a front elevational view of FIG. **17**;

FIG. **19** is a top plan view FIG. **18**;

FIG. **20** is a bottom plan view of FIG. **18**;

FIG. **21** is a rear elevational view of FIG. **18**;

FIG. **22** is a left end view of a fifth embodiment of a one-quarter turn angled ball shutoff valve of my new design;

FIG. **23** is a front elevational view of FIG. **22**;

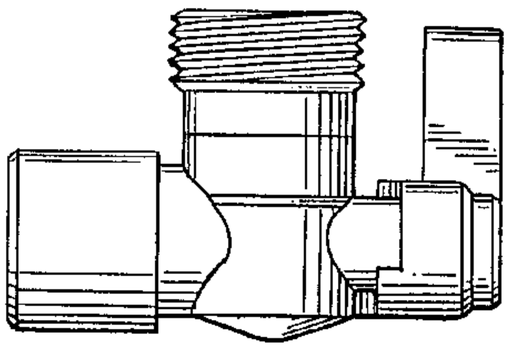
FIG. **24** is a right end view of FIG. **23**;

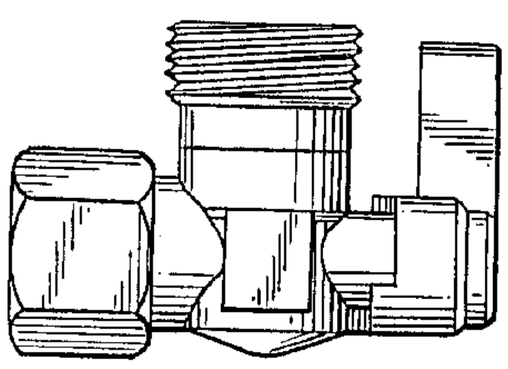
FIG. **25** is a top plan view of FIG. **23**;

FIG. **26** is a bottom plan view of FIG. **23**; and,

FIG. **27** is a rear elevational view of FIG. **23**.

1 Claim, 5 Drawing Sheets





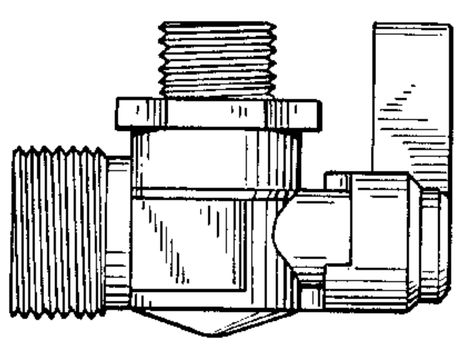


FIG. 1

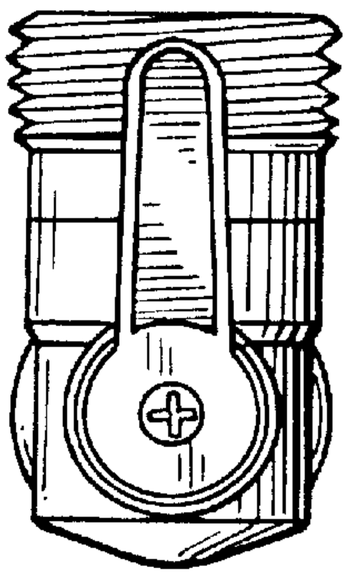


FIG. 2

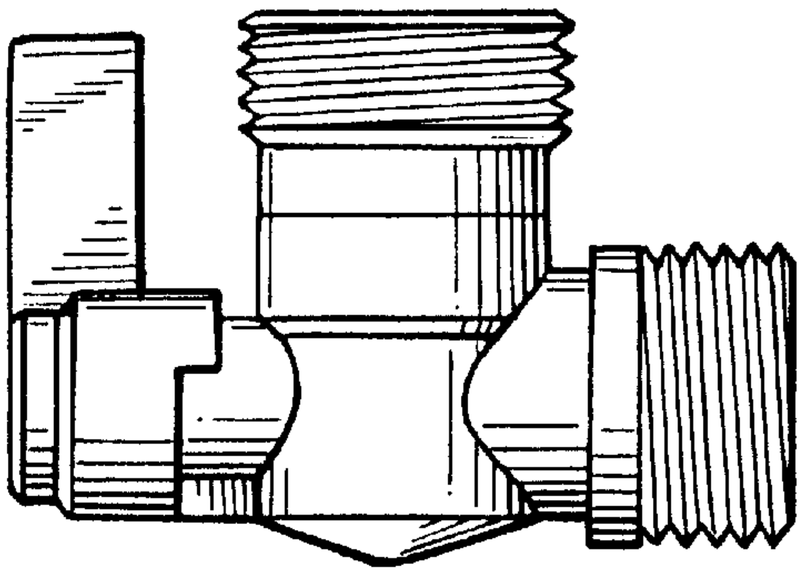


FIG. 3

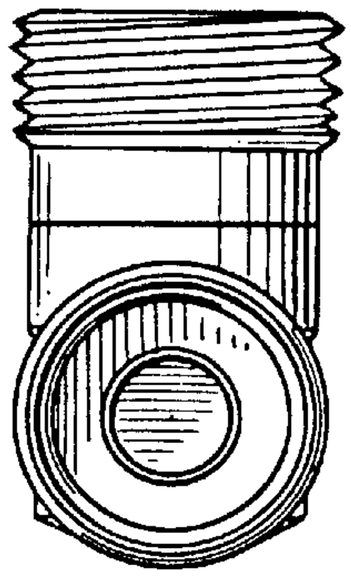


FIG. 4

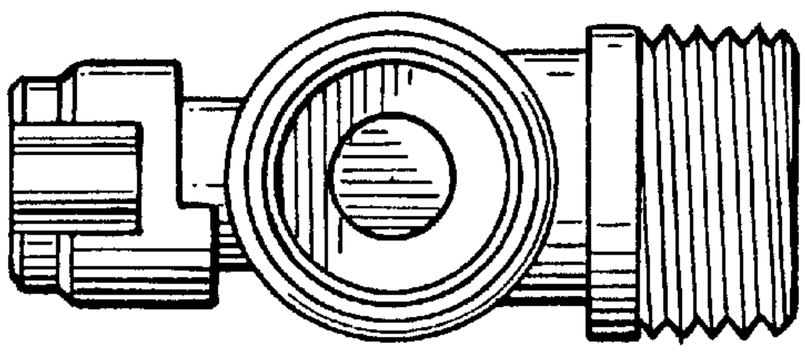


FIG. 5

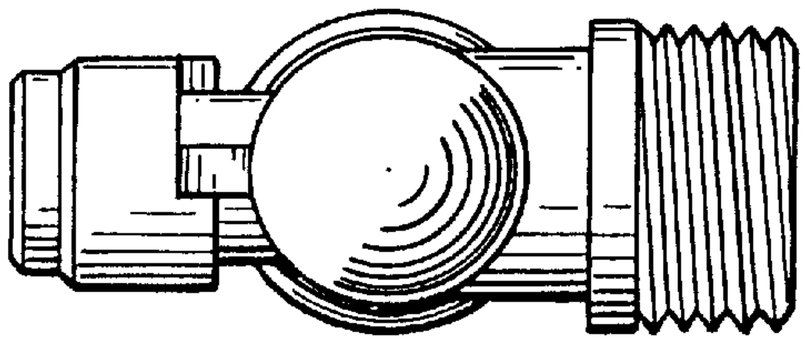


FIG. 6

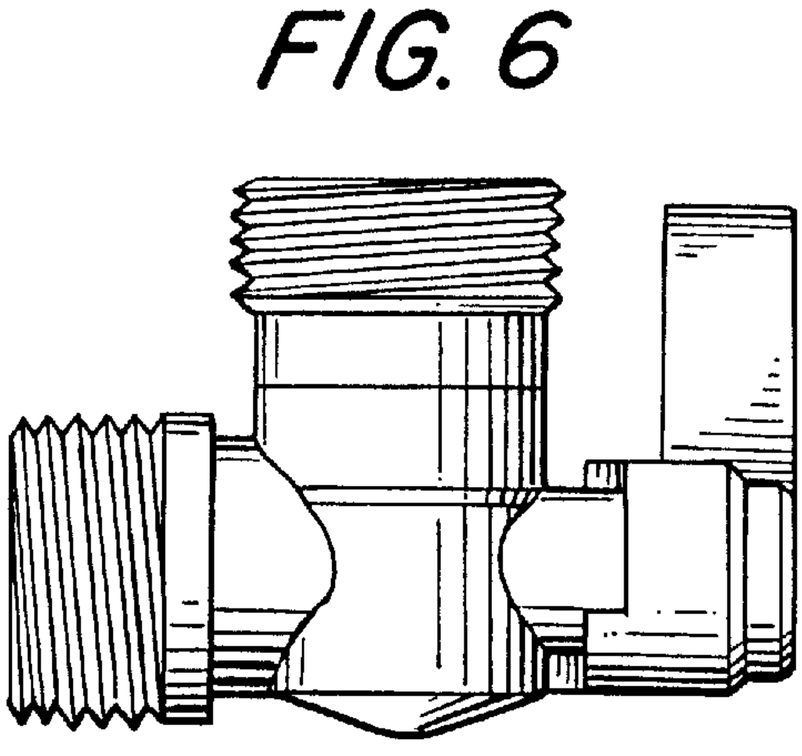


FIG. 7

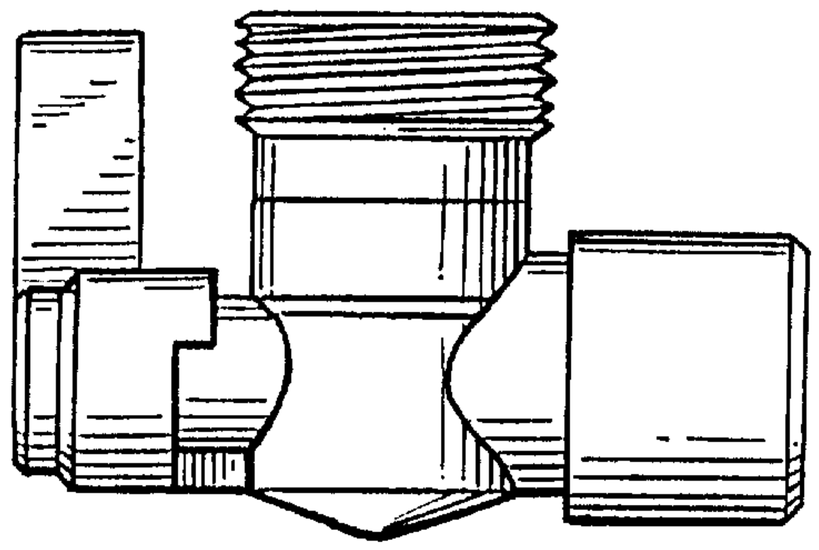


FIG. 8

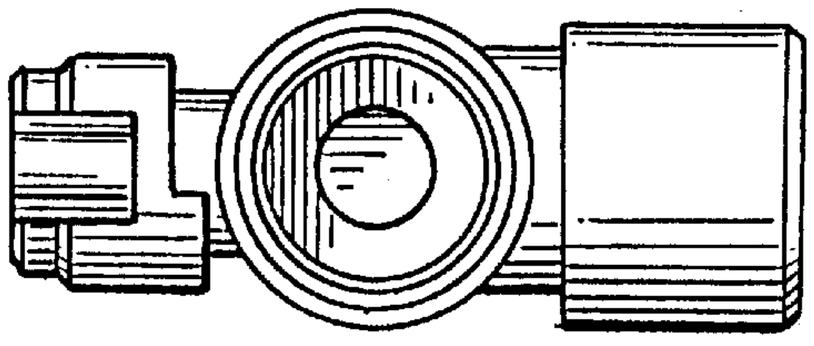


FIG. 9

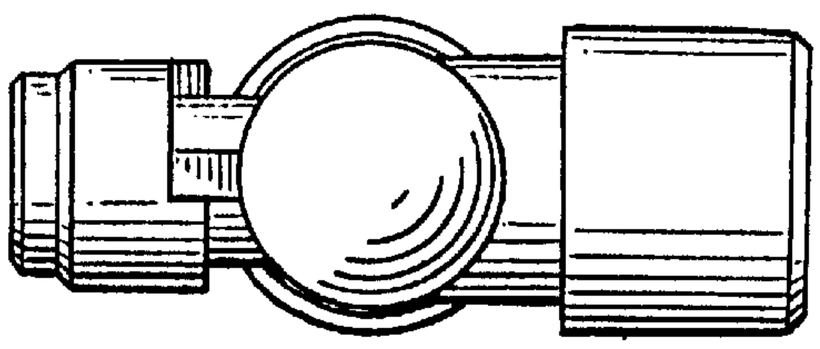


FIG. 10

FIG. 11

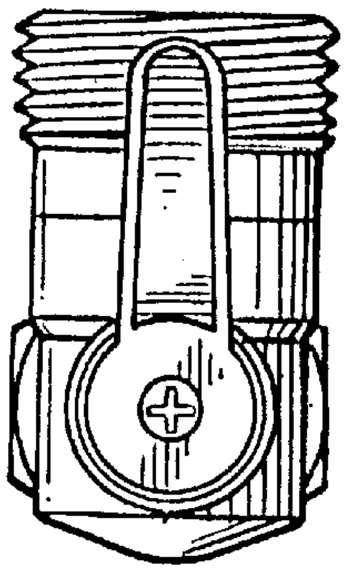


FIG. 12

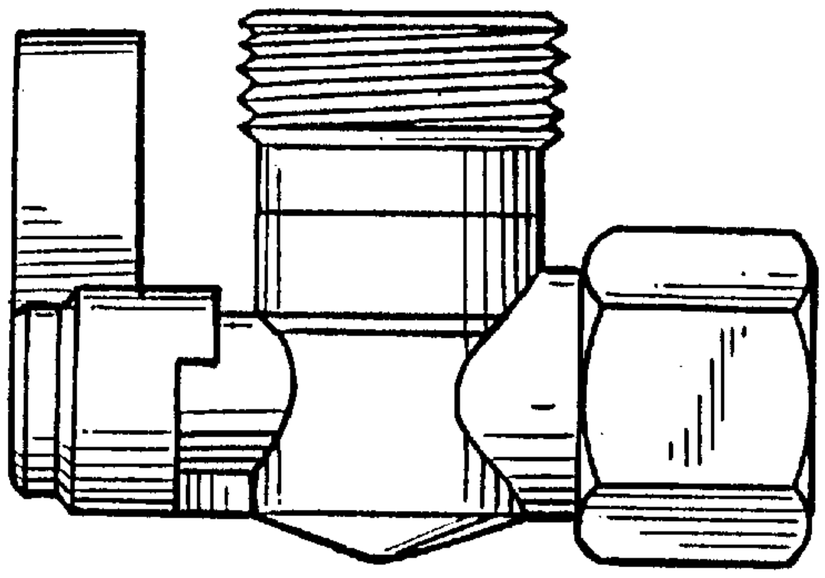


FIG. 13

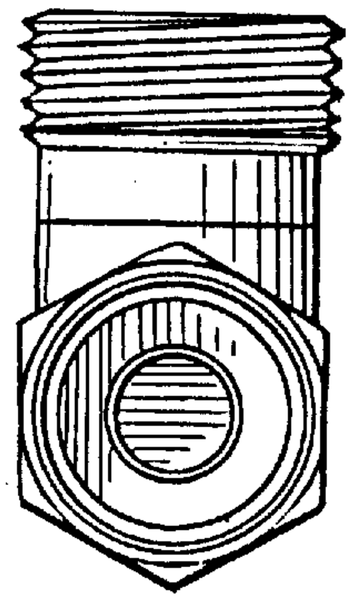


FIG. 14

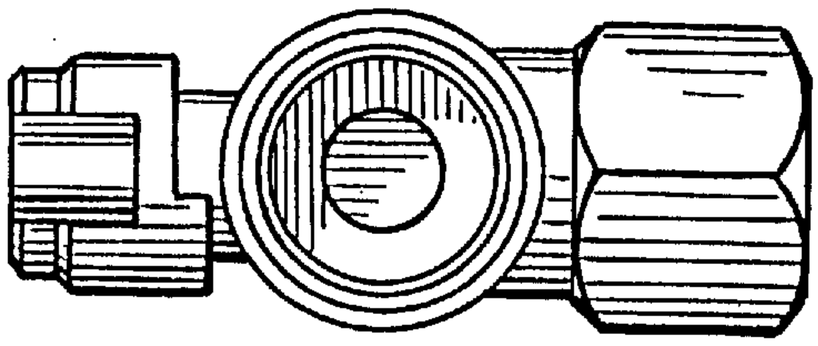


FIG. 15

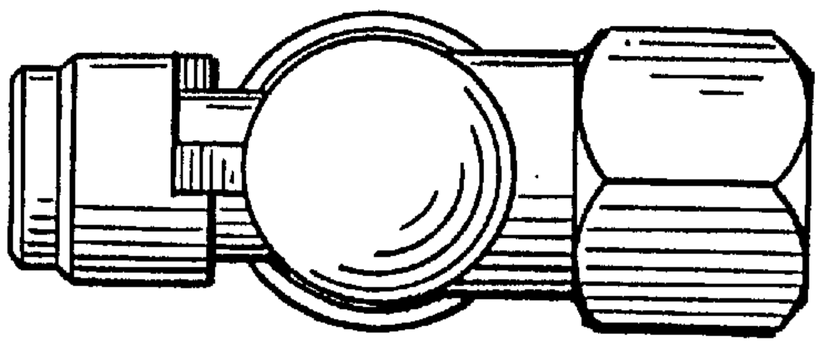


FIG. 16

FIG. 17

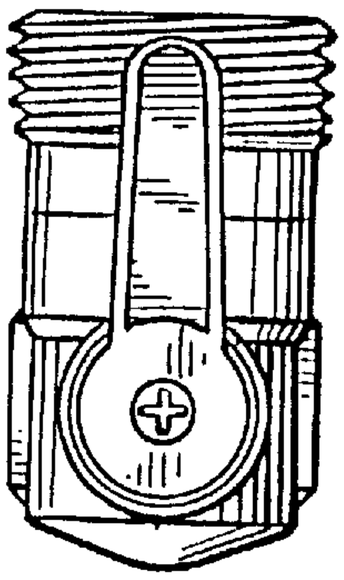


FIG. 18

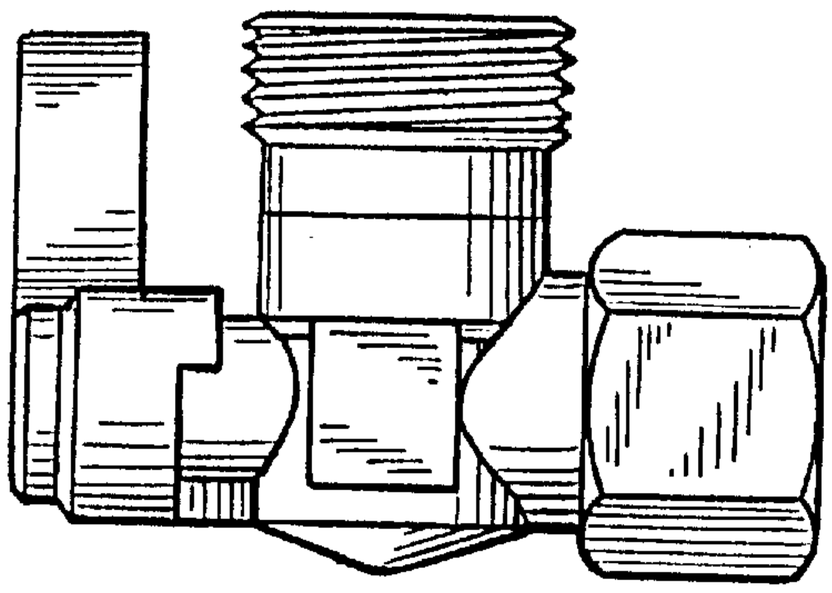


FIG. 19

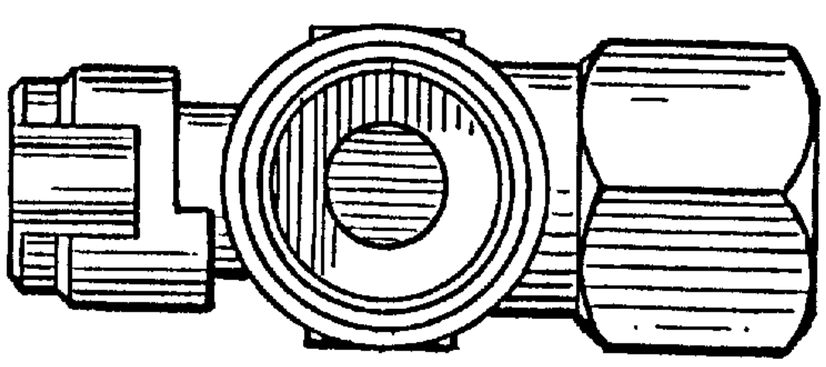


FIG. 20

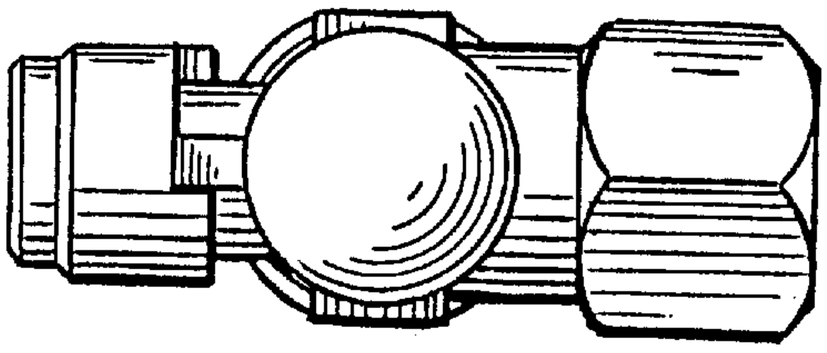


FIG. 21

FIG. 22

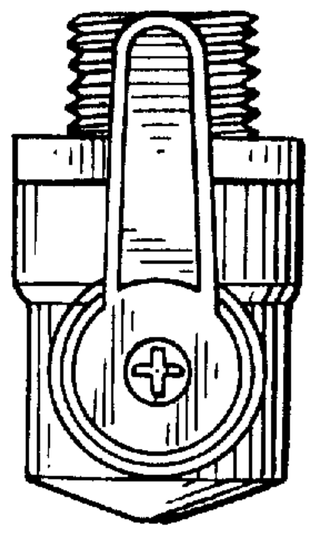


FIG. 23

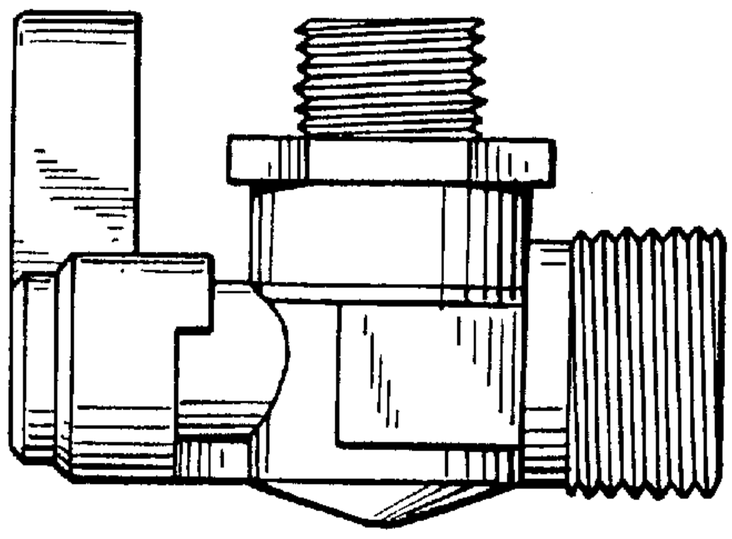


FIG. 24

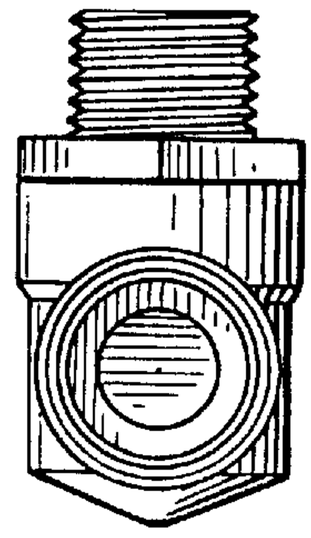


FIG. 25

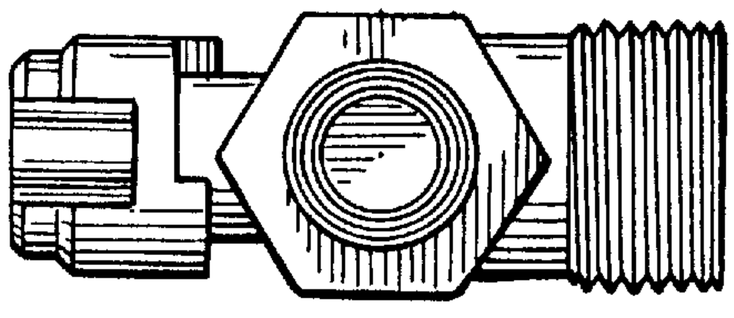


FIG. 26

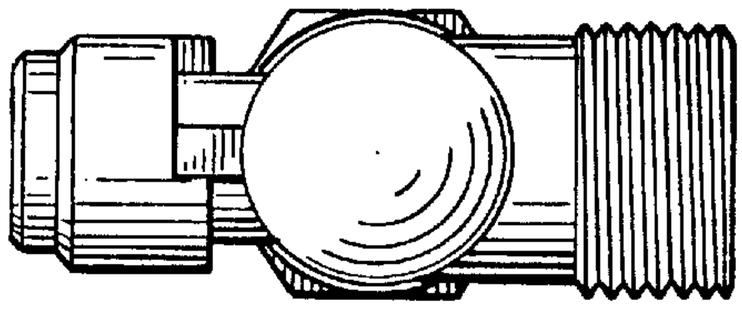


FIG. 27