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United States Patent [19]

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Takematsu et al.

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[54] LIQUID RECEIVER FOR STORAGE OF LIQUID REFRIGERANT AND HAVING A DESICCANT CHARGING PORTION, FOR USE IN VEHICLE AIR CONDITIONERS AND THE LIKE

FOREIGN PATENT DOCUMENTS

1139518 11/1962 Fed. Rep. of Germany 62/474
61-159777 10/1986 Japan .
63-315874 12/1988 Japan .
533571 2/1941 United Kingdom 215/1 R

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Assistant Examiner—Lisa Lichtenstein
Attorney, Agent, or Firm—Gordon W. Hueschen

[73] Assignee: Calsonic Corporation, Tokyo, Japan

[57] CLAIM

[**] Term: 14 Years

The ornamental design for a liquid receiver for storage of liquid refrigerant and having a desiccant charging portion, for use in vehicle air conditioners and the like, as shown and described.

[21] Appl. No.: 405,667

[22] Filed: Sep. 11, 1989

DESCRIPTION

[30] Foreign Application Priority Data

Mar. 13, 1989 [JP] Japan 1-8657
Mar. 13, 1989 [JP] Japan 1-8658

[52] U.S. Cl. D23/325

[58] Field of Search D23/361, 363, 357, 359, D23/360, 362, 356, 325, 386; 215/1 R; D24/56; D9/371; 62/149, 509, 474509, 474

FIG. 1 is a top front perspective view of a liquid receiver for storage of liquid refrigerant and having a desiccant charging portion, for use in vehicle air conditioners and the like showing our new design;

FIG. 2 is a front elevation view thereof;

FIG. 3 is a rear elevation view thereof;

FIG. 4 is a left side elevation view thereof, the opposite side being a mirror image of that shown;

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

FIG. 7 is a top, front, perspective view of a liquid receiver showing a second embodiment of our new design;

FIG. 8 is a front elevation view of FIG. 7;

FIG. 9 is a rear elevation view of FIG. 7;

FIG. 10 is a left side elevation view of FIG. 7, the opposite side being a mirror image of that shown;

FIG. 11 is a top plan view of FIG. 7; and

FIG. 12 is a bottom plan view of FIG. 7.

The electrical cord has been broken-away in FIGS. 2, 3, 4, 5, 8, 9, 10, and 11 for convenience of illustration.

[56] References Cited

U.S. PATENT DOCUMENTS

D. 232,355 8/1974 Wiedmann D24/56
893,843 7/1908 Hamman 215/1 R
1,599,348 9/1926 Rieser 215/1 R
1,934,887 11/1933 Robinson D23/360
2,227,662 1/1941 McHarg D23/360
2,324,649 7/1943 Smith 62/509
3,606,762 9/1971 Anglin 62/61
4,647,719 3/1987 Yanagisawa 62/509
4,707,999 11/1987 Ohta et al. 62/509
4,778,073 10/1988 Ehs 220/3
4,920,766 5/1990 Yamamoto et al. 62/509

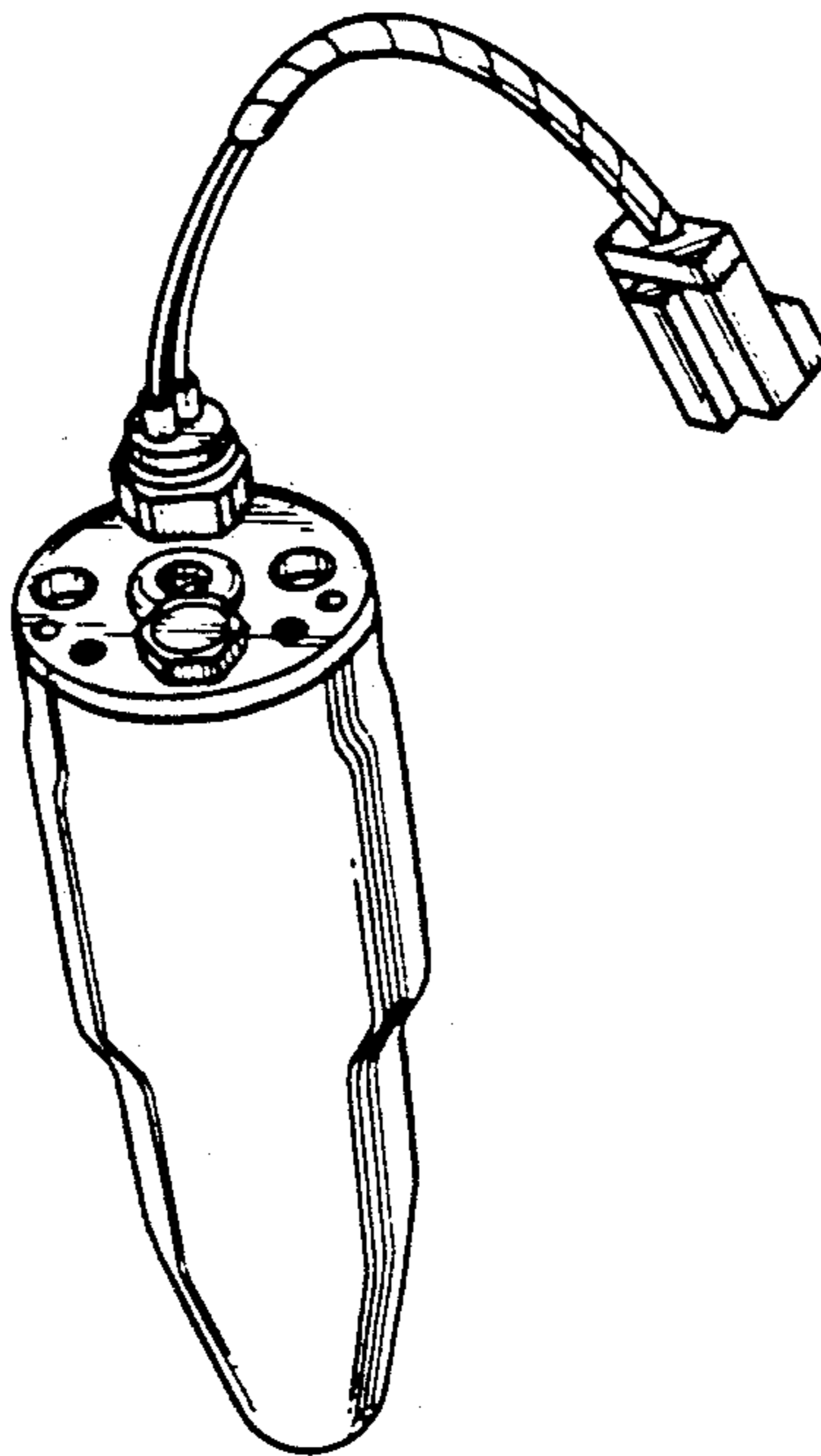


FIG. 1

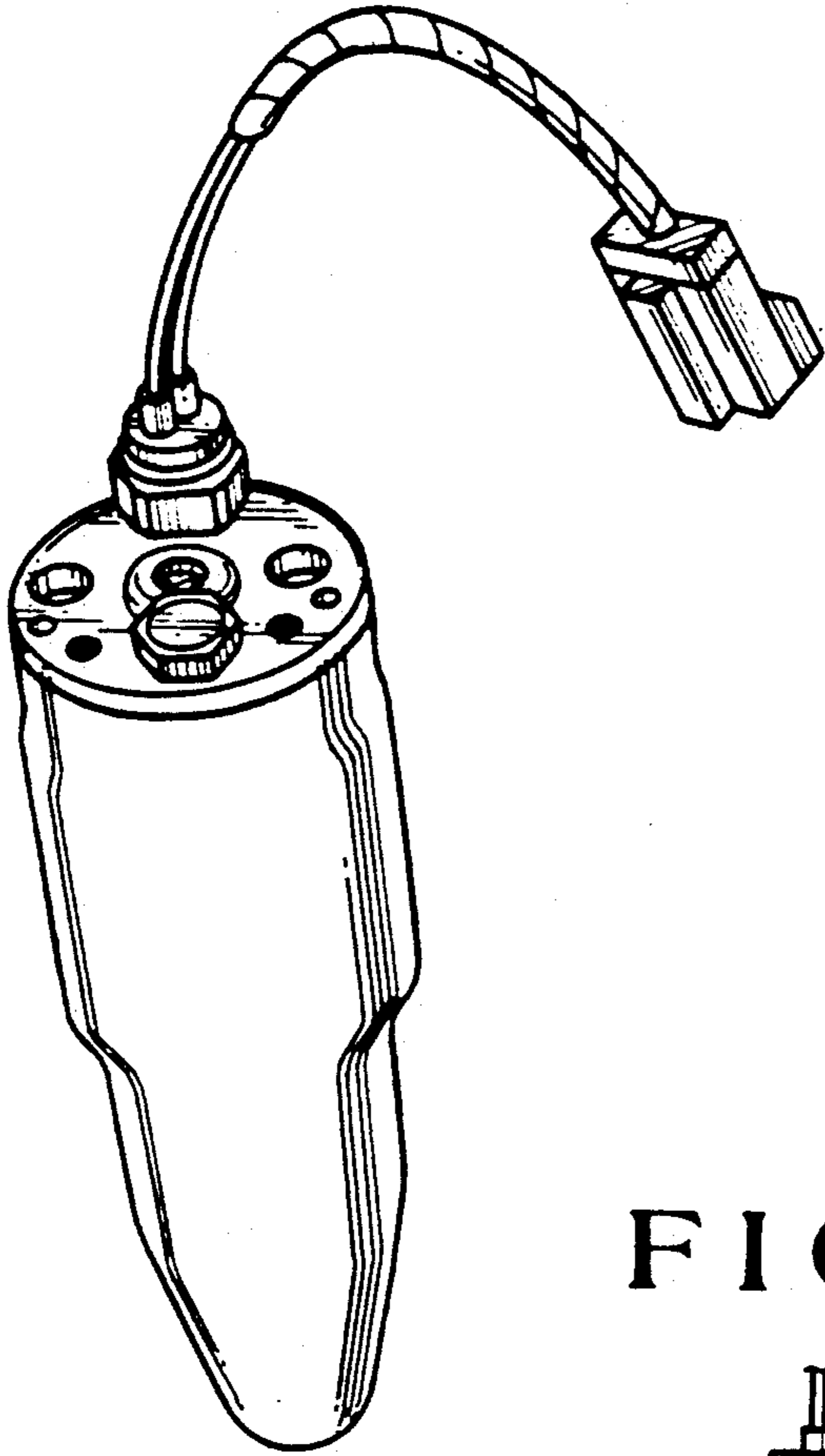


FIG. 2

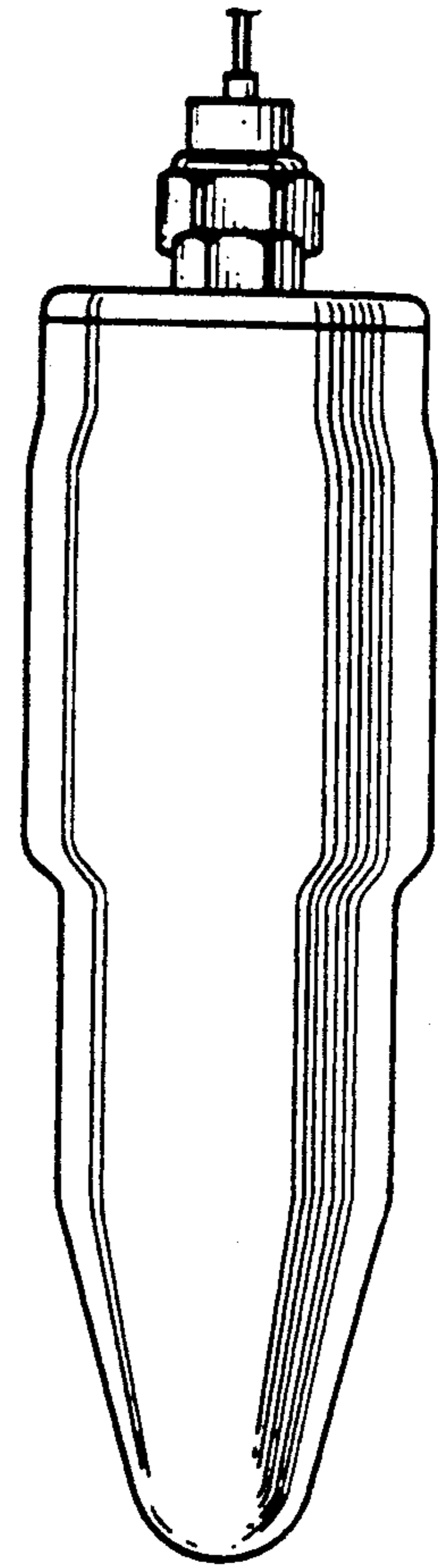


FIG. 3

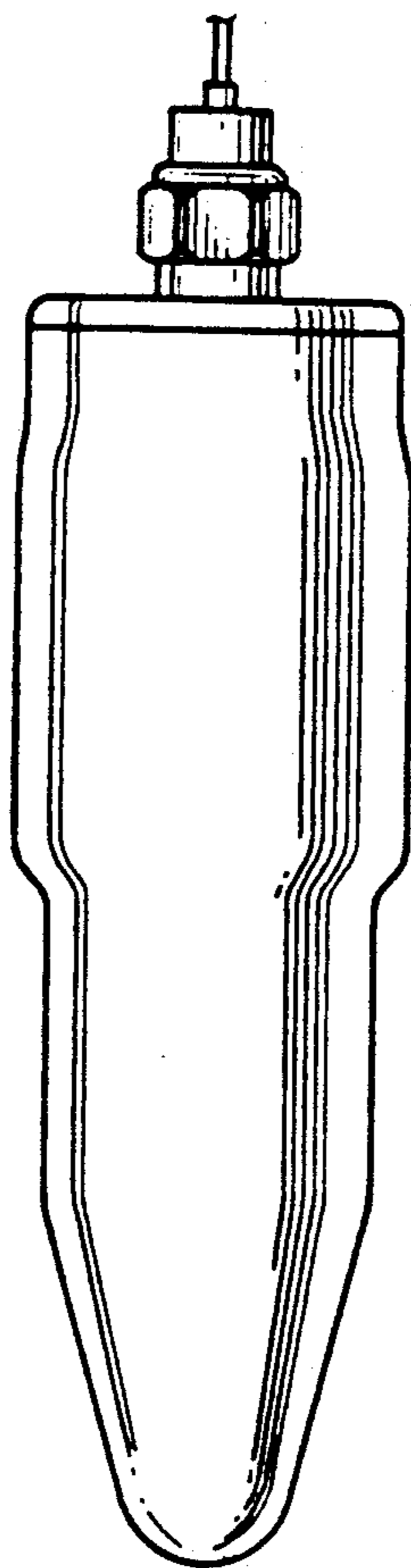


FIG. 4

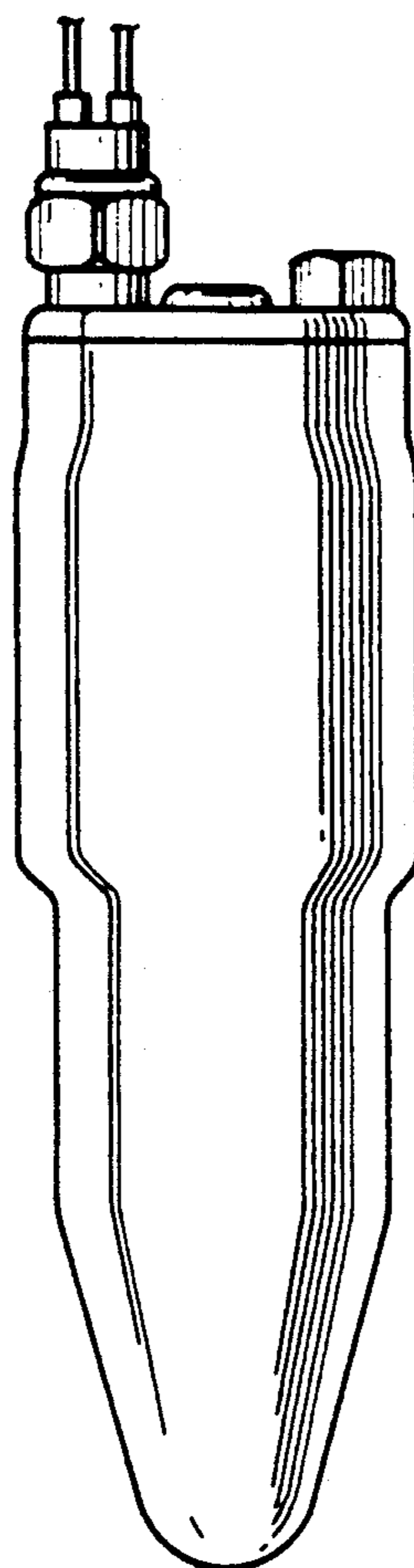


FIG. 5

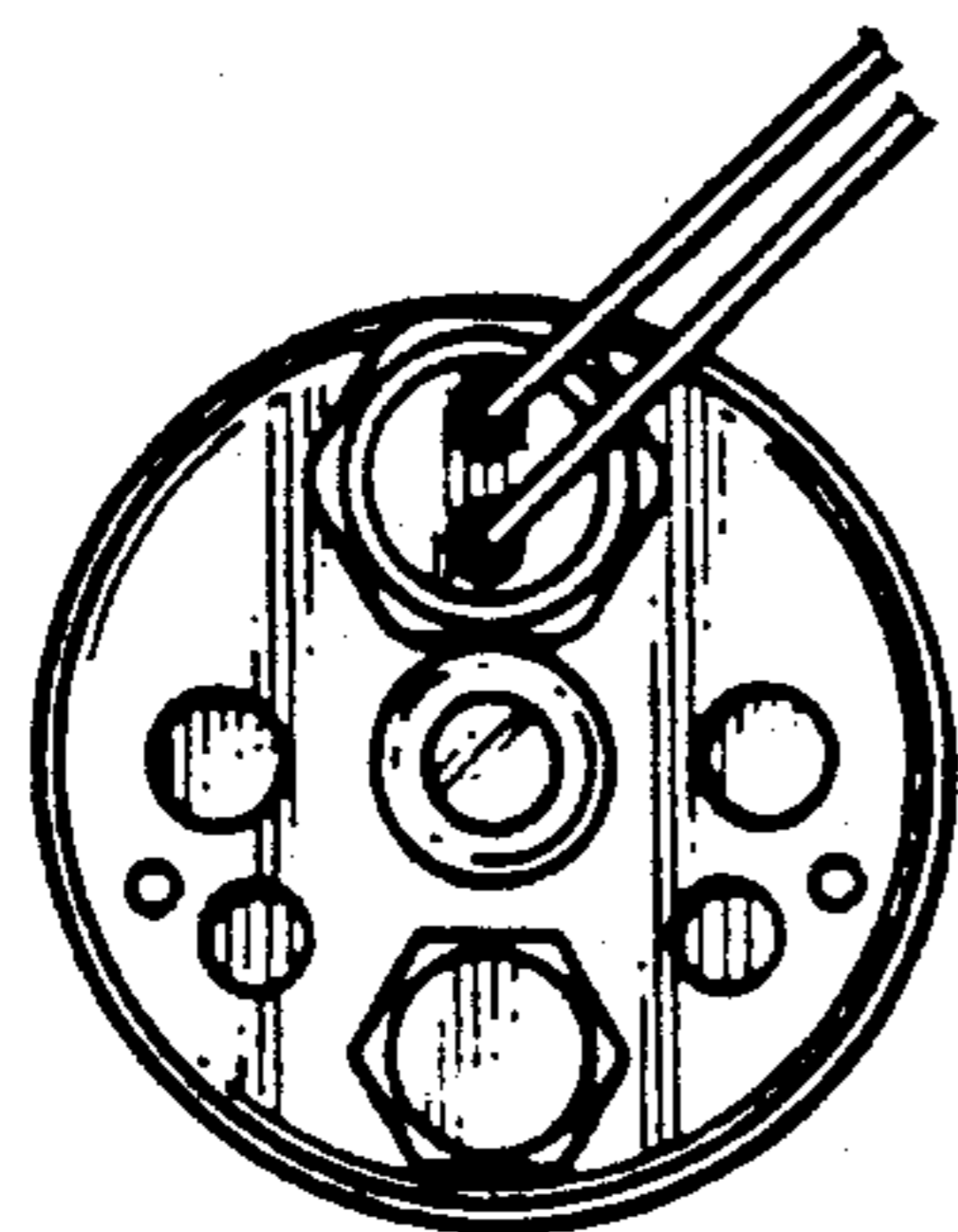


FIG. 6

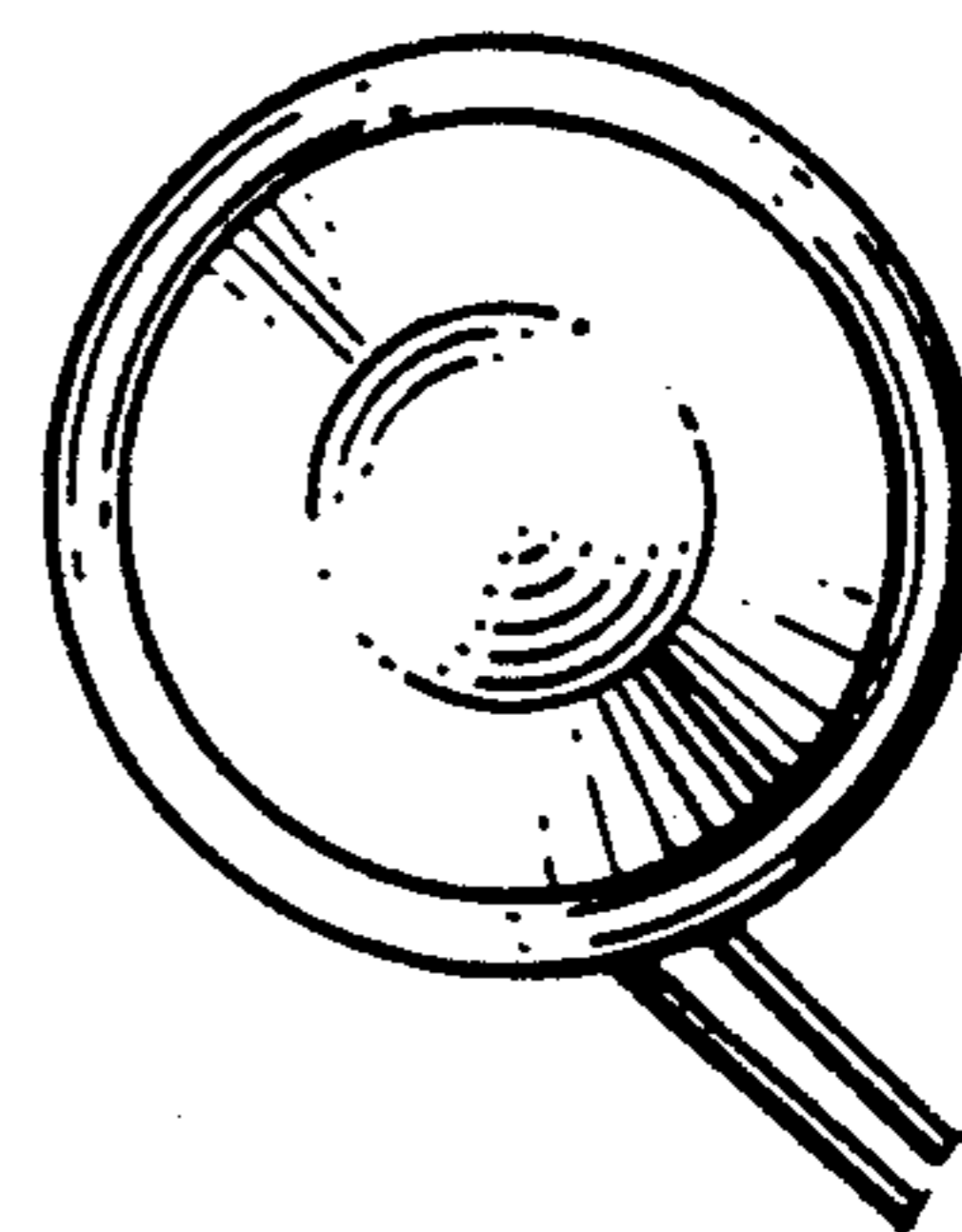


FIG. 7

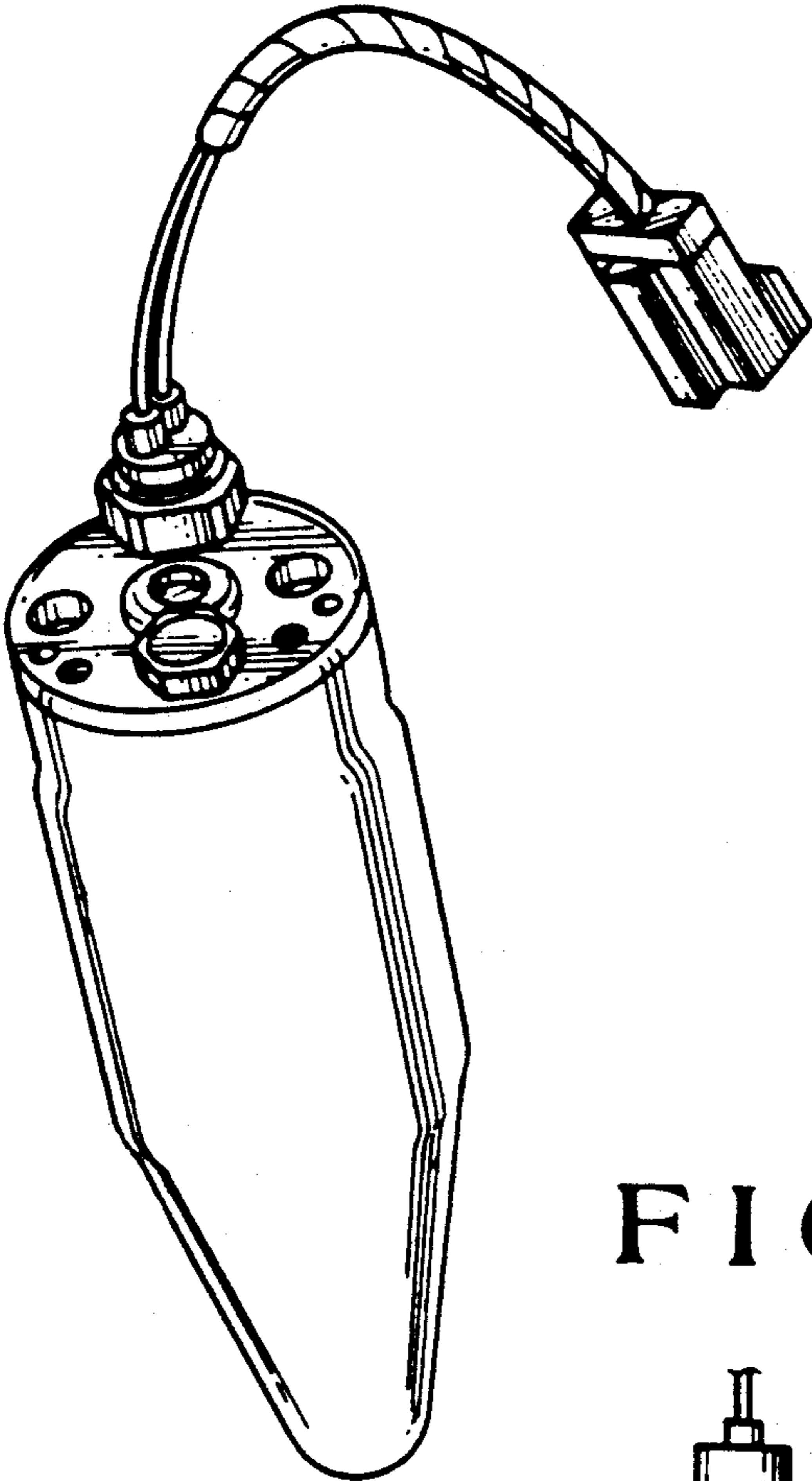


FIG. 8

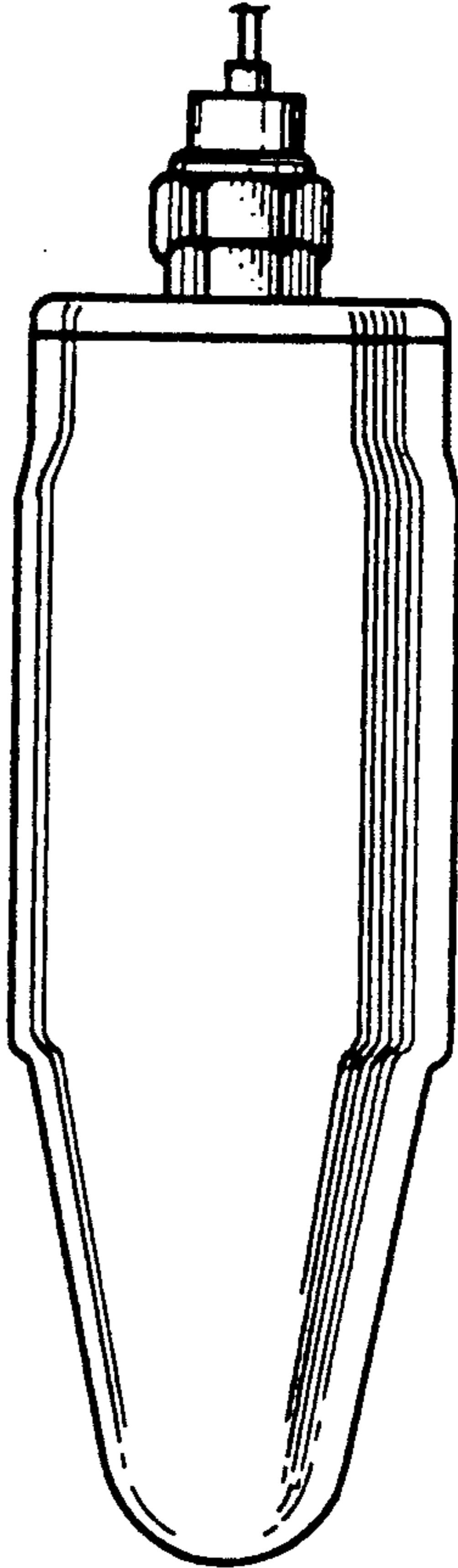


FIG. 9

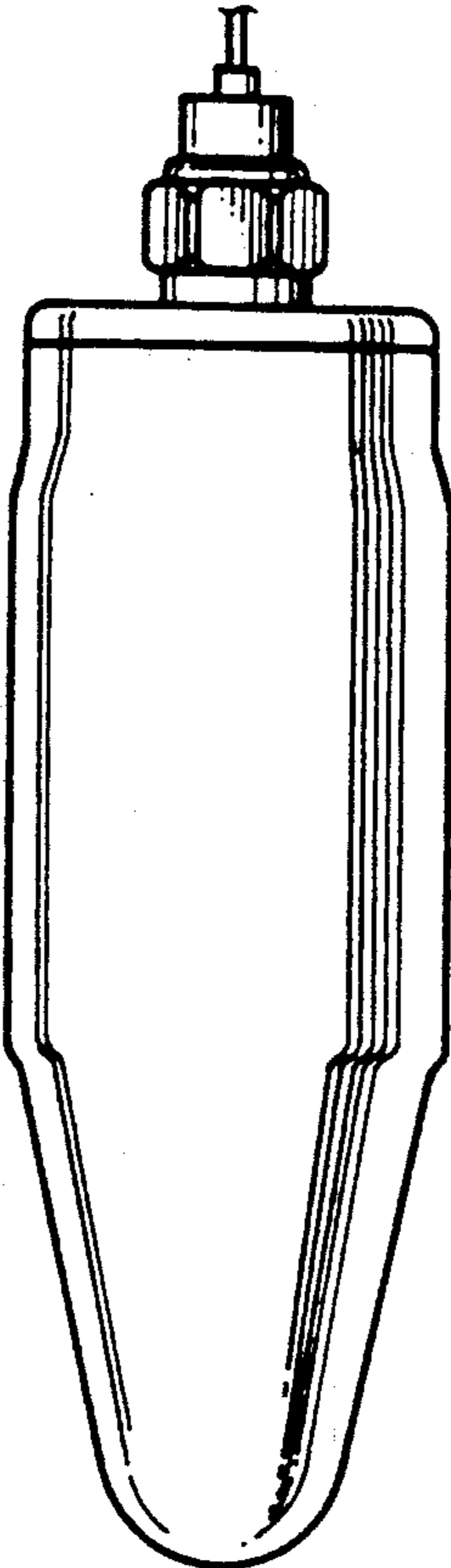


FIG.10

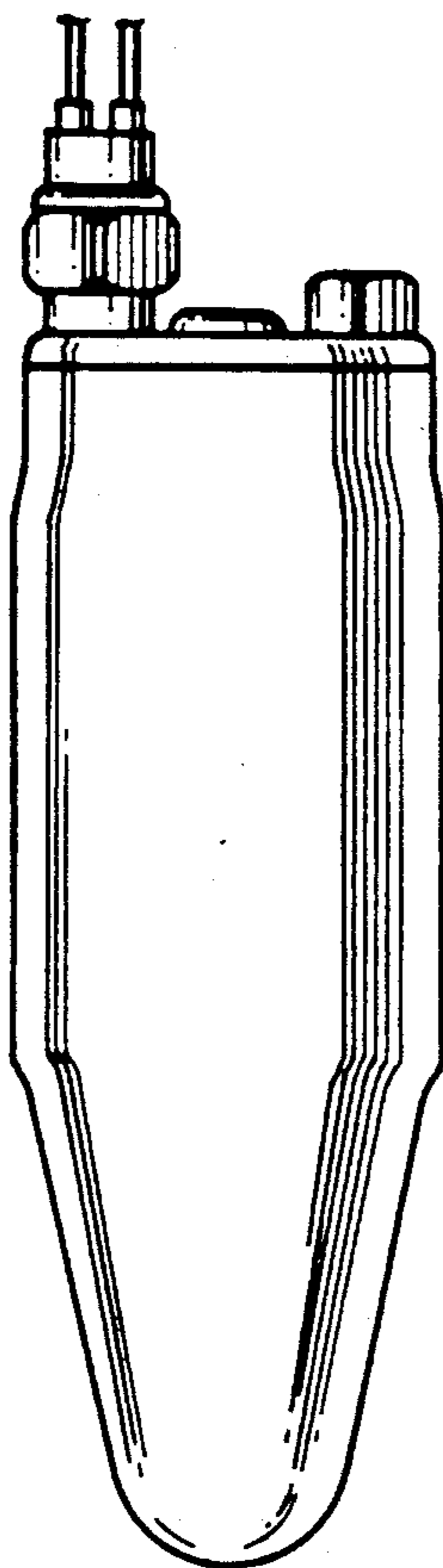


FIG.11

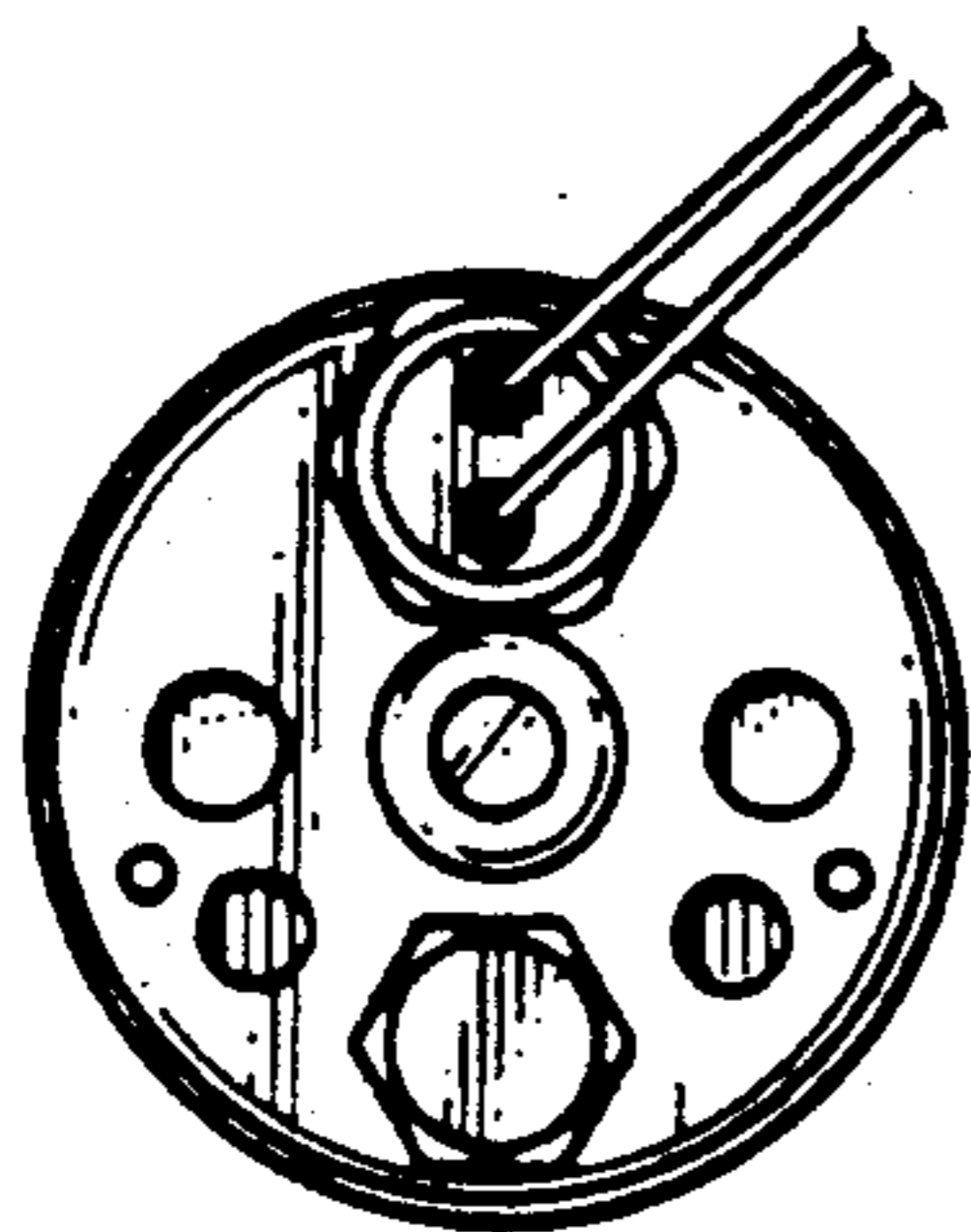


FIG.12

