US00D390833S

United States Patent [19]

Takizawa et al.

[11] **Patent Number: Des. 390,833**

[45] **Date of Patent: **Feb. 17, 1998**

[54] **PIEZOLECTRIC CONVERSION TYPE SEMICONDUCTOR DEVICE**

[75] Inventors: **Takashi Takizawa**, Kawasaki; **Tatsuya Ito**; **Hiroshi Nishida**, both of Akita, all of Japan

[73] Assignee: **Fujikura Ltd.**, Tokyo, Japan

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

[21] Appl. No.: **67,087**

[22] Filed: **Mar. 4, 1997**

[30] **Foreign Application Priority Data**

Sep. 9, 1996	[JP]	Japan	8-26572
Sep. 9, 1996	[JP]	Japan	8-26572

[51] **LOC (6) Cl.** **13-03**

[52] **U.S. Cl.** **D13/182**; D13/101

[58] **Field of Search** D13/101, 123, D13/125, 182; 73/721; 257/416–418; 338/4, 42

[56] **References Cited**

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Motorola catalog of pressure sensor device data published Jan. 1, 1994.

Primary Examiner—James Gandy
Assistant Examiner—Cathon B. Matta
Attorney, Agent, or Firm—Laff, Whitesel, Conte & Saret, Ltd.

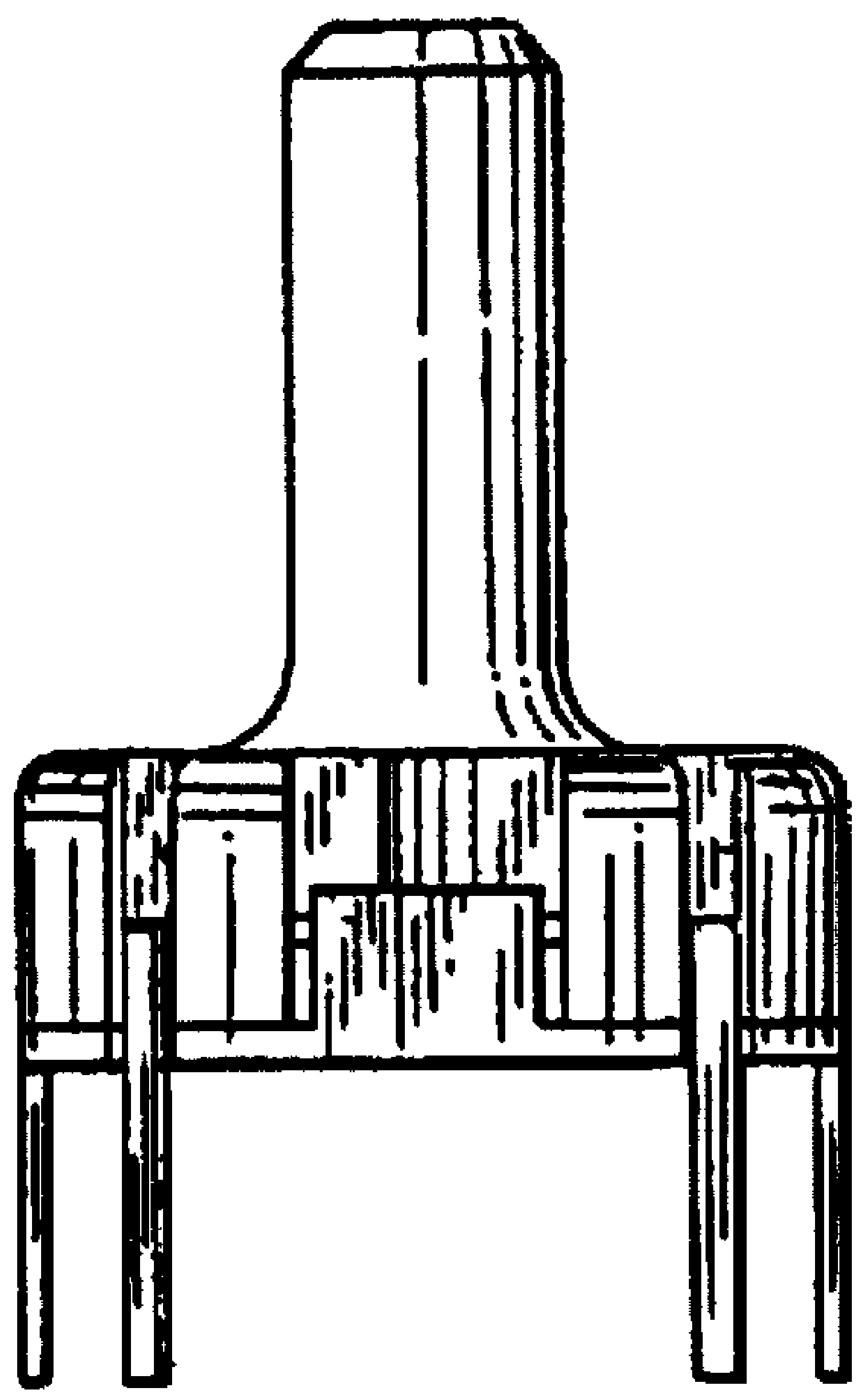
[57] **CLAIM**

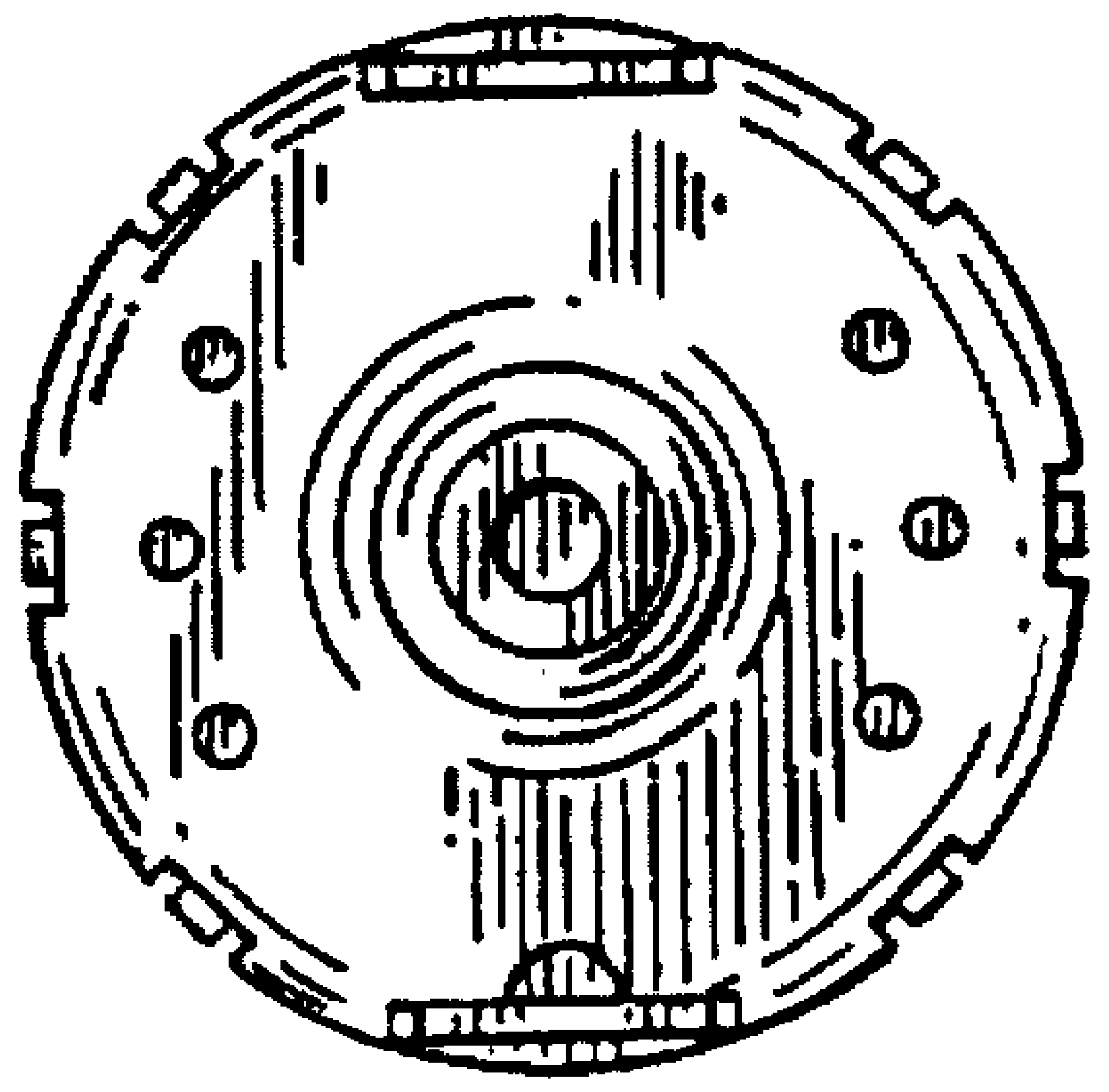
The ornamental design for a piezoelectric conversion type semiconductor device, as show and described.

DESCRIPTION

FIG. **1** is a front elevational view of a piezoelectric conversion type semiconductor device, showing our new design;
FIG. **2** is a right side elevational view thereof; the opposite side being an identical thereof;
FIG. **3** is a rear elevational view thereof;
FIG. **4** is a top plan view thereof;
FIG. **5** is a bottom plan view thereof;
FIG. **6** is a front elevational view of a second embodiment of the piezoelectric conversion type semiconductor device;
FIG. **7** is a right side elevational view thereof; the opposite side being a mirror image thereof;
FIG. **8** is a rear elevational view thereof;
FIG. **9** is a top plan view thereof;
FIG. **10** is a bottom plan view thereof;
FIG. **11** is a front elevational view of a third embodiment of the piezoelectric conversion type semiconductor device;
FIG. **12** is a right side elevational view thereof; the opposite side being an identical thereof;
FIG. **13** is a rear elevational view thereof;
FIG. **14** is a top plan view thereof;
FIG. **15** is a bottom plan view thereof;
FIG. **16** is a front elevational view of a fourth embodiment of the piezoelectric conversion type semiconductor device;
FIG. **17** is a right side elevational view thereof; the opposite side being a mirror image thereof;
FIG. **18** is a rear elevational view thereof;
FIG. **19** is a top plan view thereof; and,
FIG. **20** is a bottom plan view thereof.

1 Claim, 2 Drawing Sheets





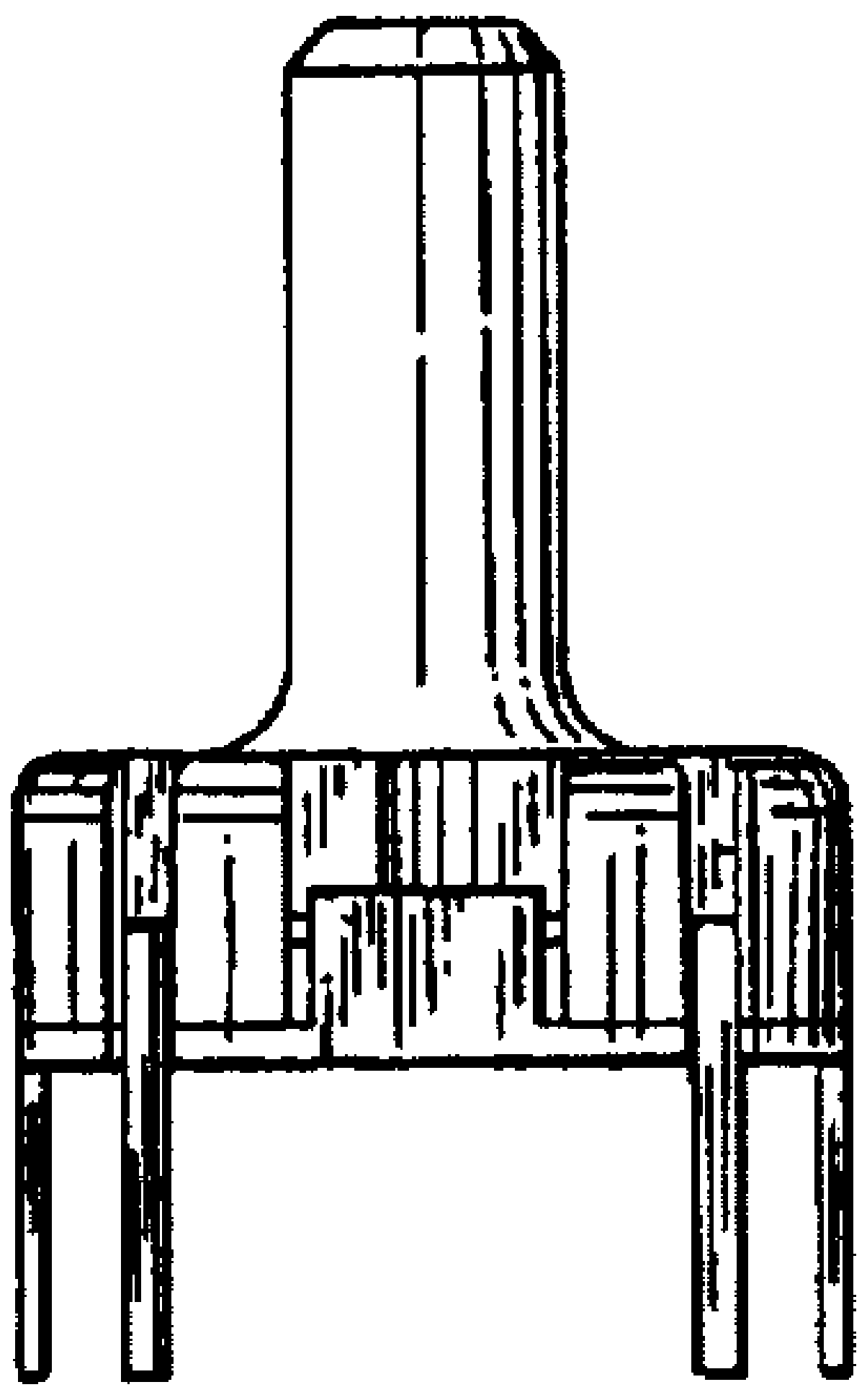


FIG. 1

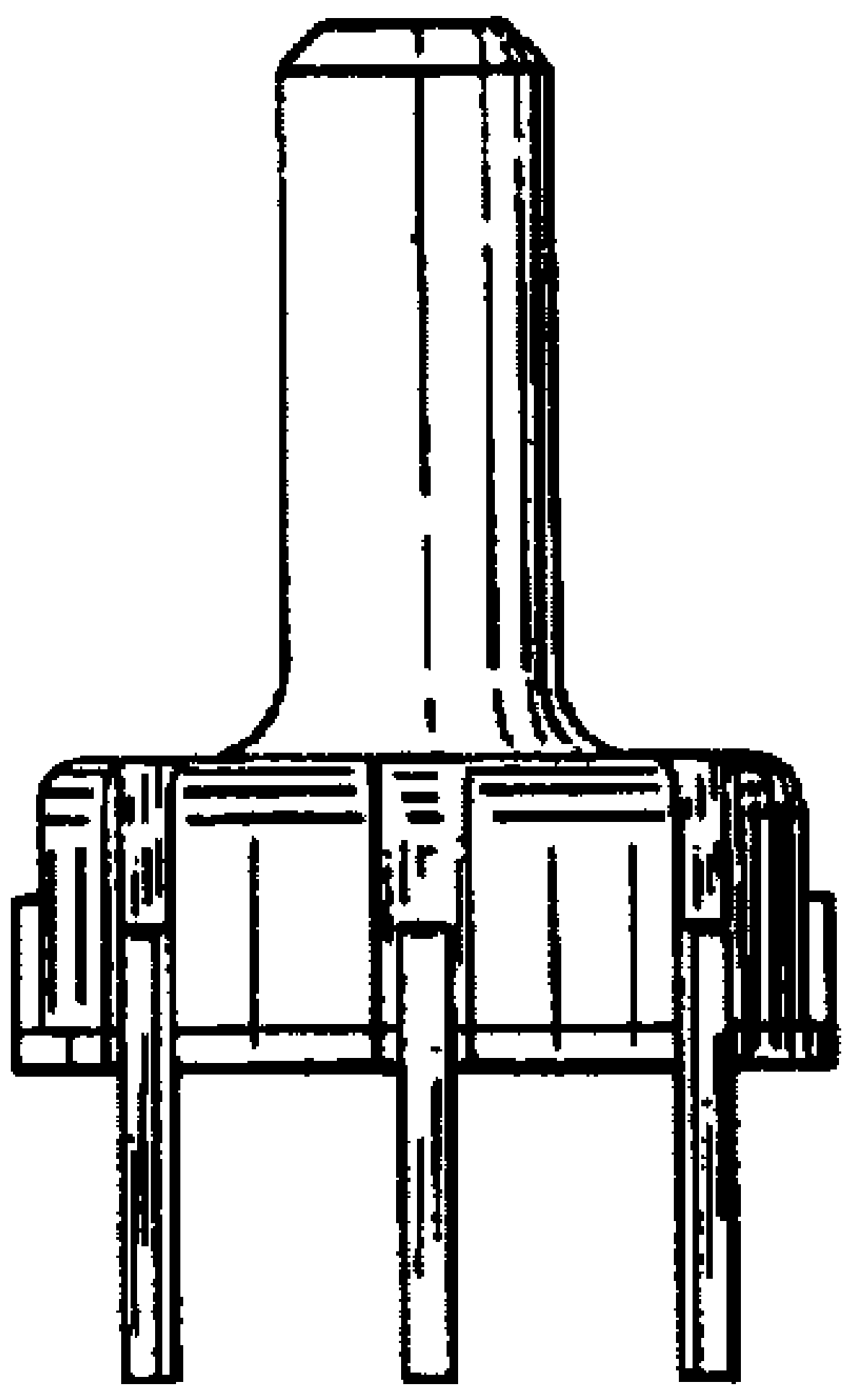


FIG. 2

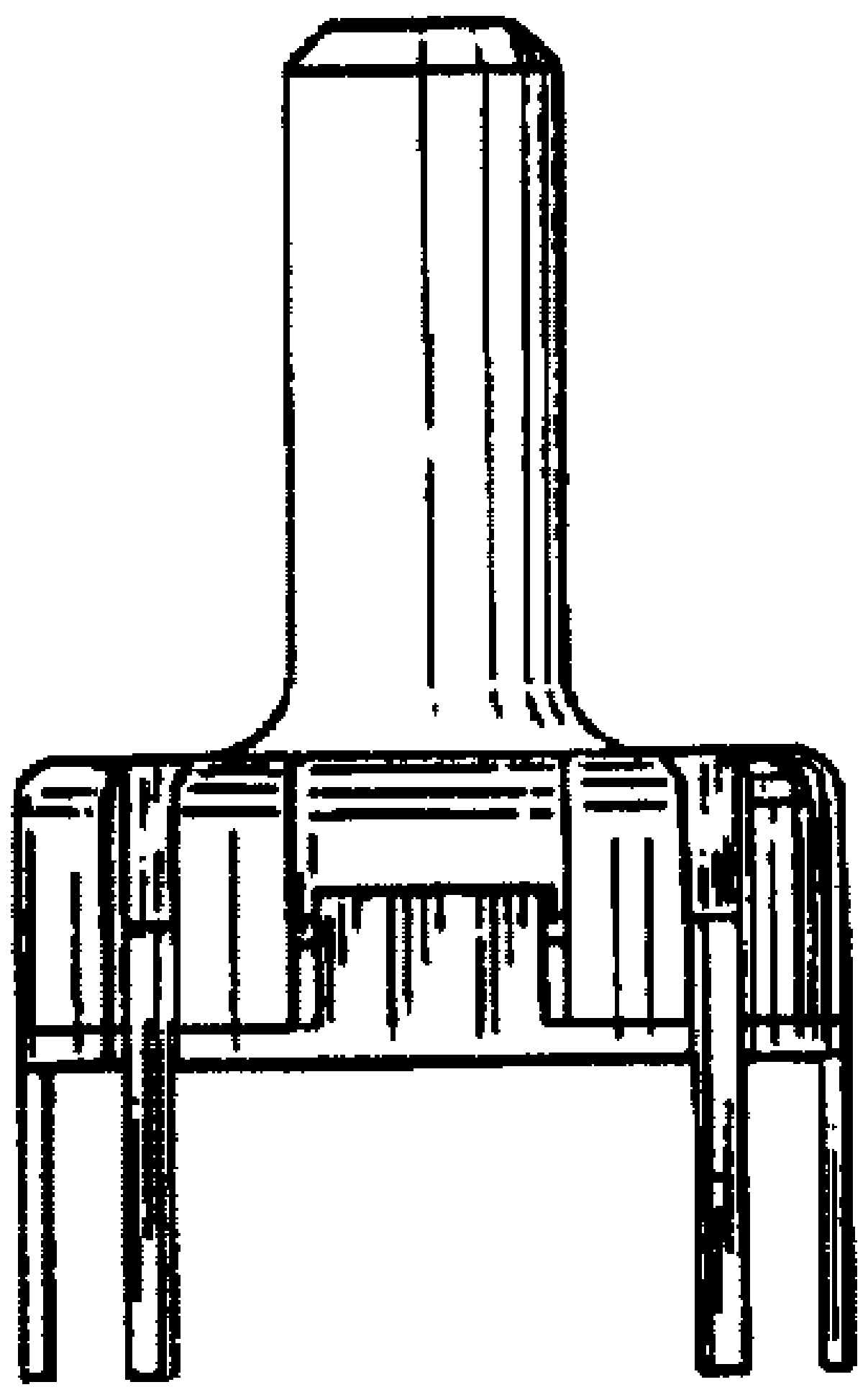


FIG. 3

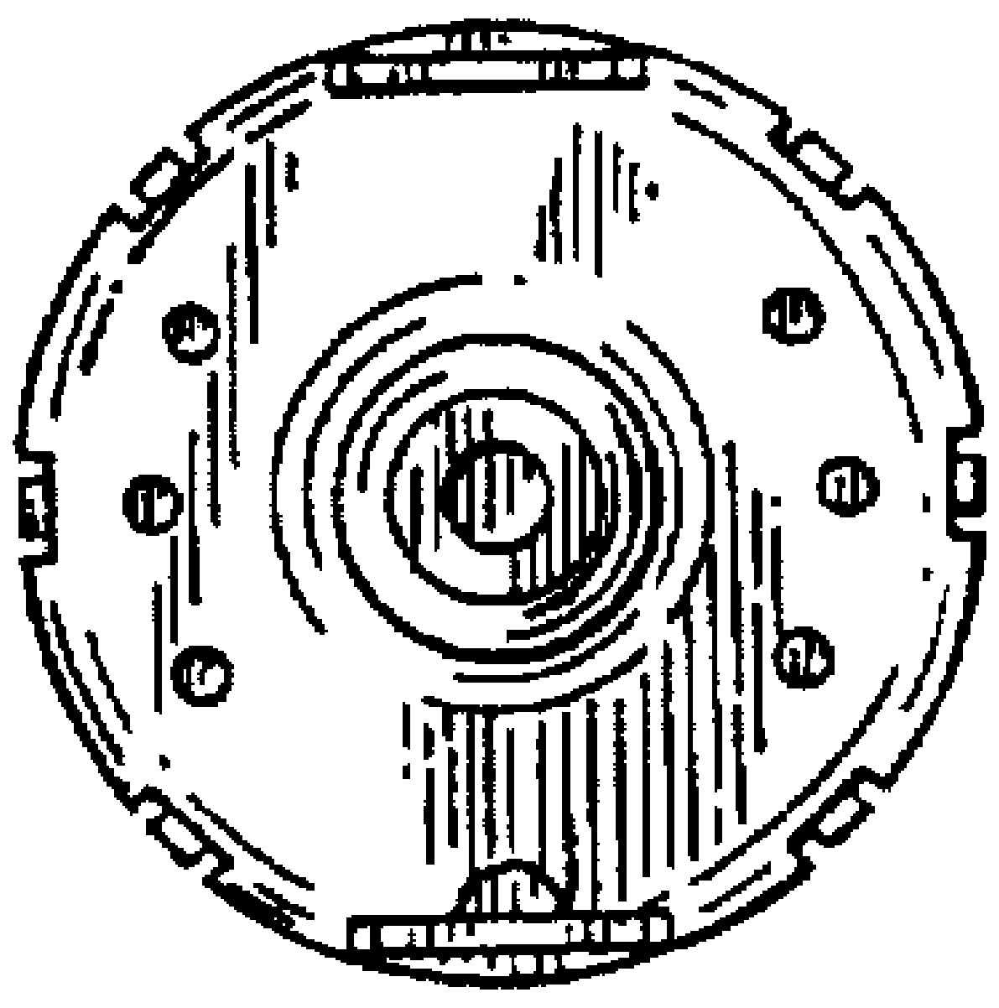


FIG. 4

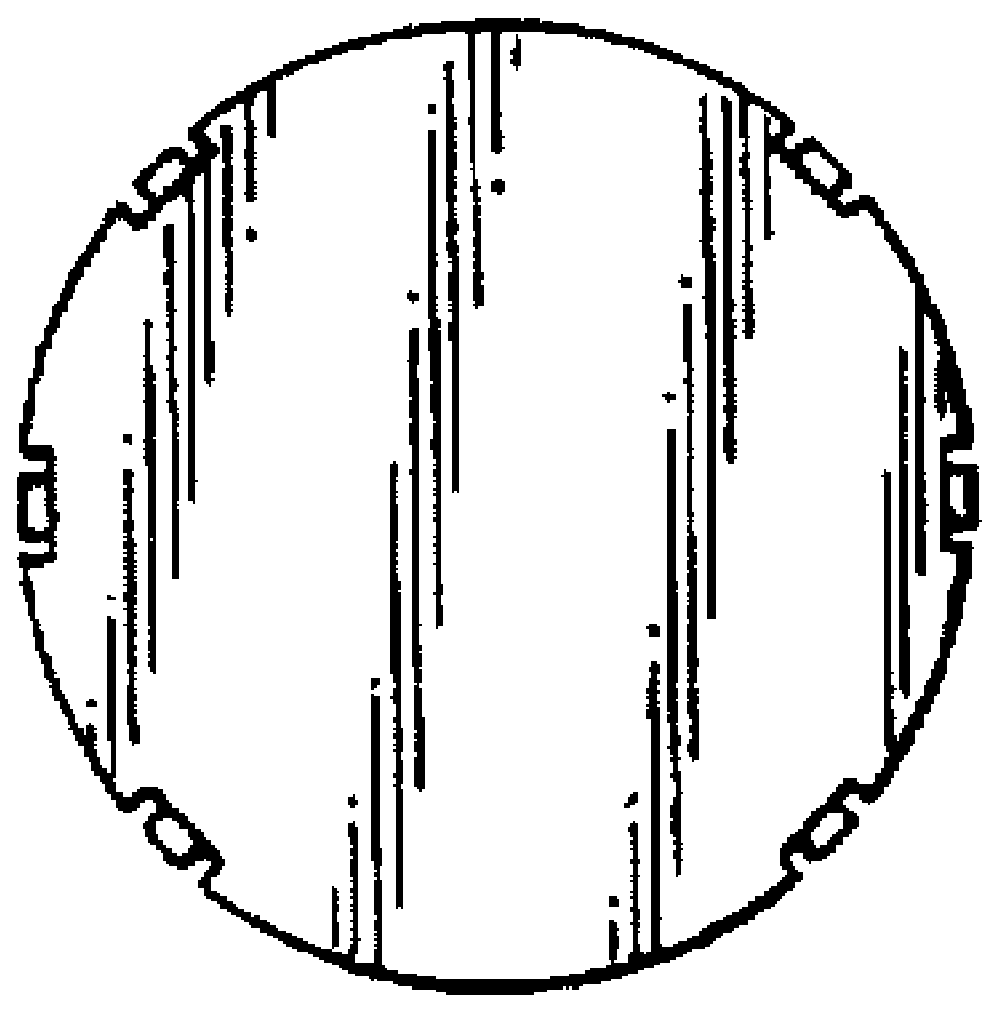


FIG. 5

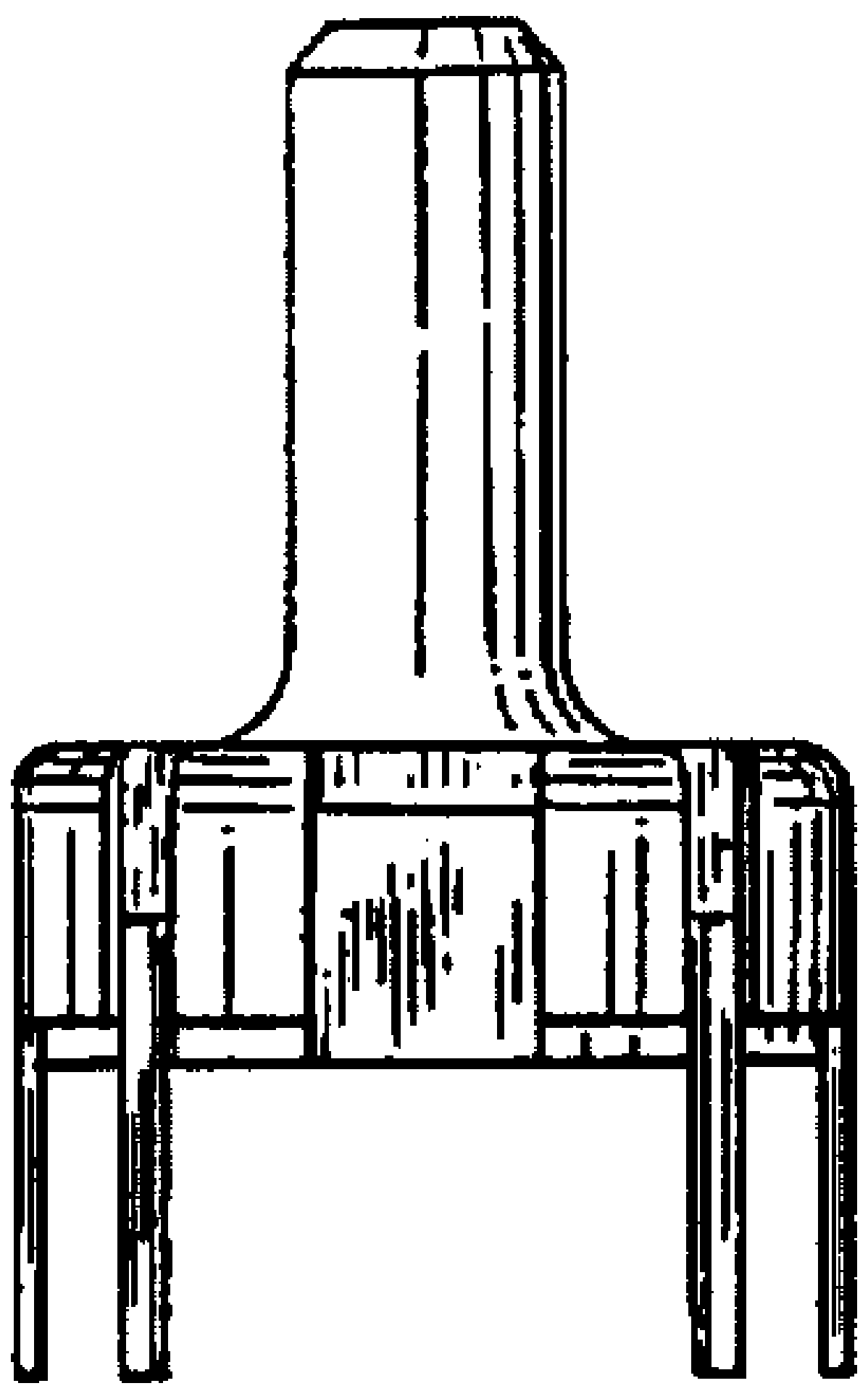


FIG. 6

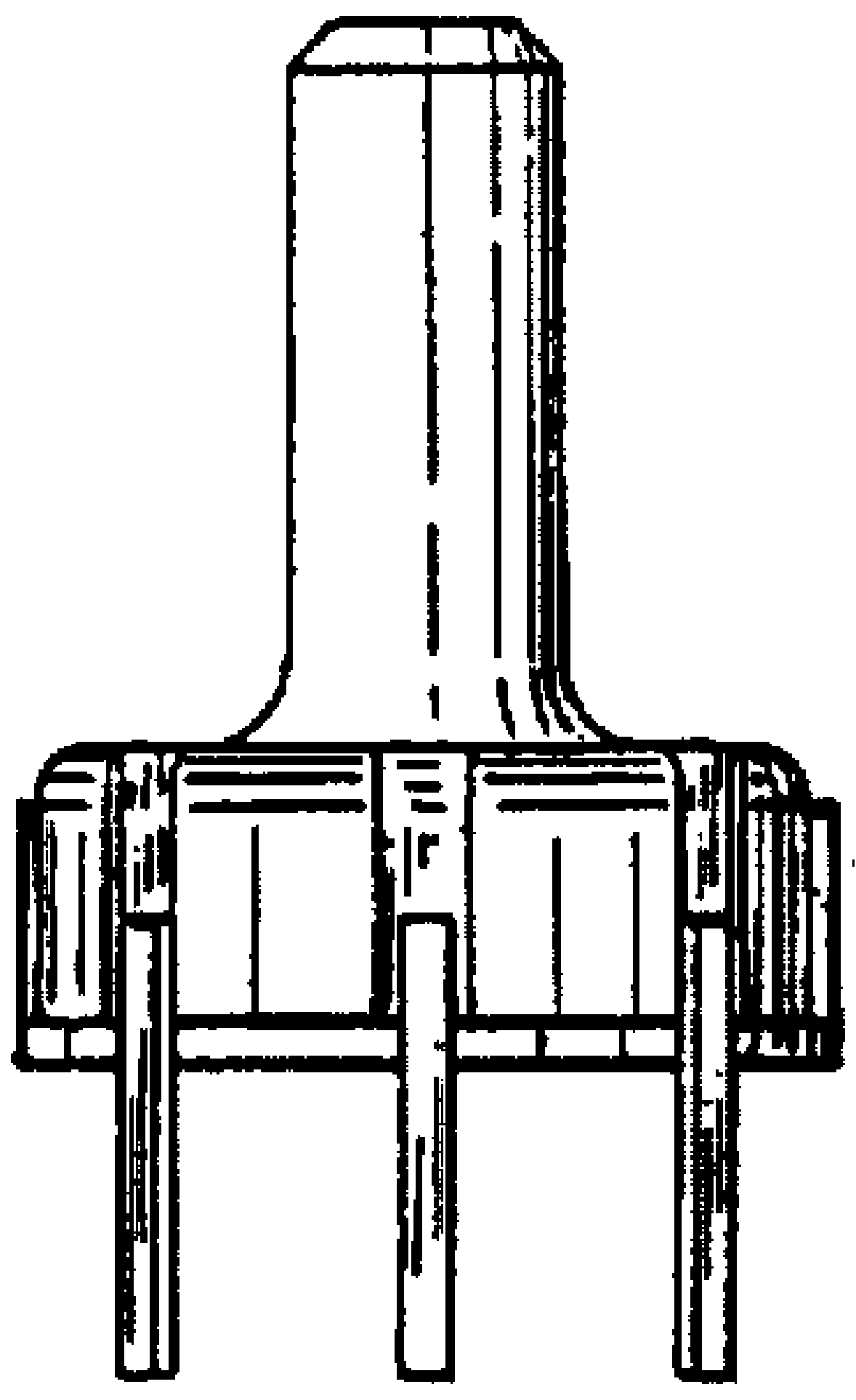


FIG. 7

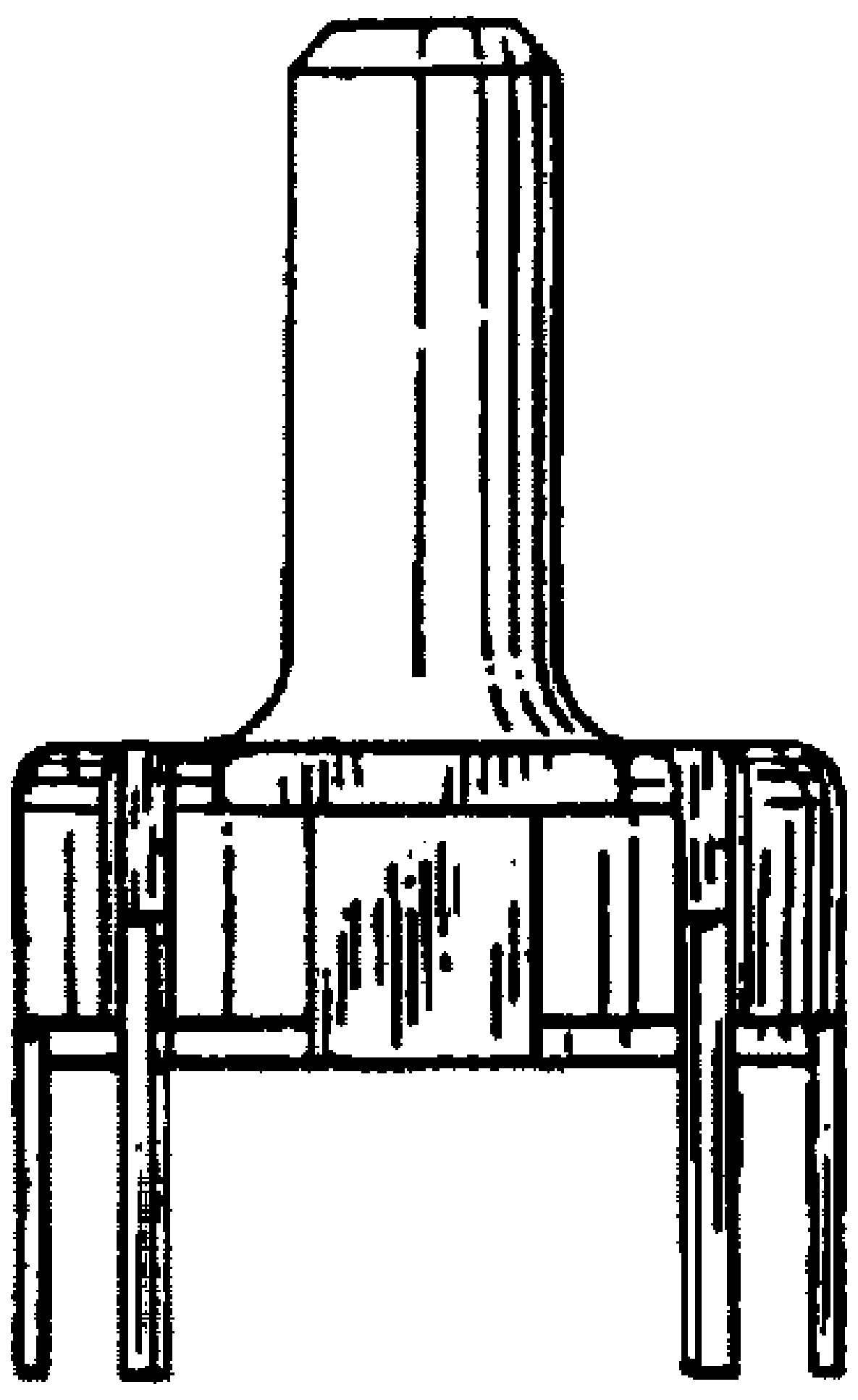


FIG. 8

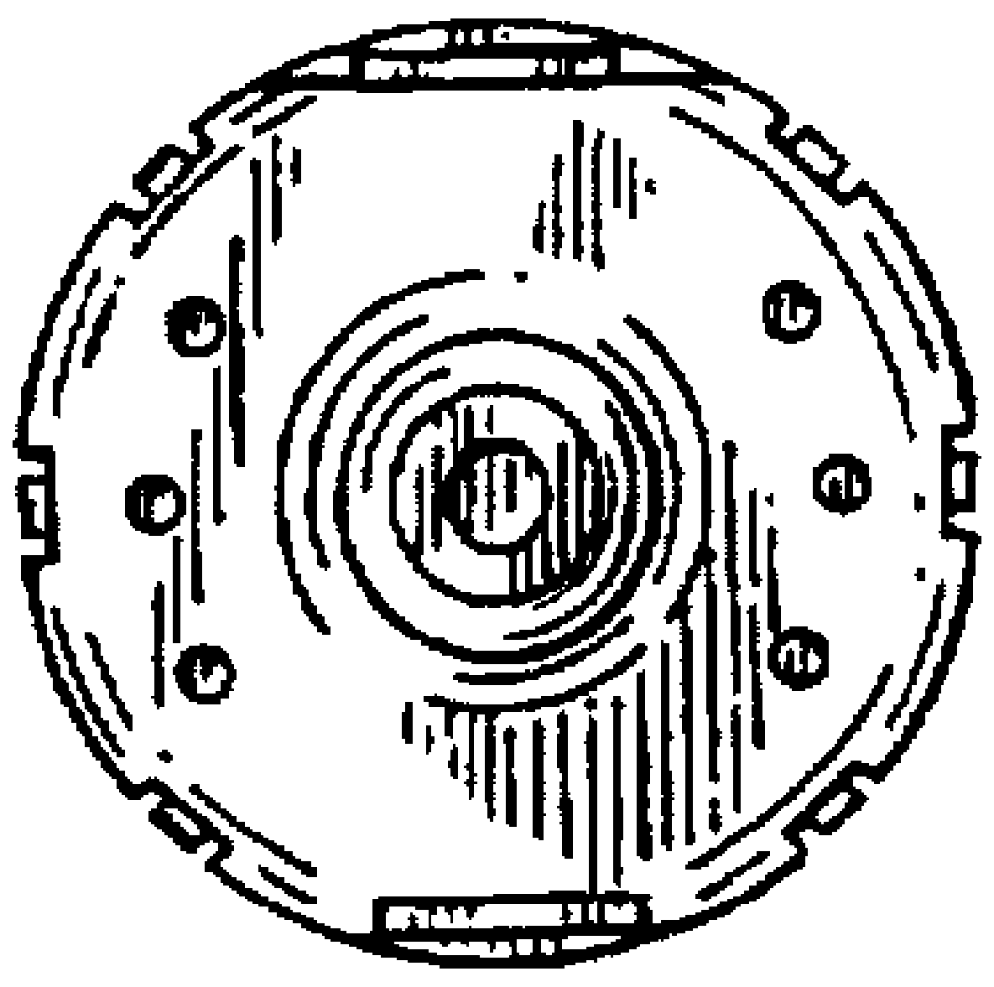


FIG. 9

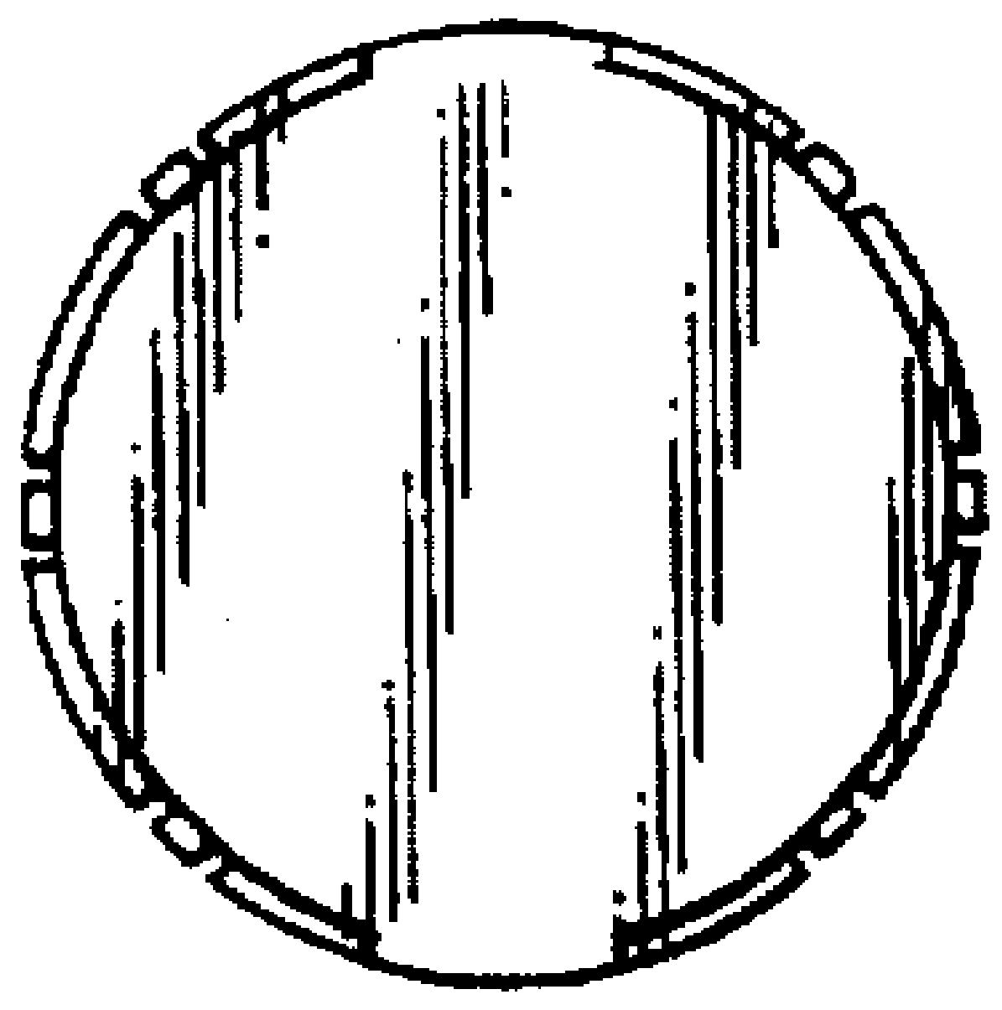


FIG. 10

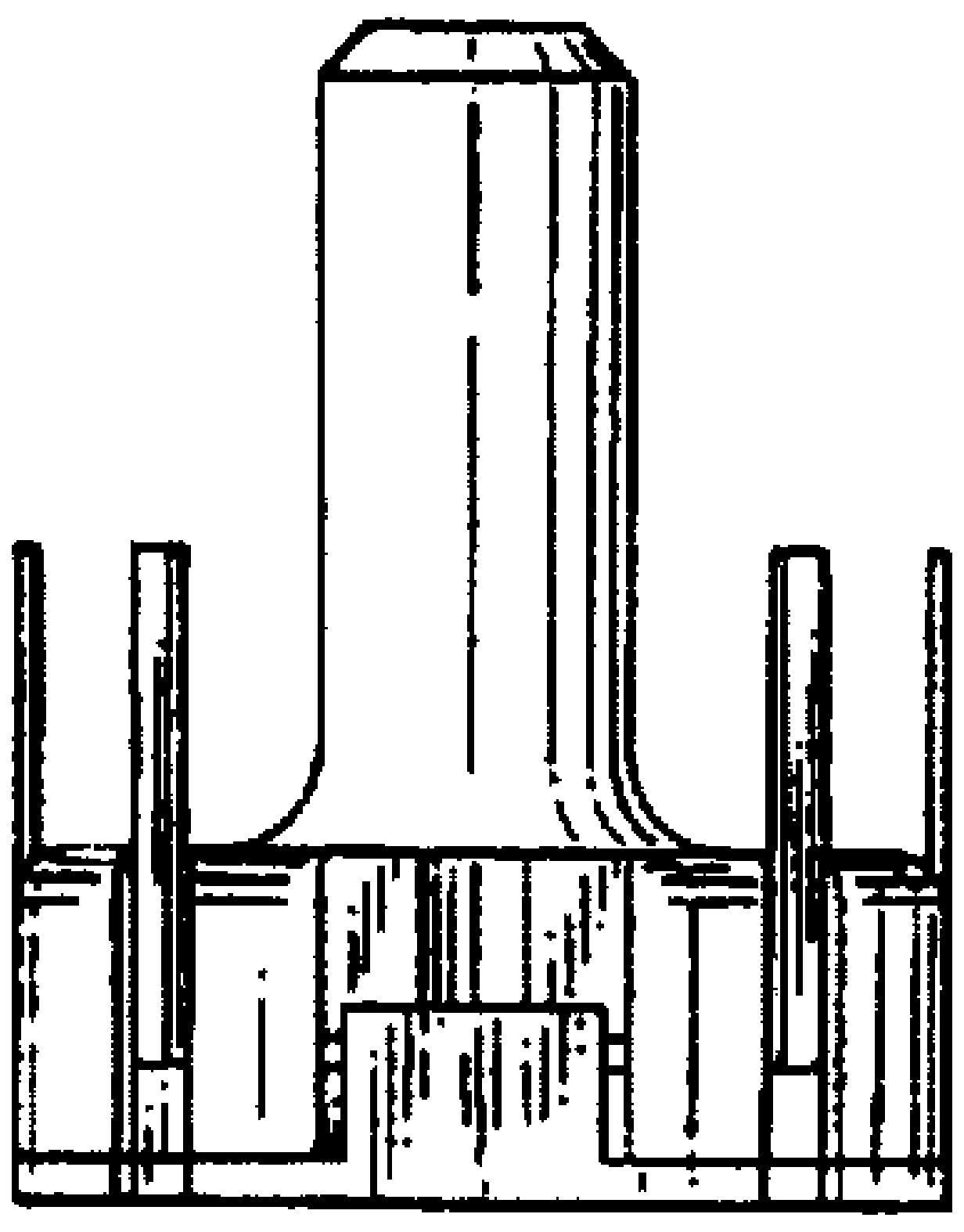
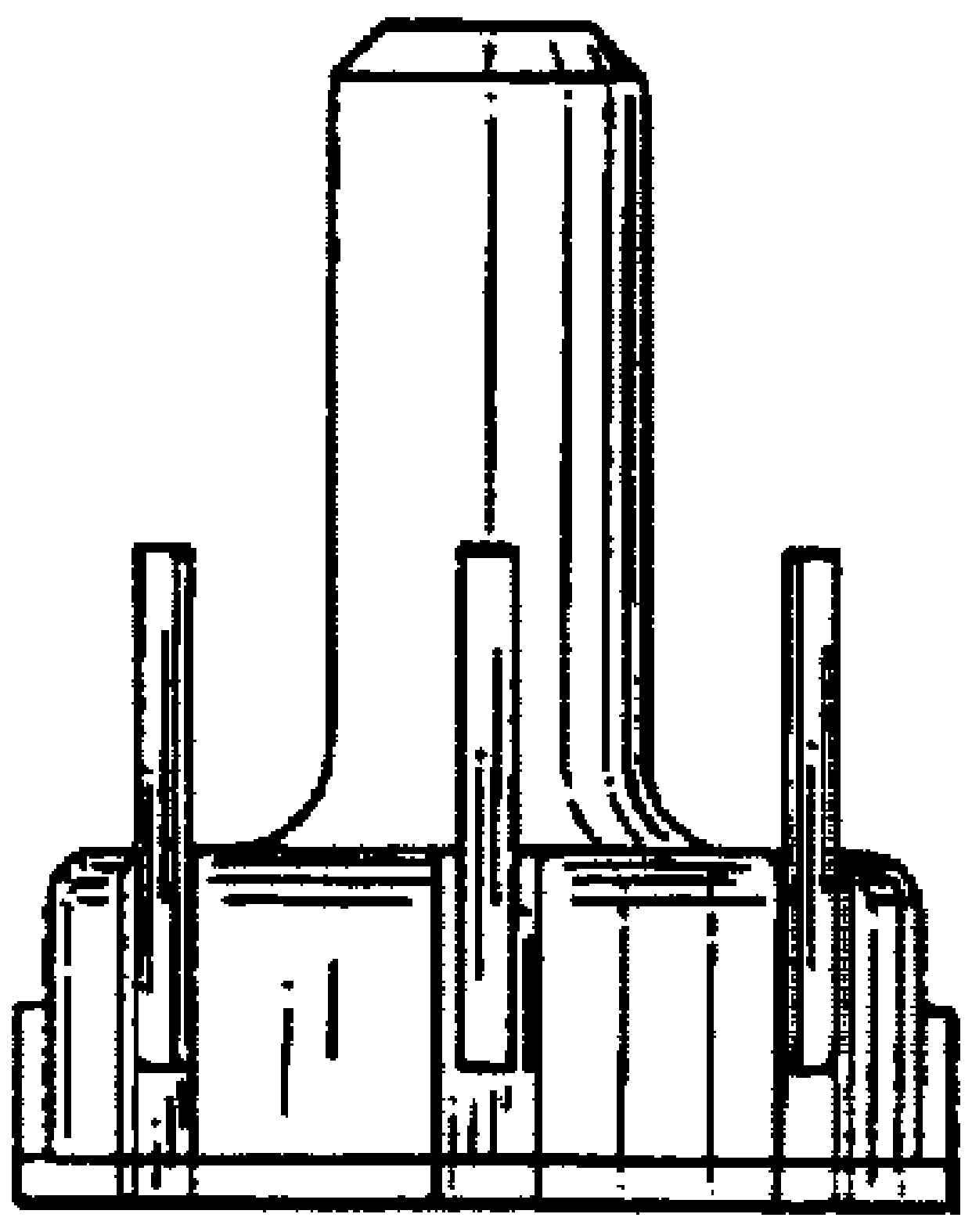


FIG. 11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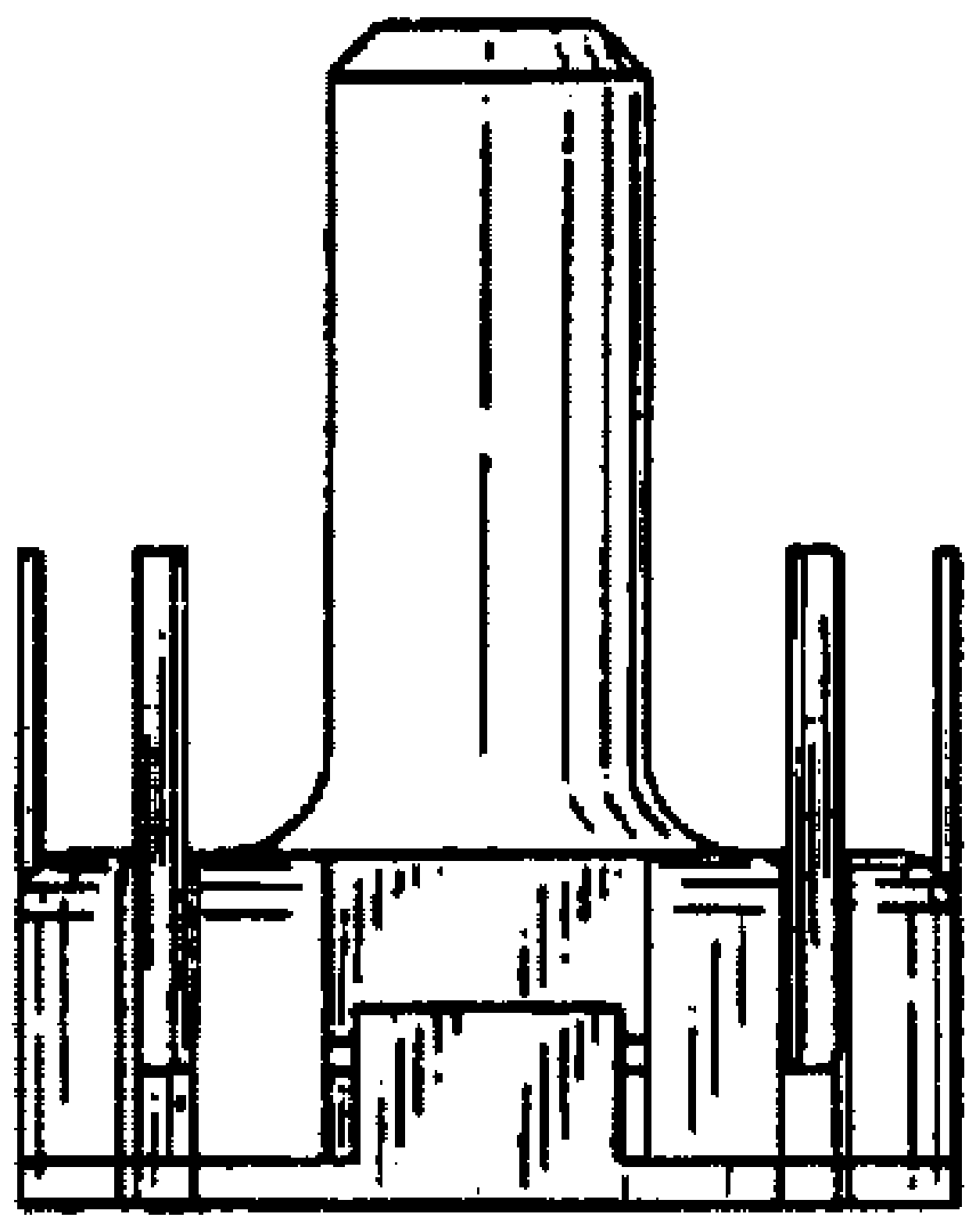
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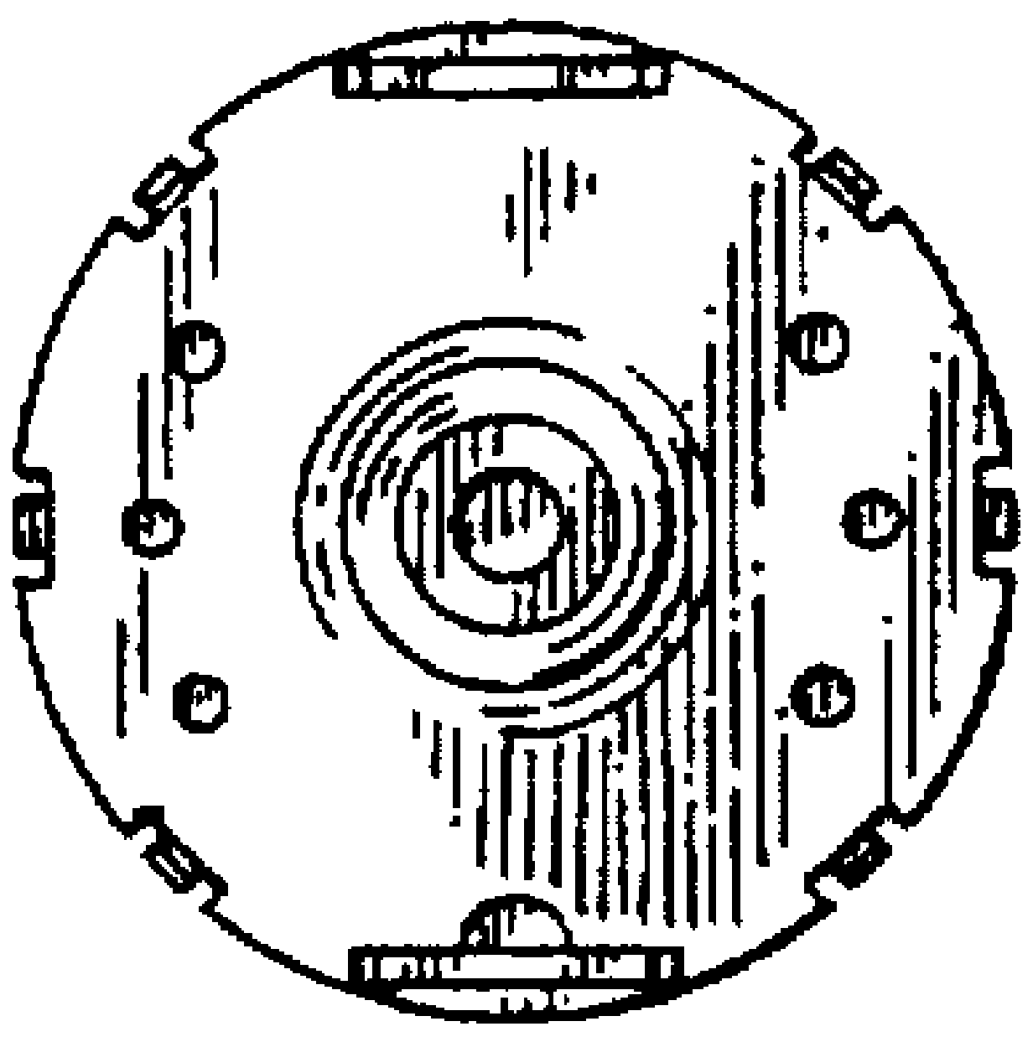
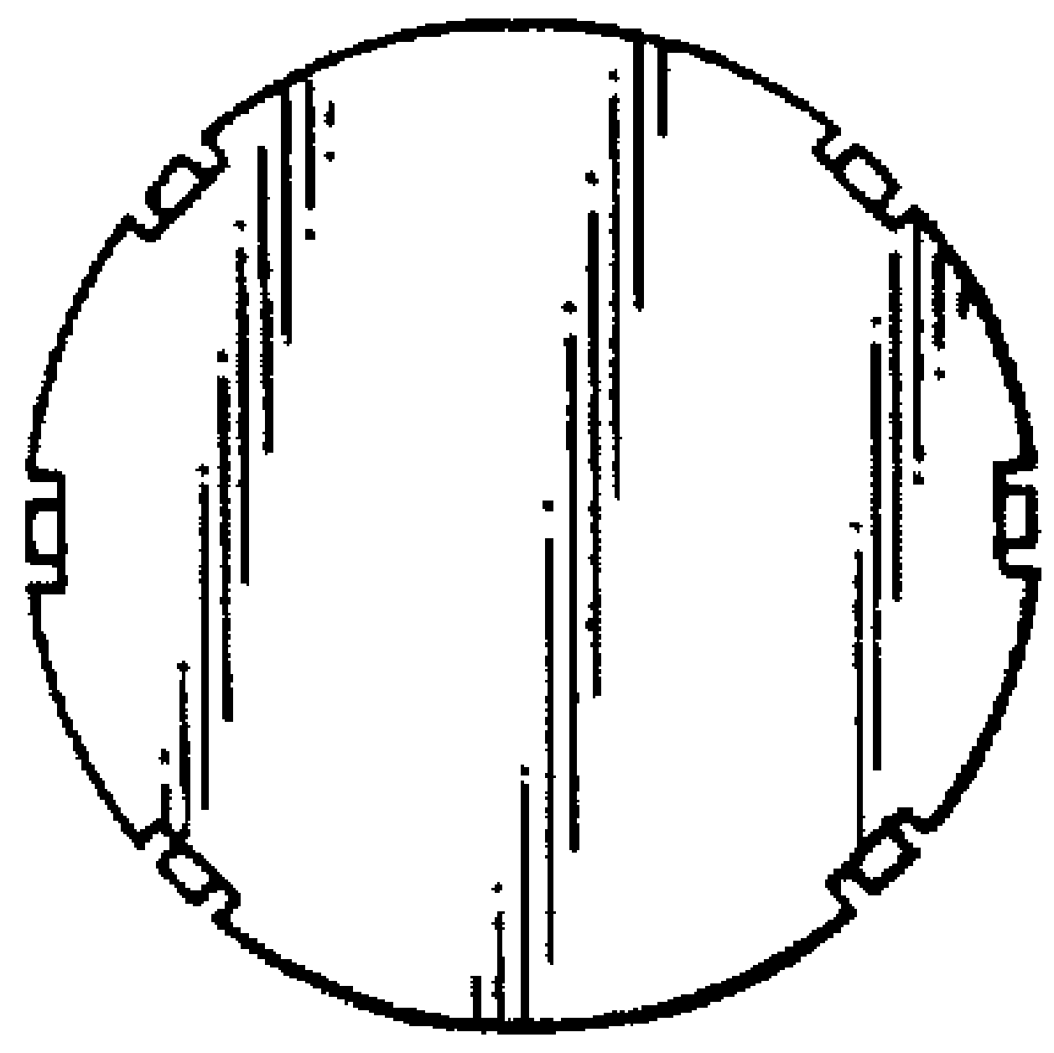


FIG. 14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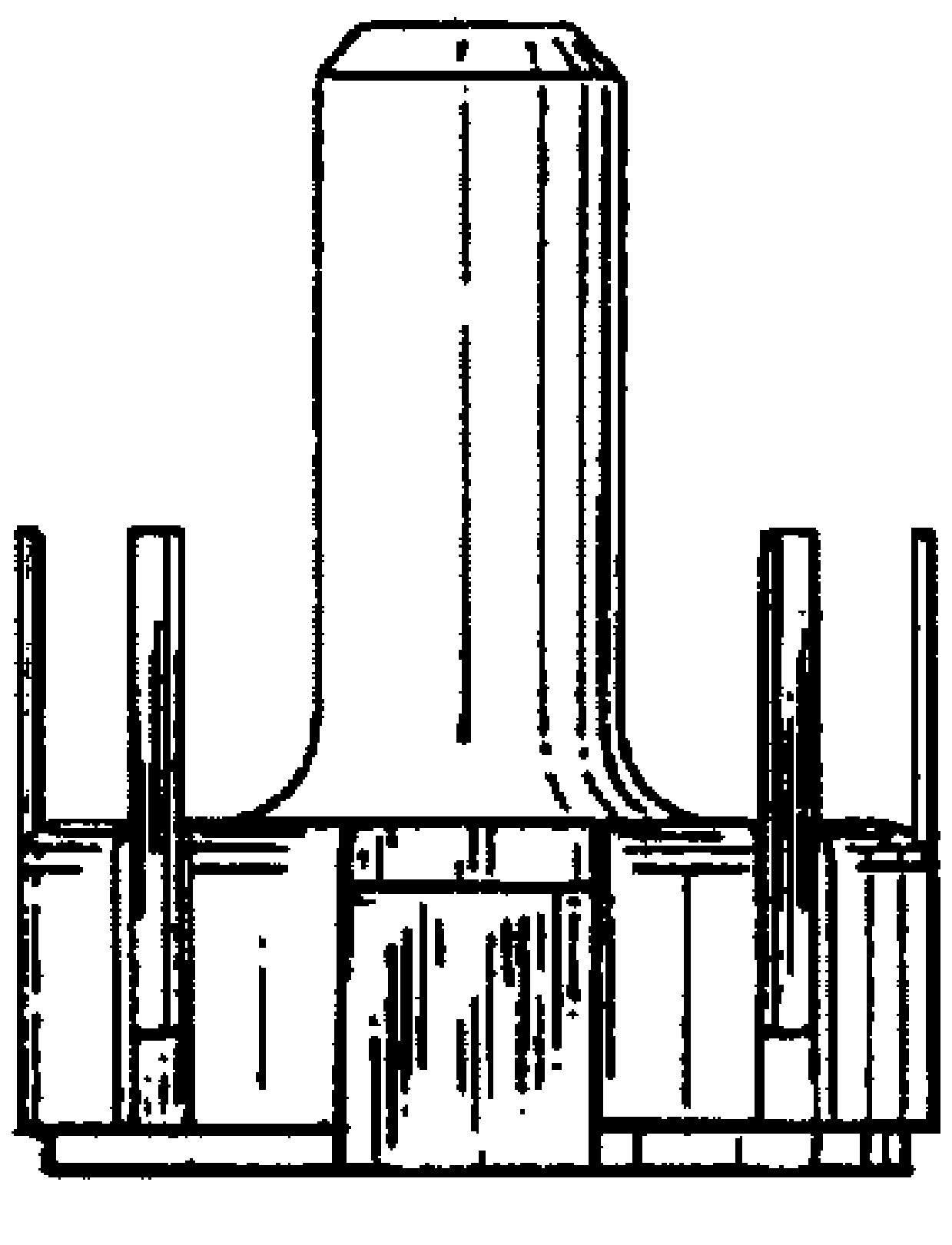
FIG. 16

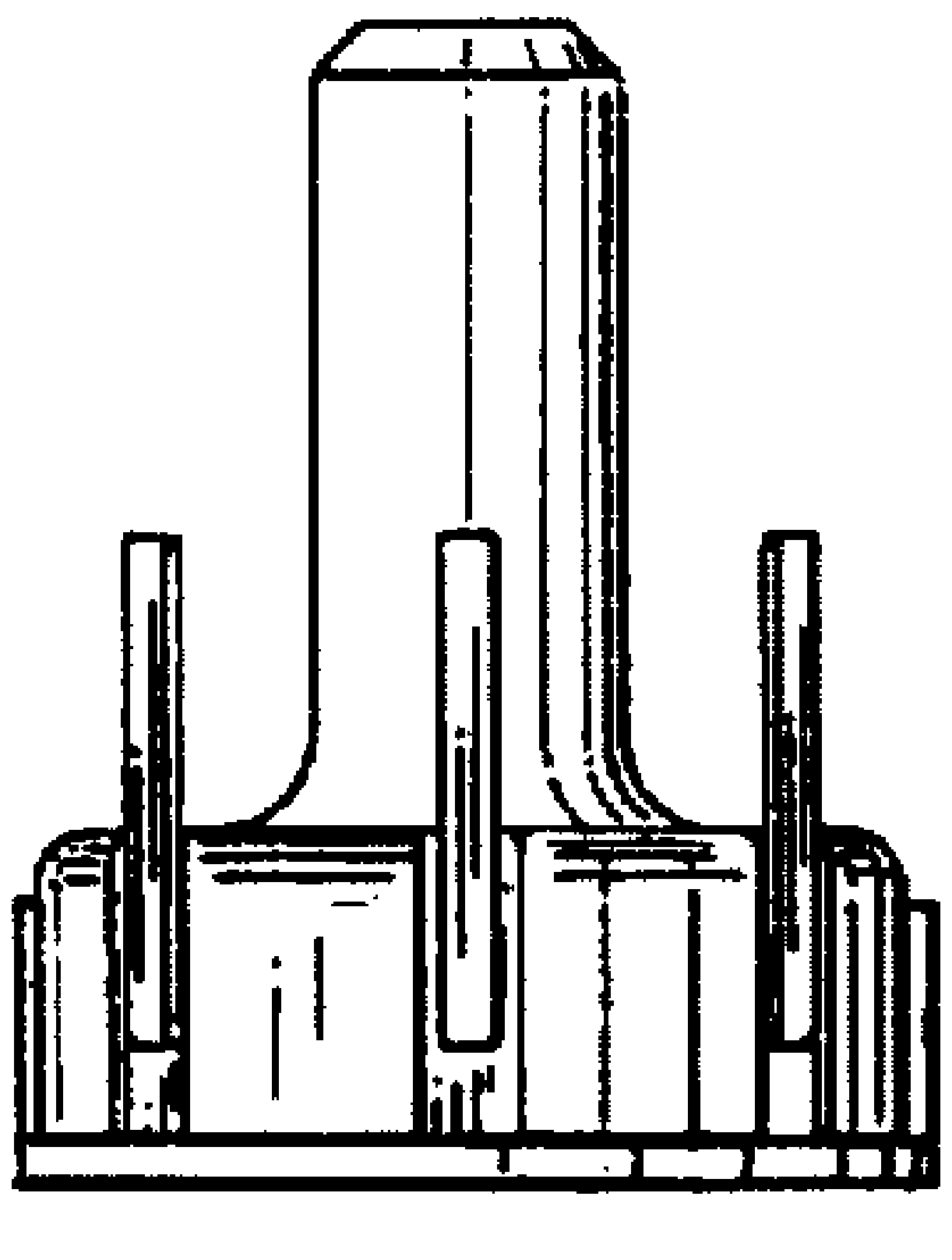
FIG. 17

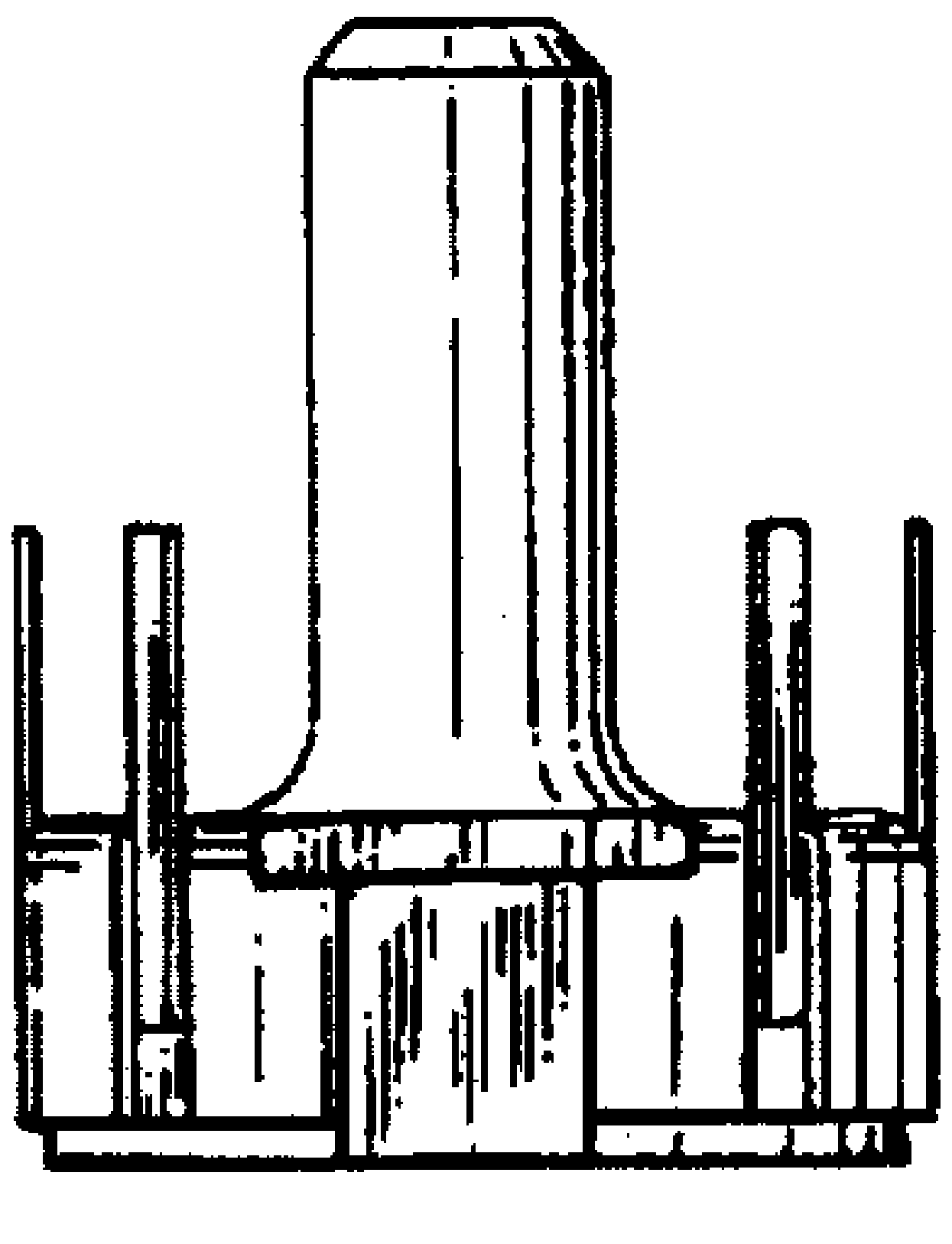
FIG. 18

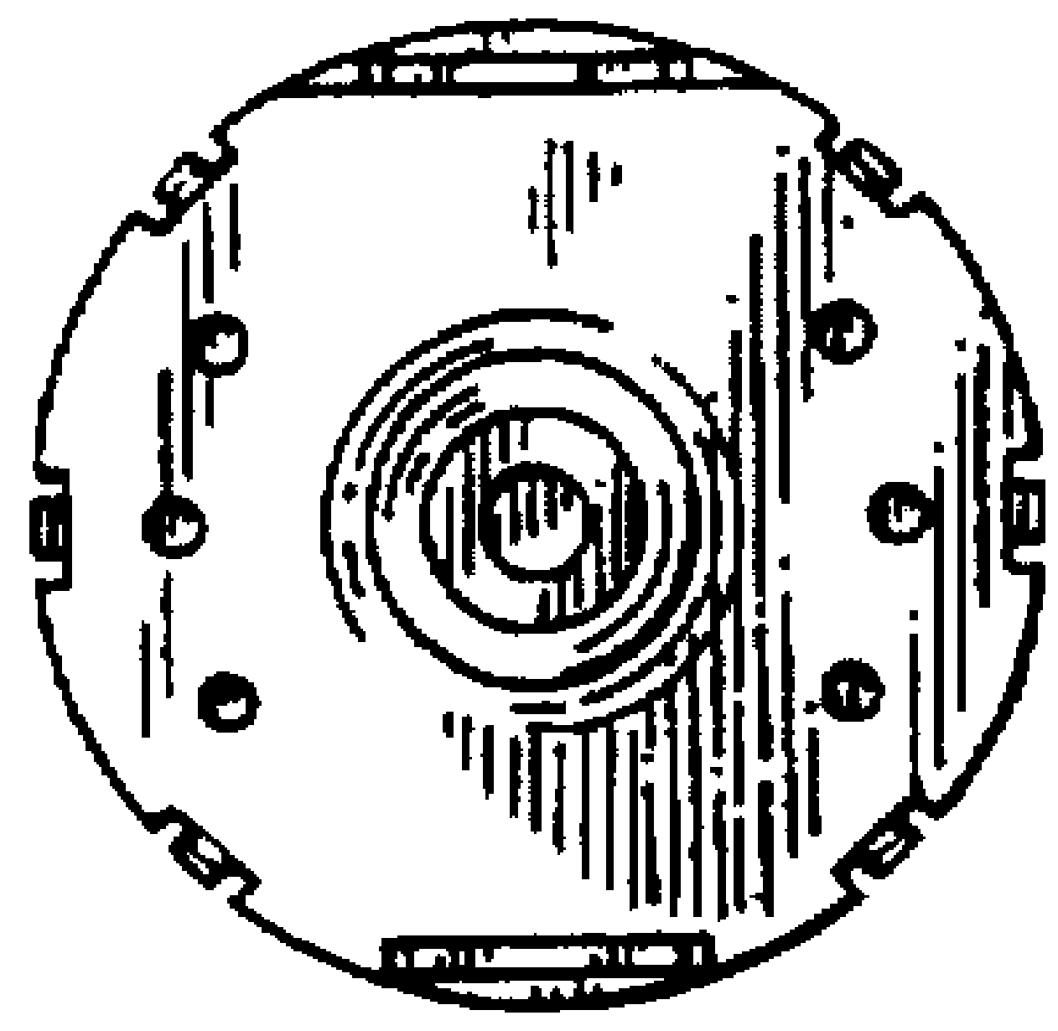
FIG. 19

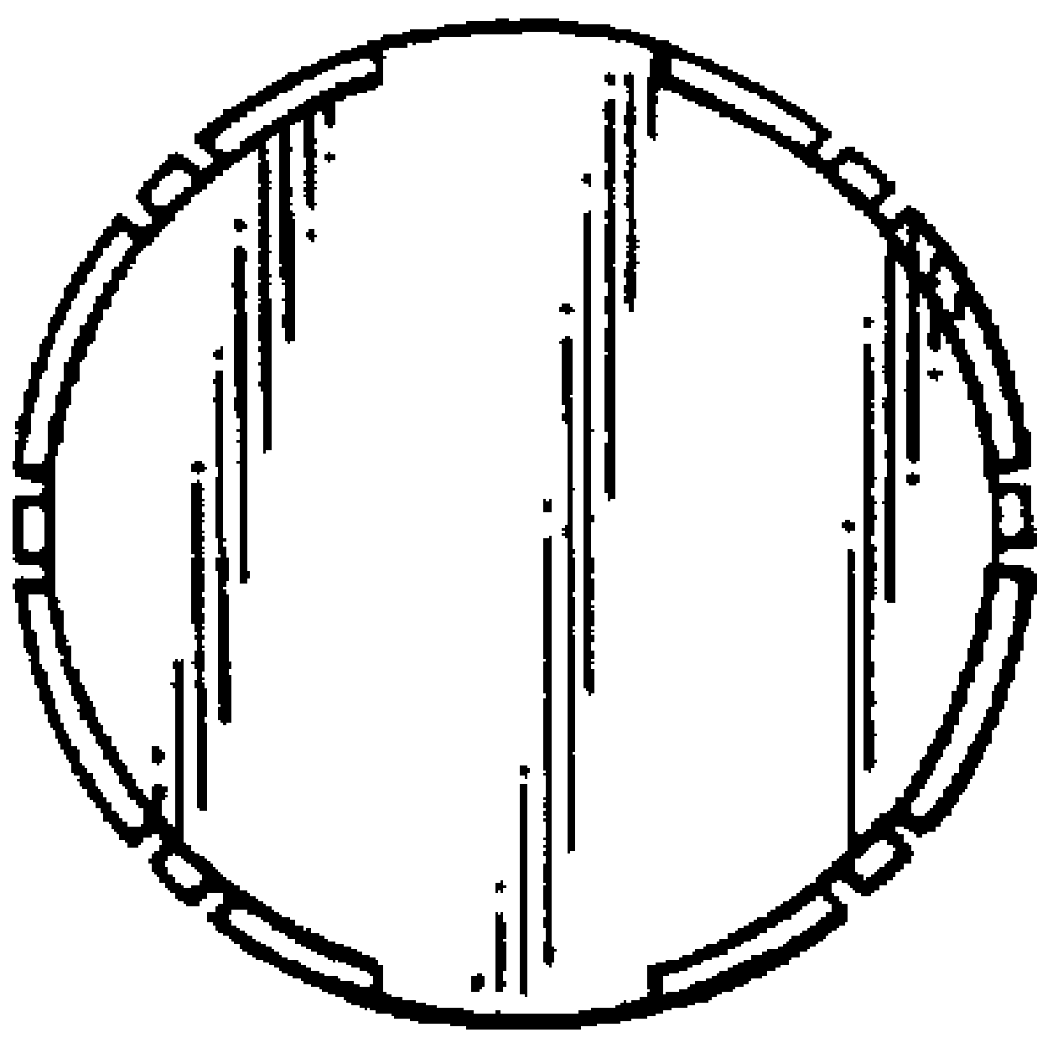
FIG. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : Des. 390,833

DATED : Feb. 17,1998

INVENTOR(S) : Takashi Takizawa, et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page: item [54] delete "Piezolectric" and insert --Piezoelectric--

[30] delete the first priority number "8-26572" and insert --8-26571--

[57] delete "show" and insert --shown--

Signed and Sealed this

Fifteenth Day of June, 1999

Attest:

Q. TODD DICKINSON

Attesting Officer

Acting Commissioner of Patents and Trademarks