



US00D390833S

United States Patent [19]  
Takizawa et al.

[11] Patent Number: Des. 390,833  
[45] Date of Patent: \*\*Feb. 17, 1998

[54] **PIEZOELECTRIC 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.

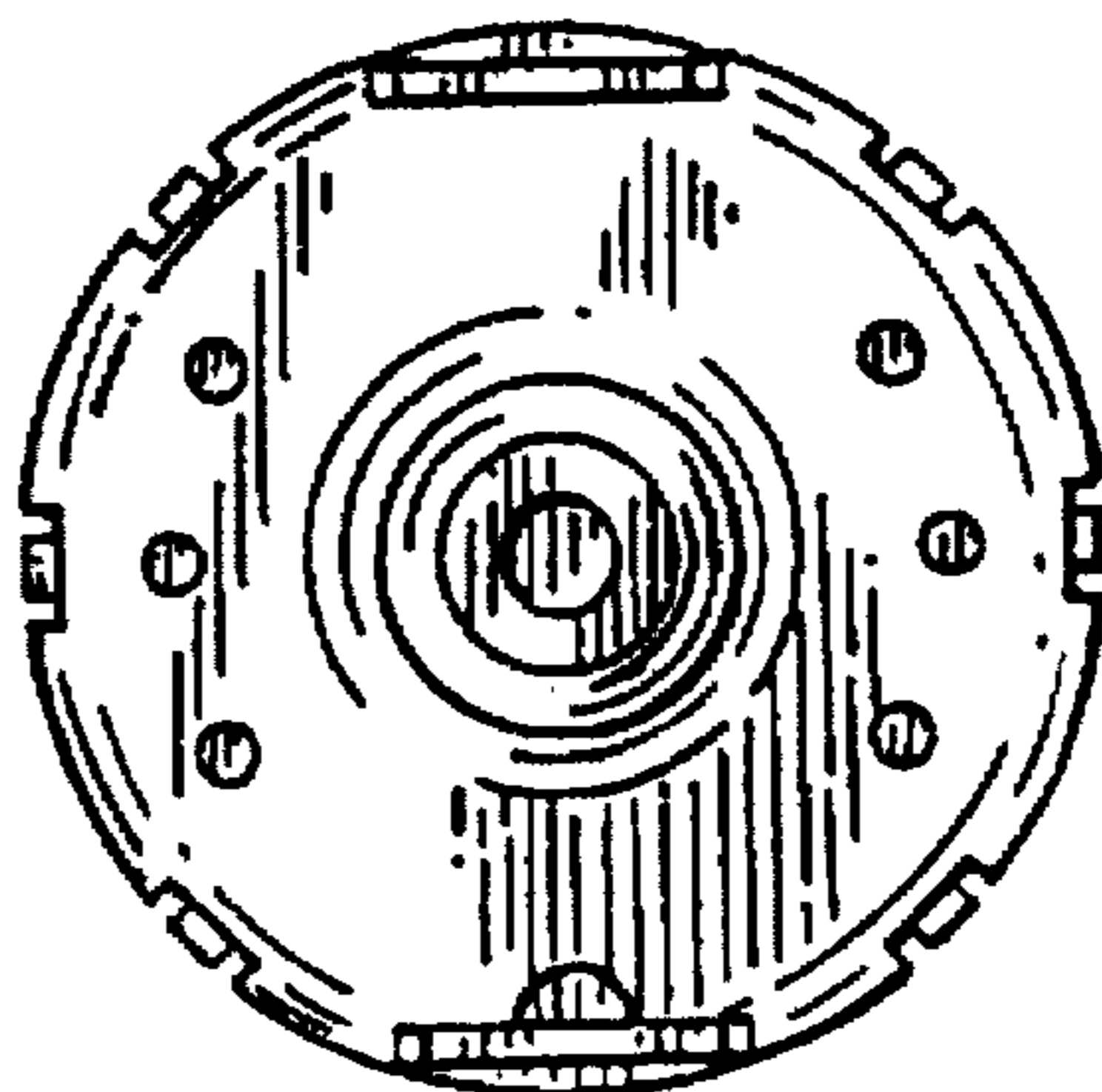
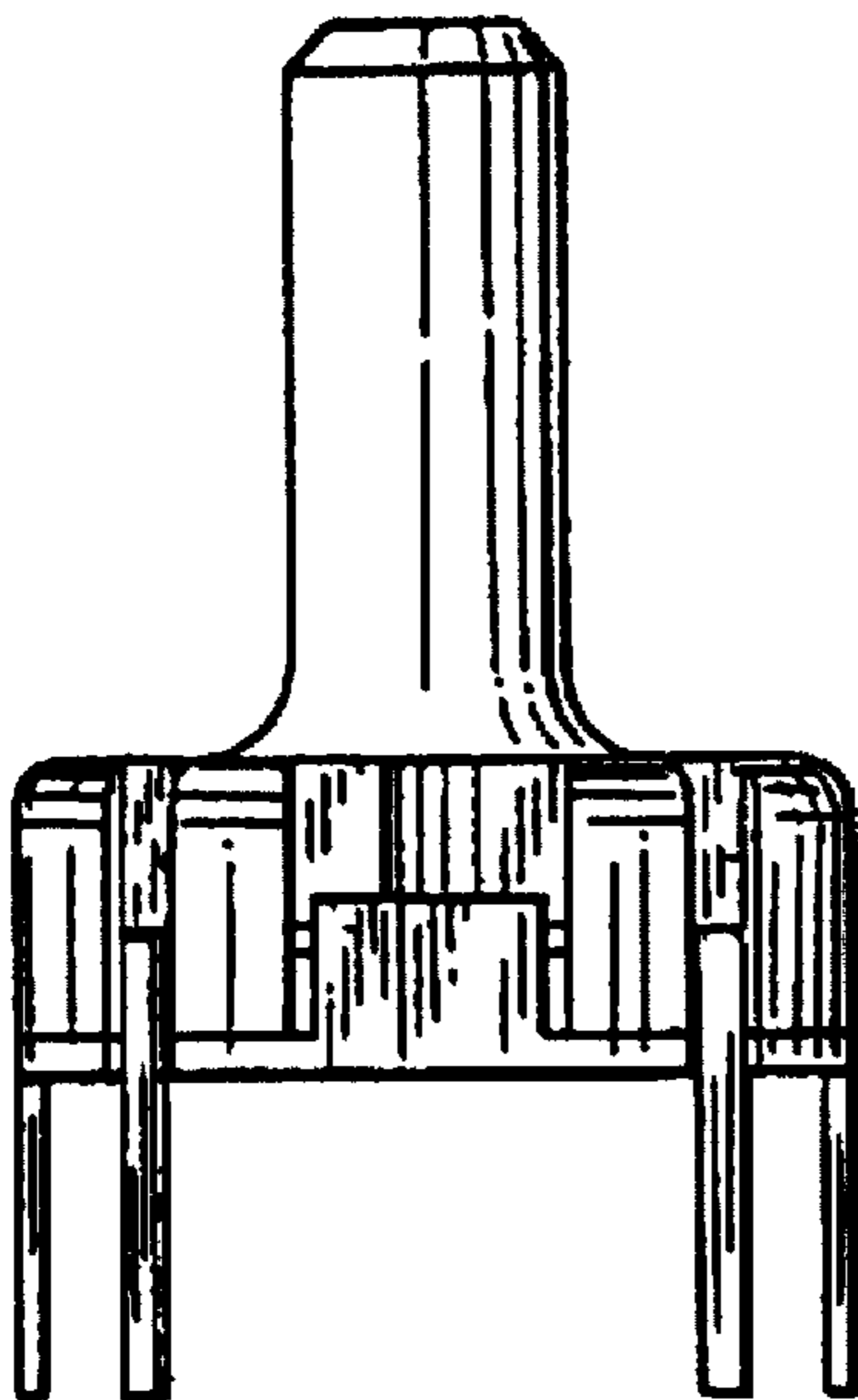
[57] **CLAIM**

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**



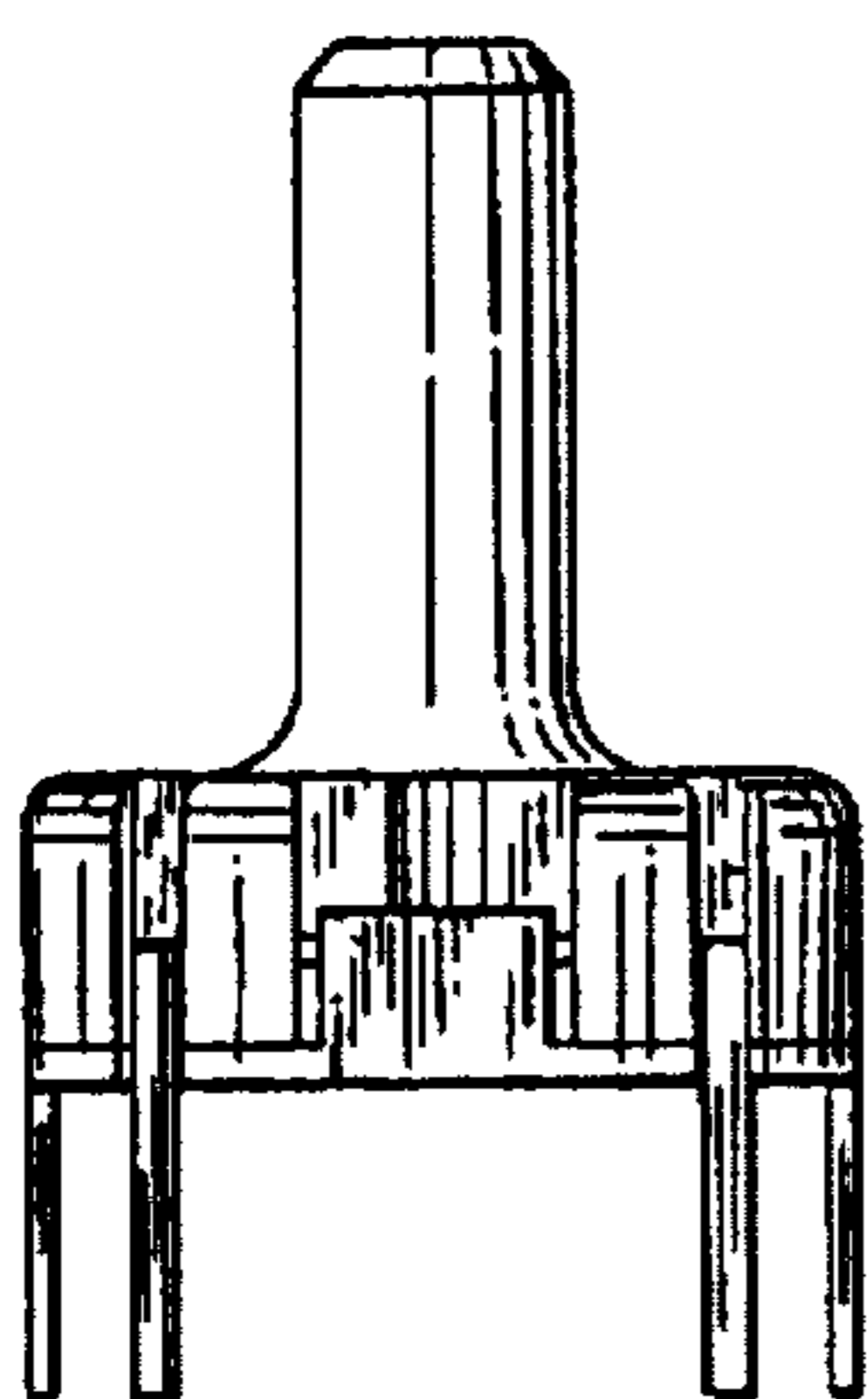


FIG. 1

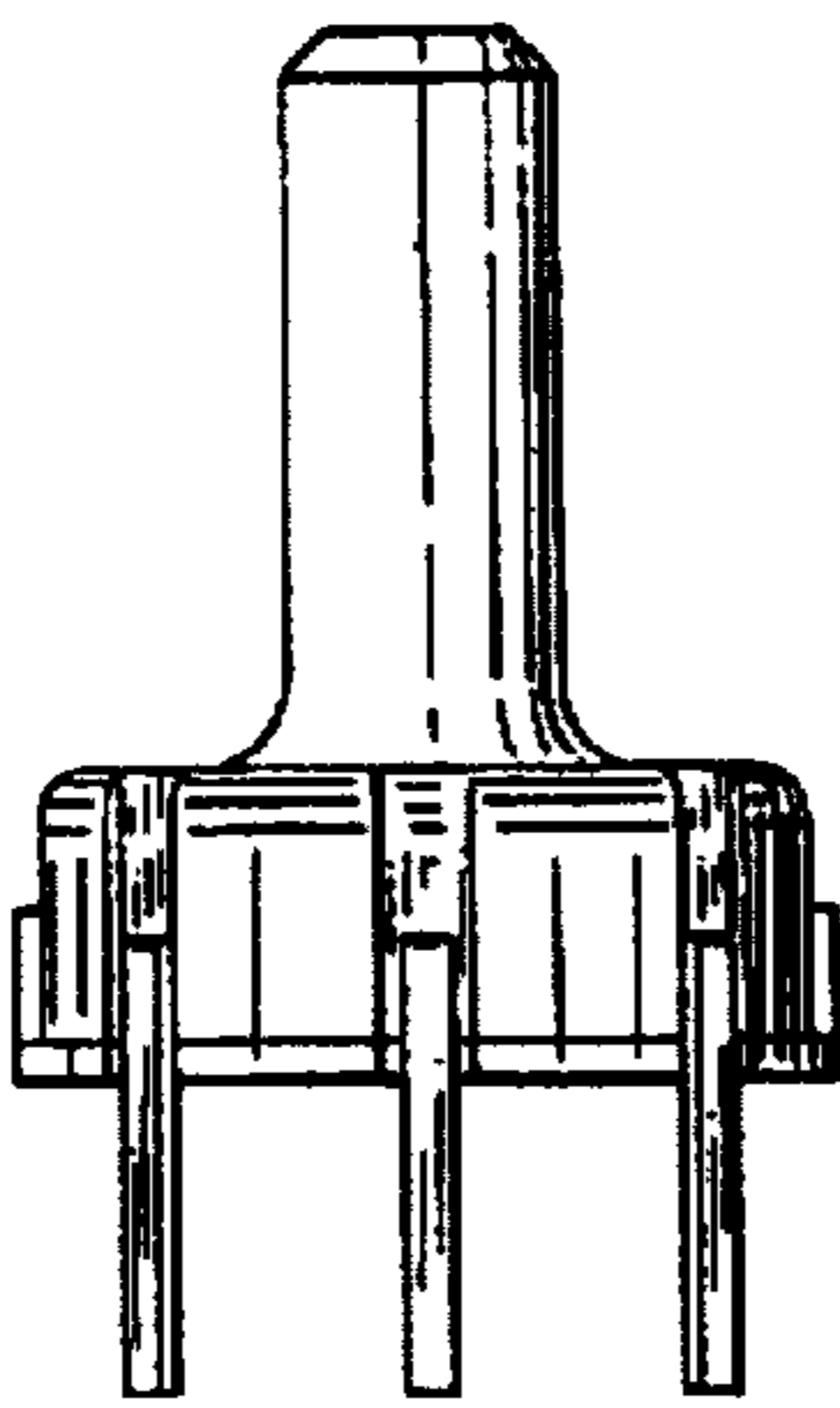


FIG. 2

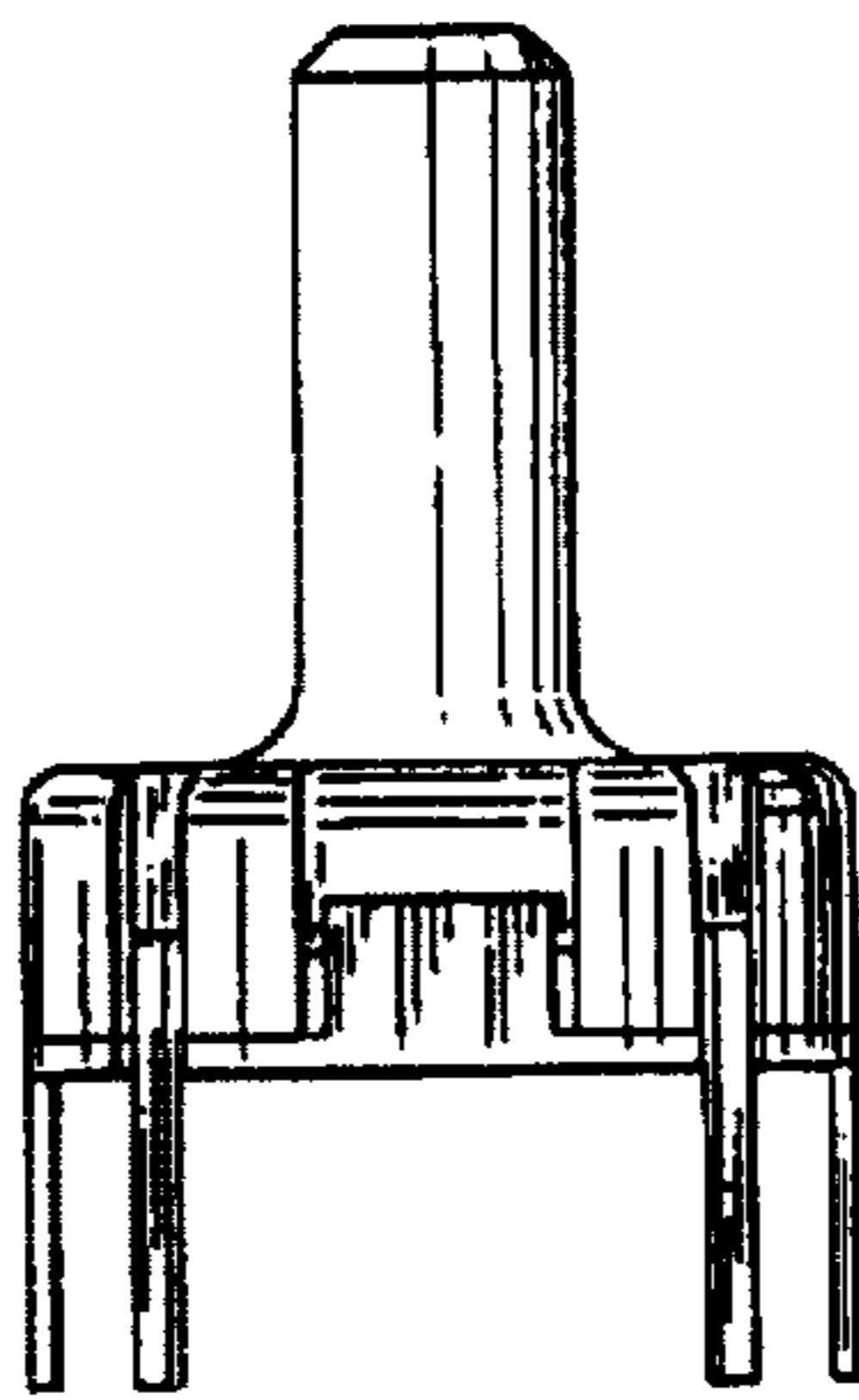


FIG. 3

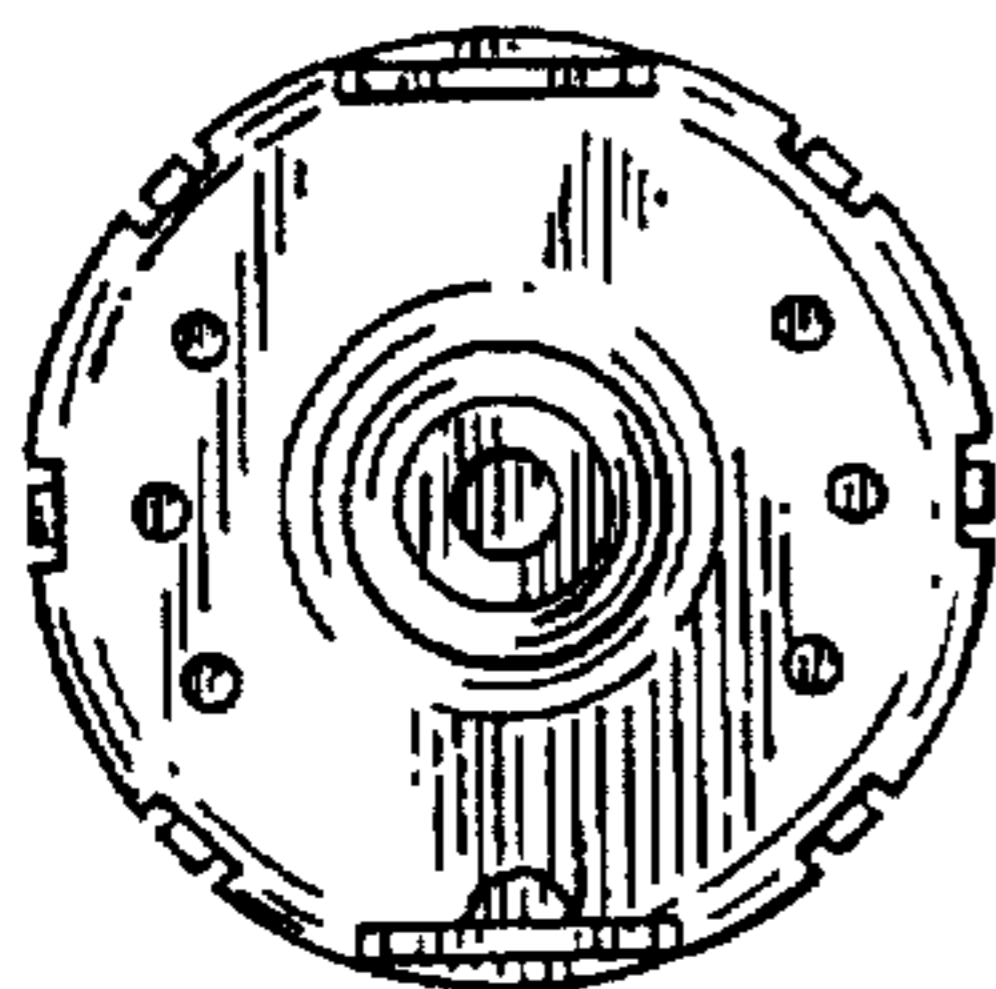


FIG. 4

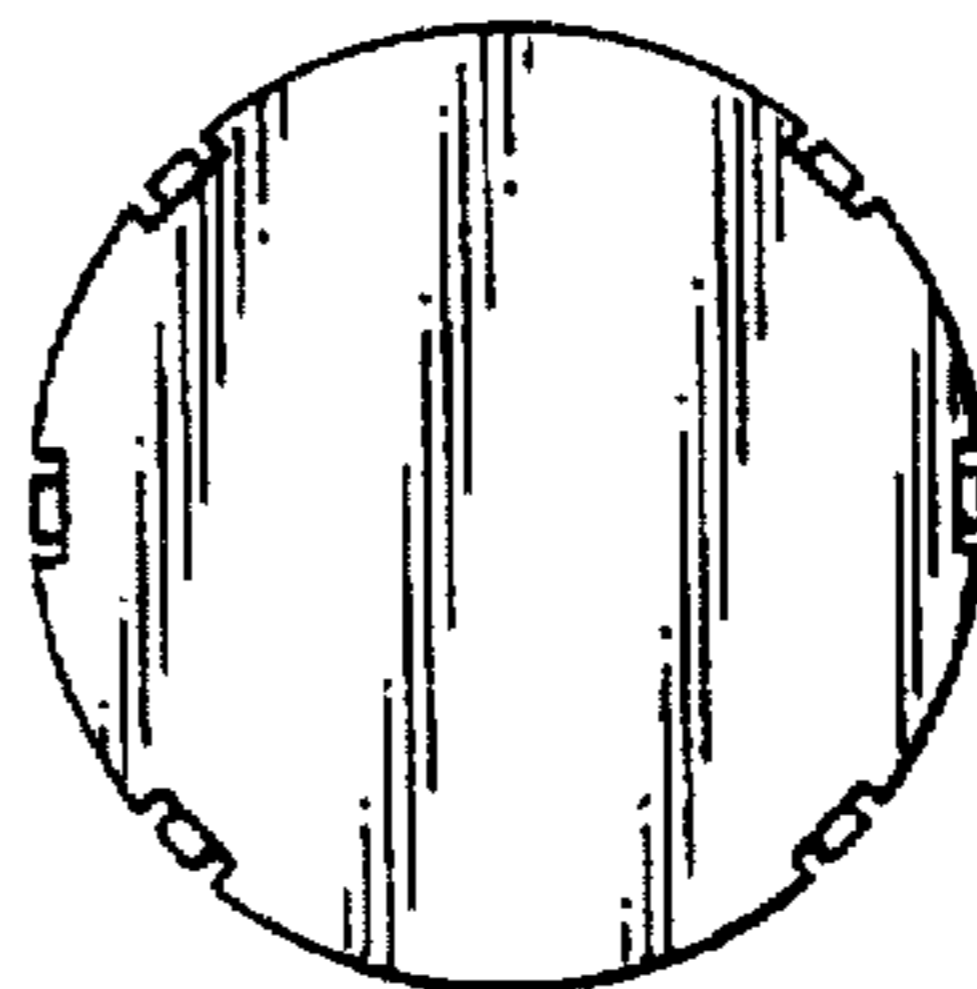


FIG. 5

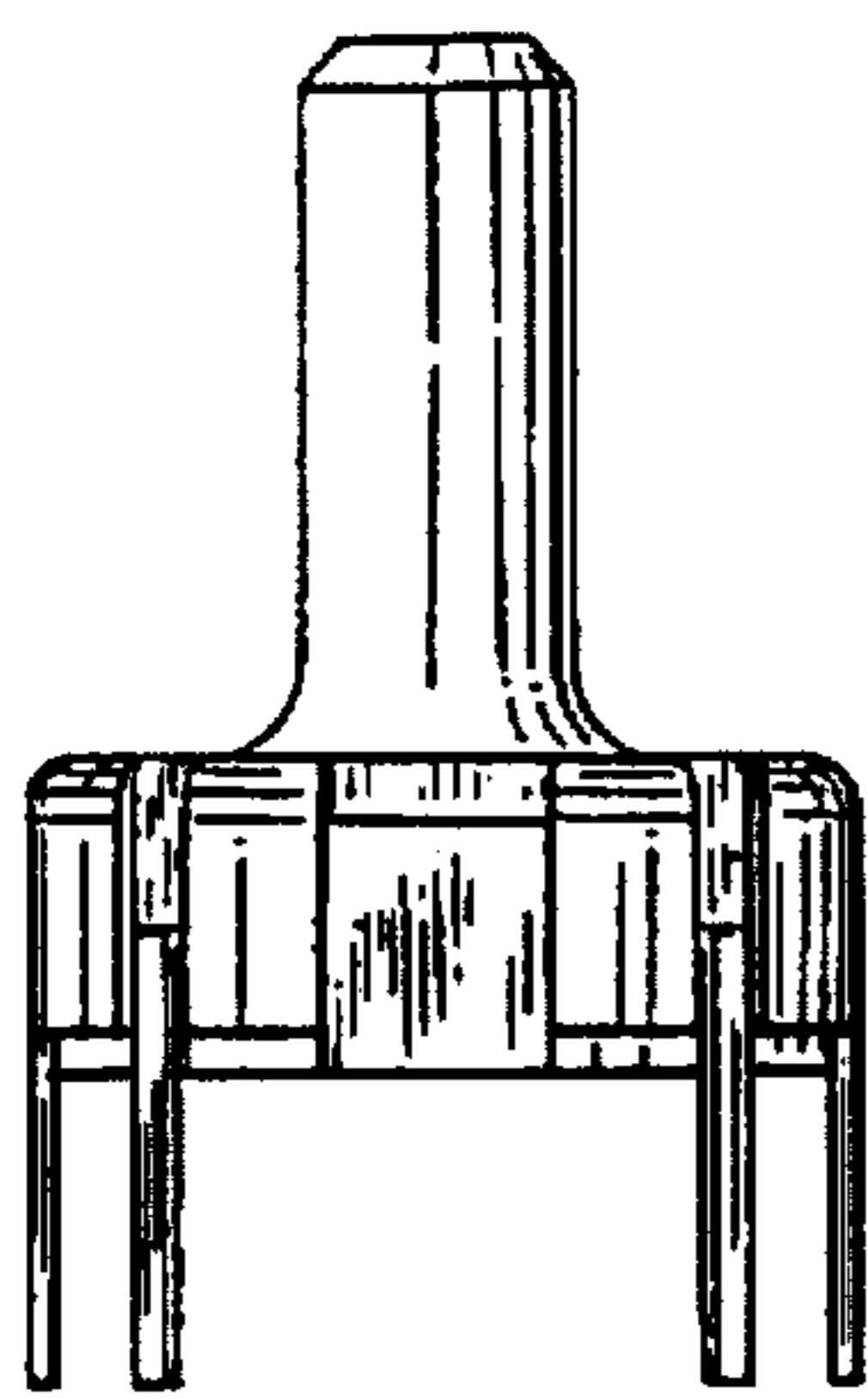


FIG. 6

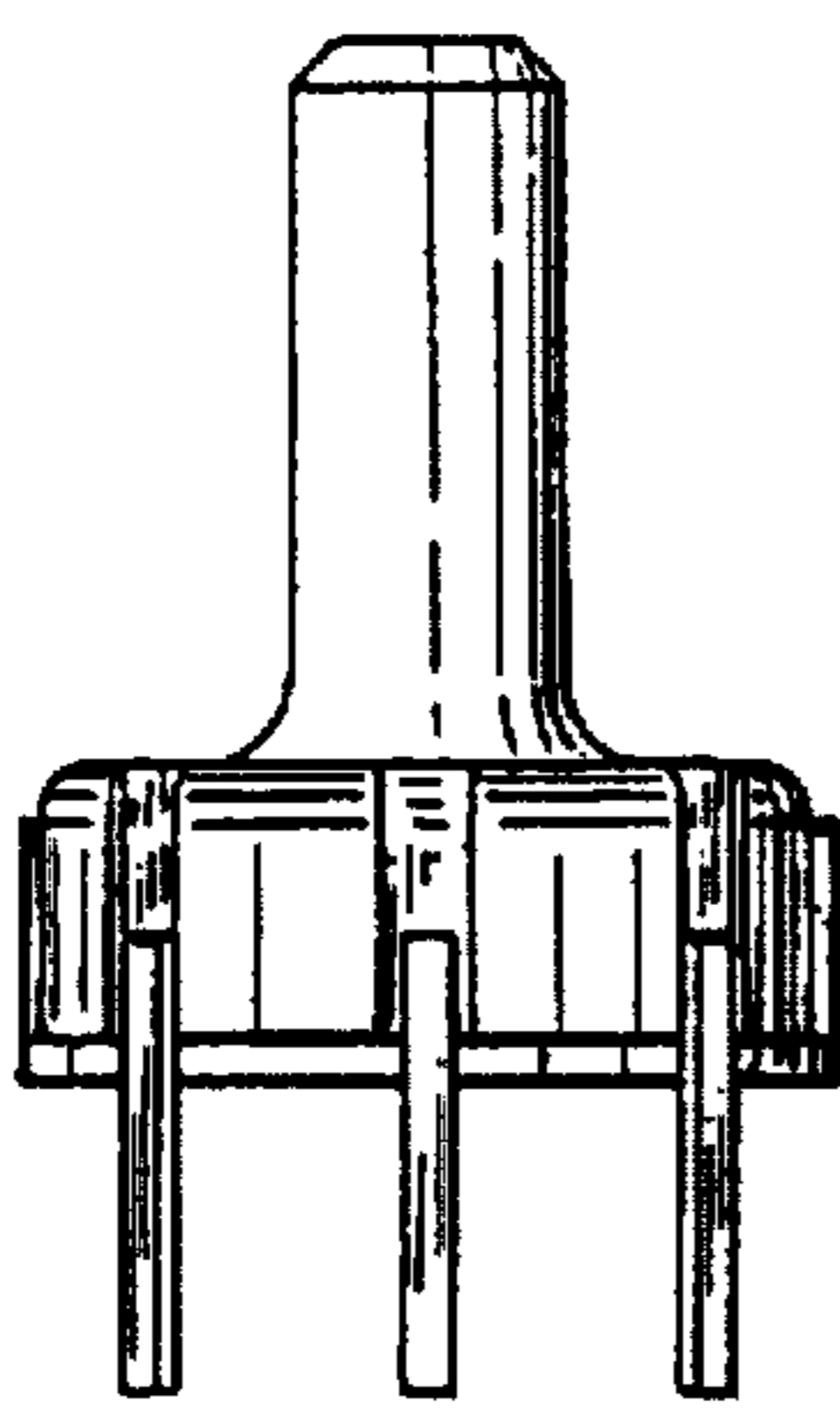


FIG. 7

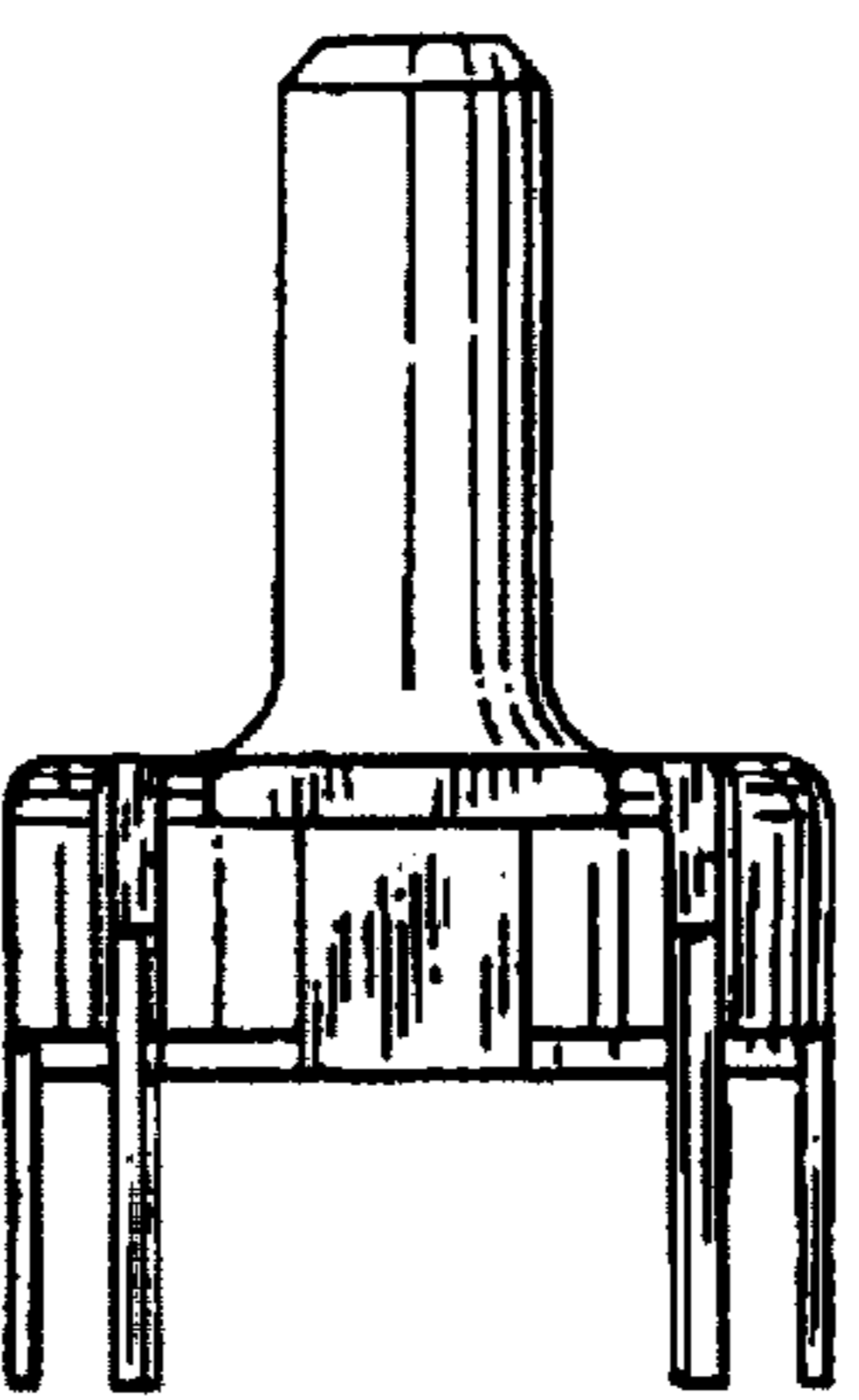


FIG. 8

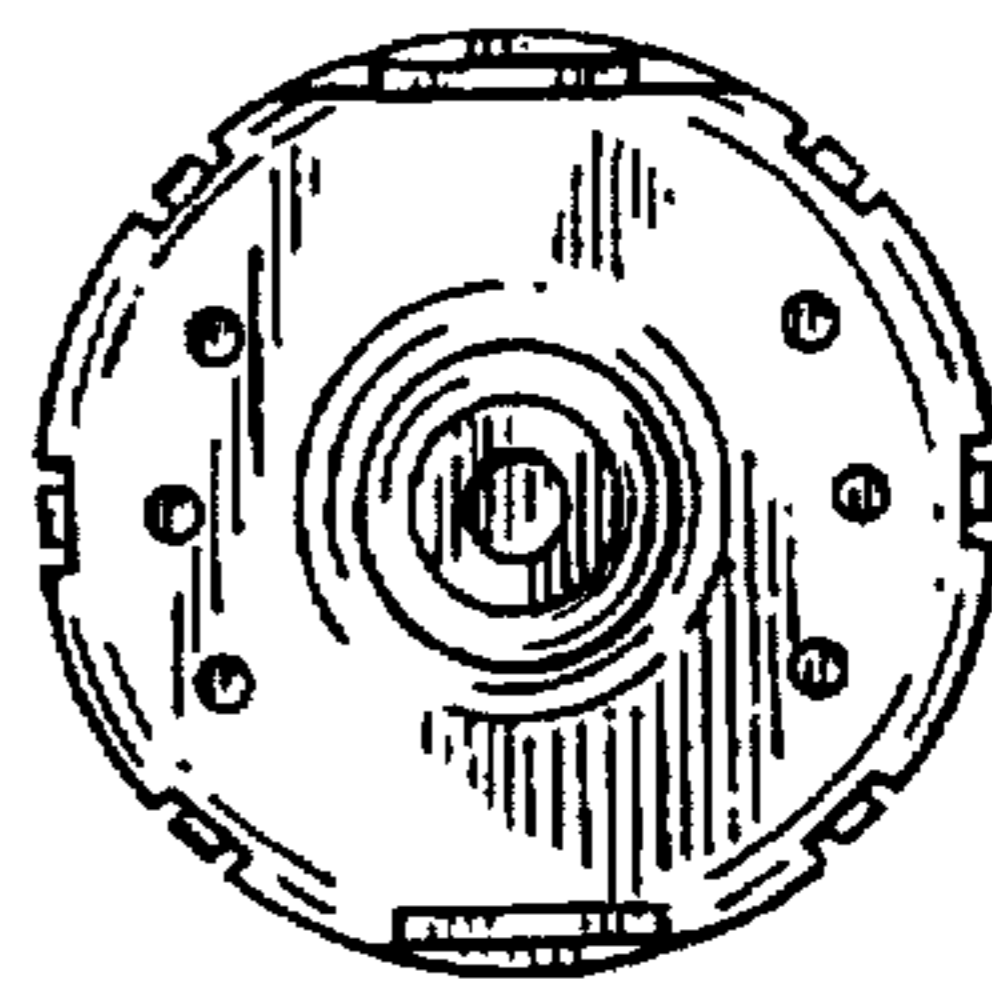


FIG. 9

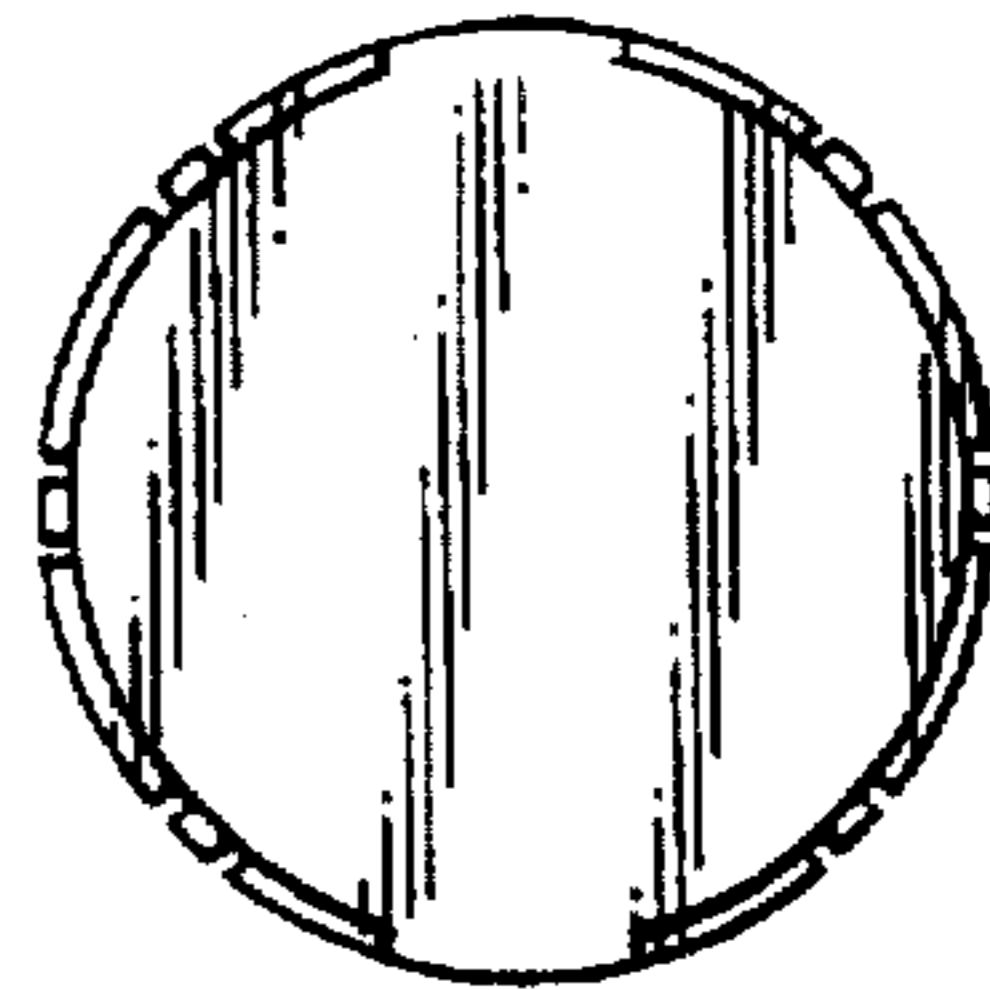


FIG. 10

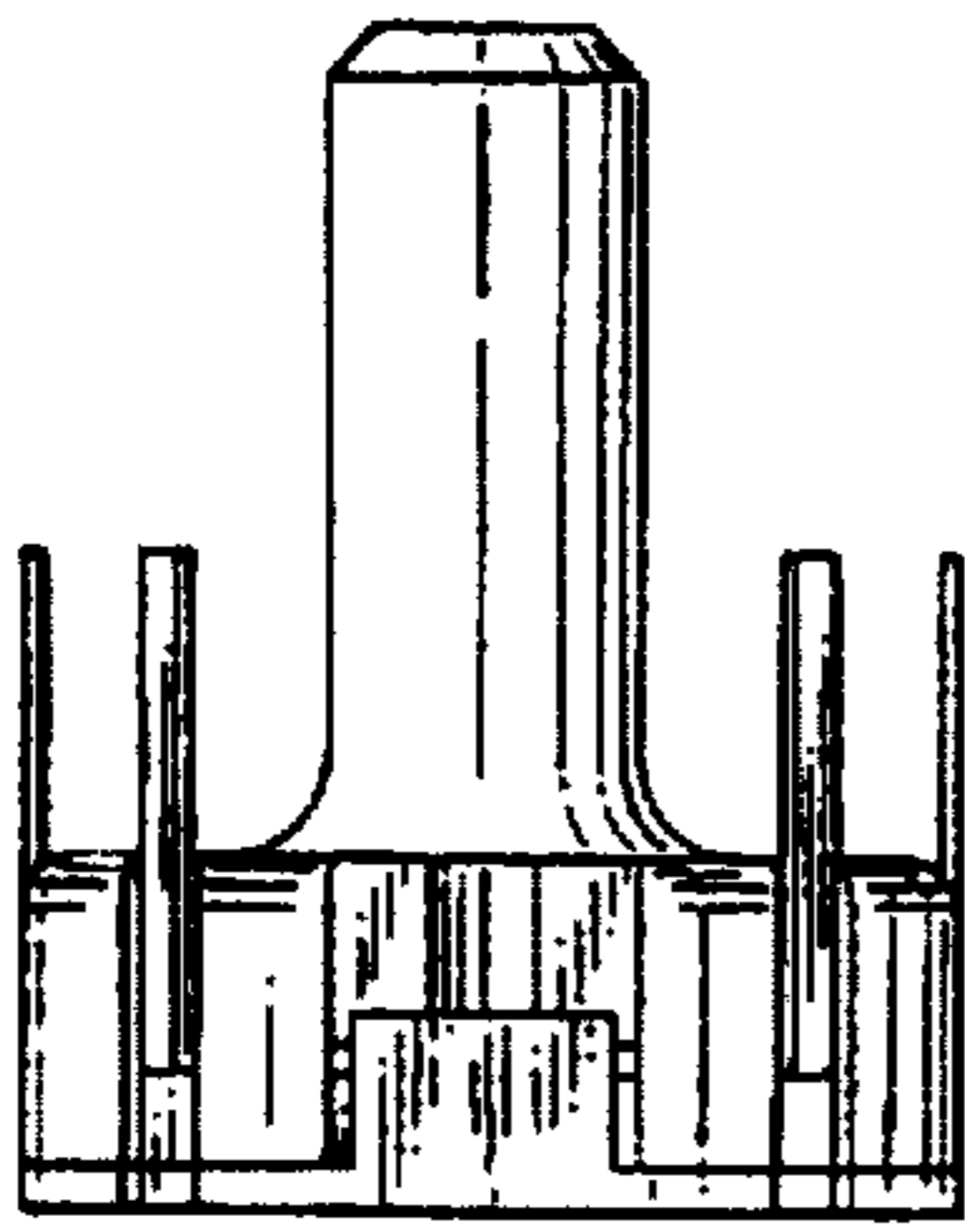


FIG. 11

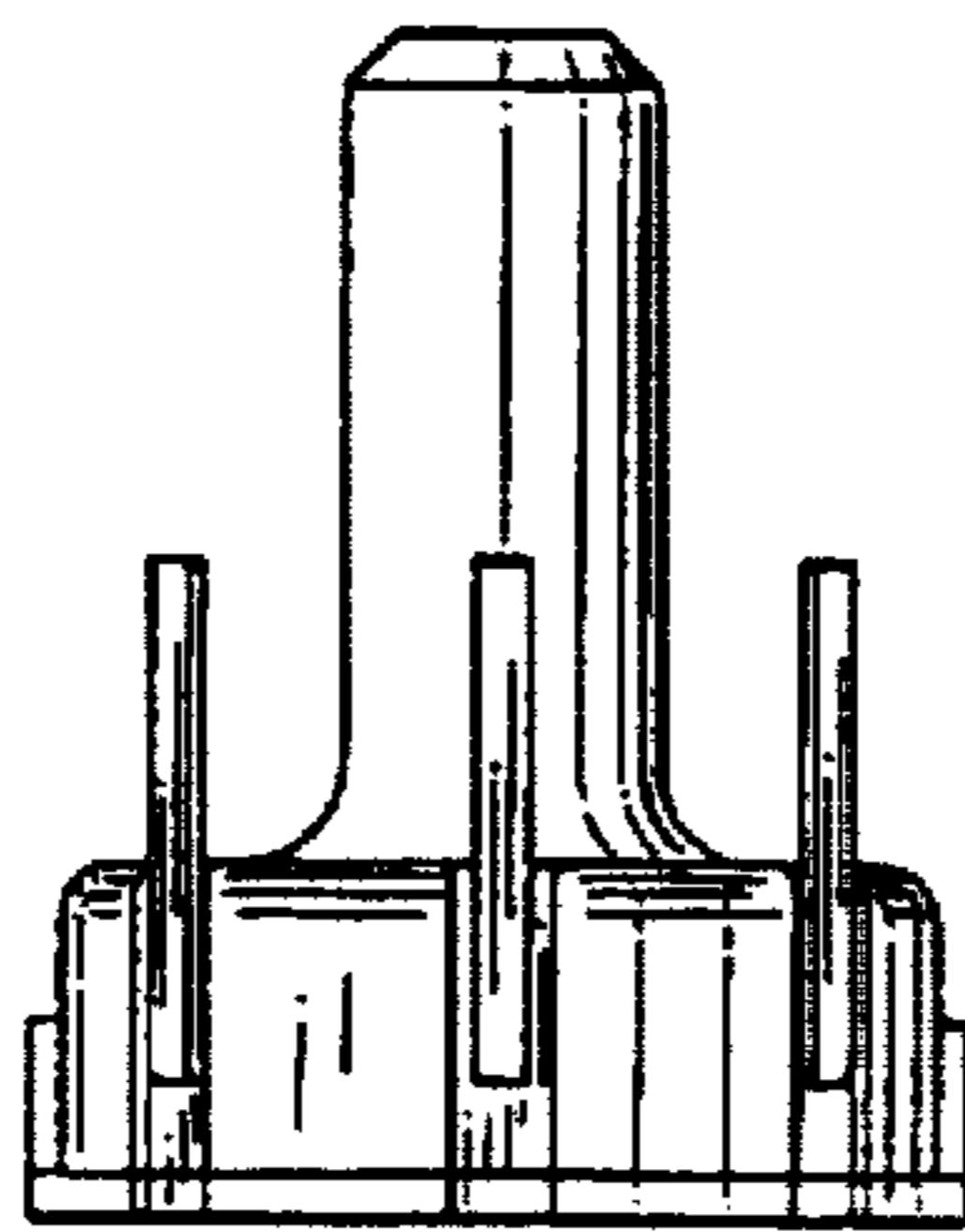


FIG. 12

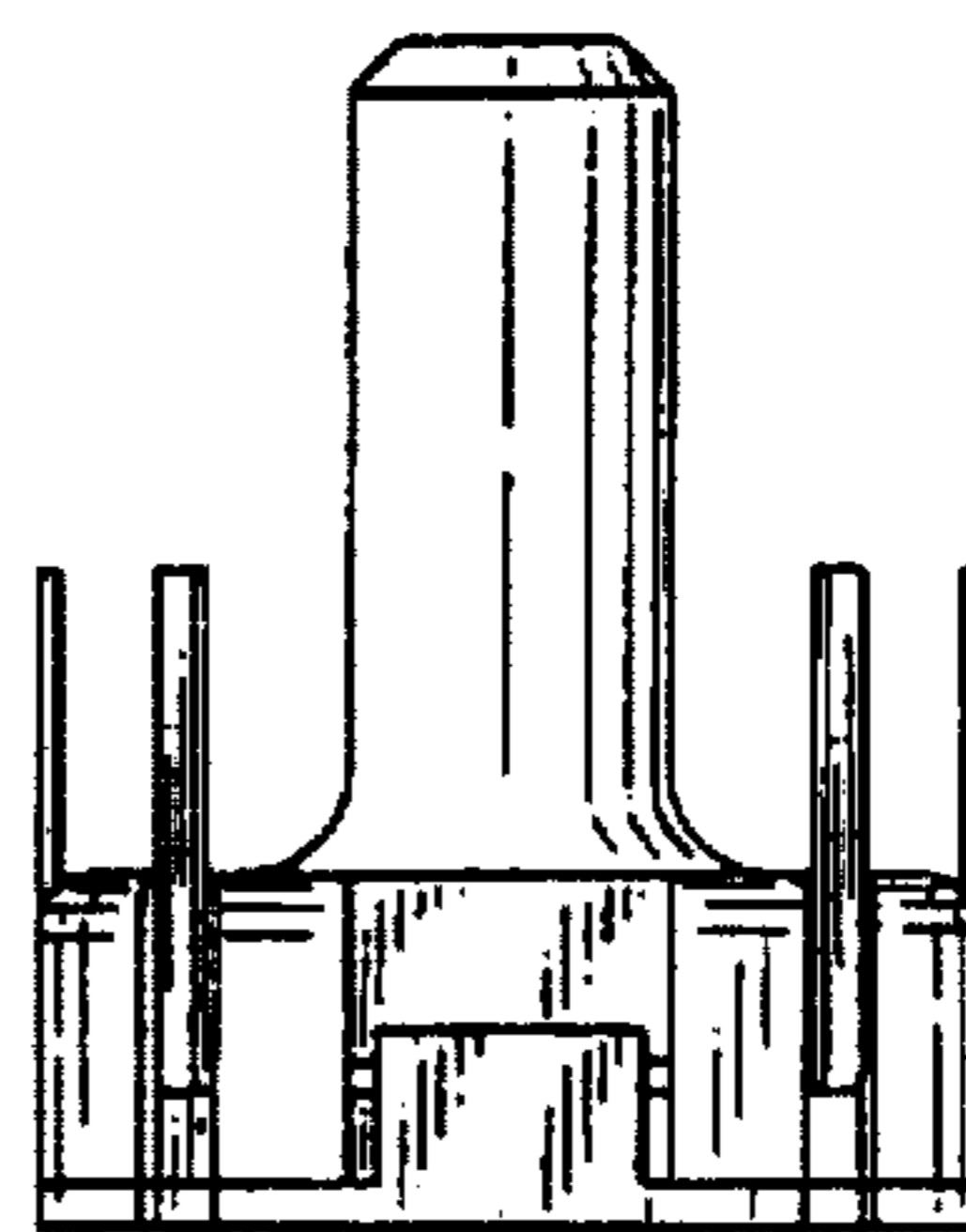


FIG. 13

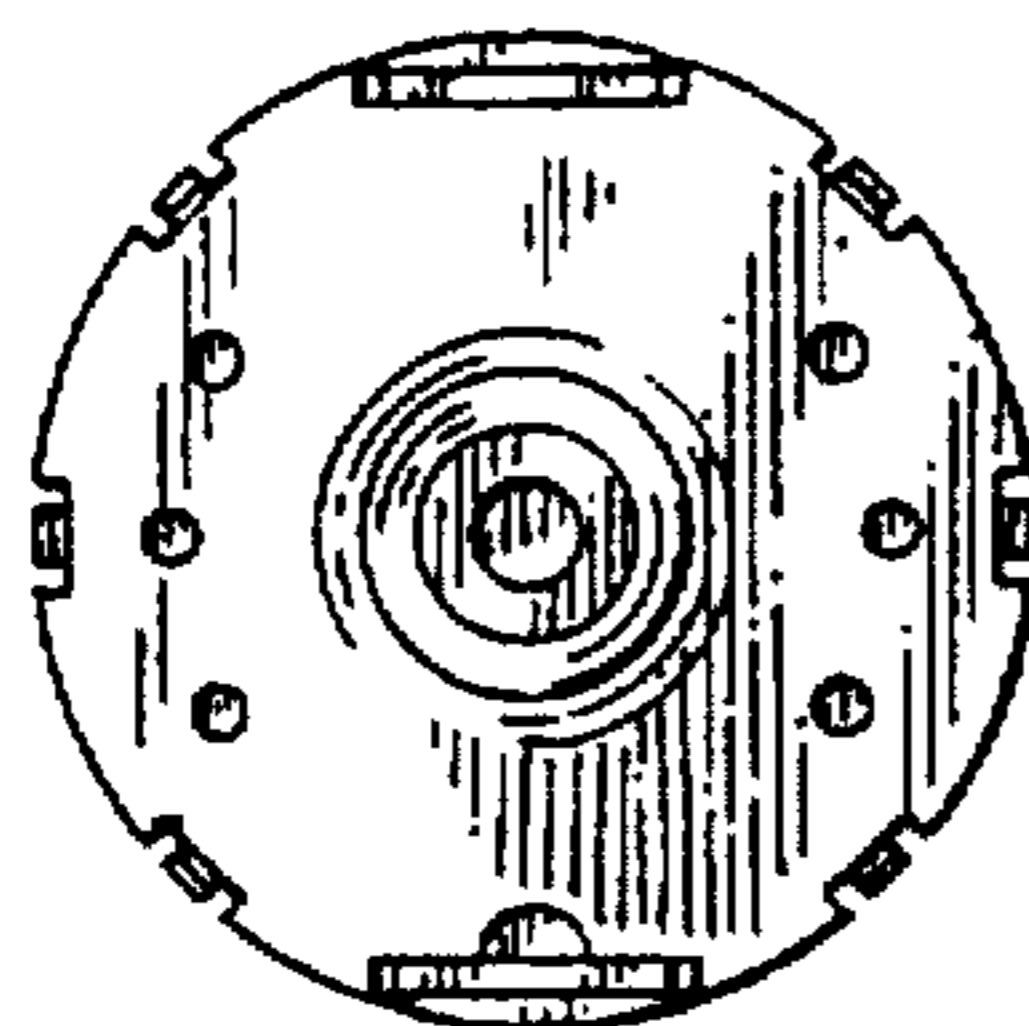


FIG. 14

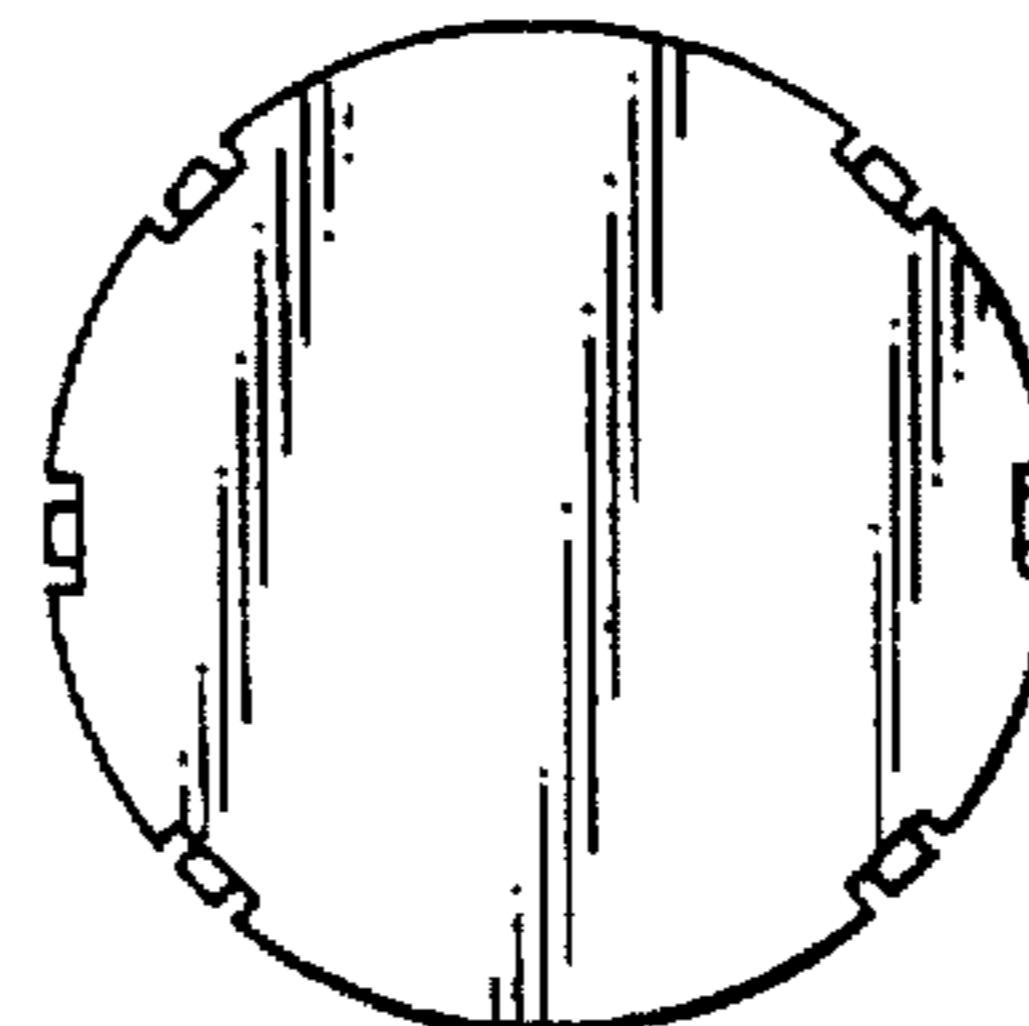


FIG. 15

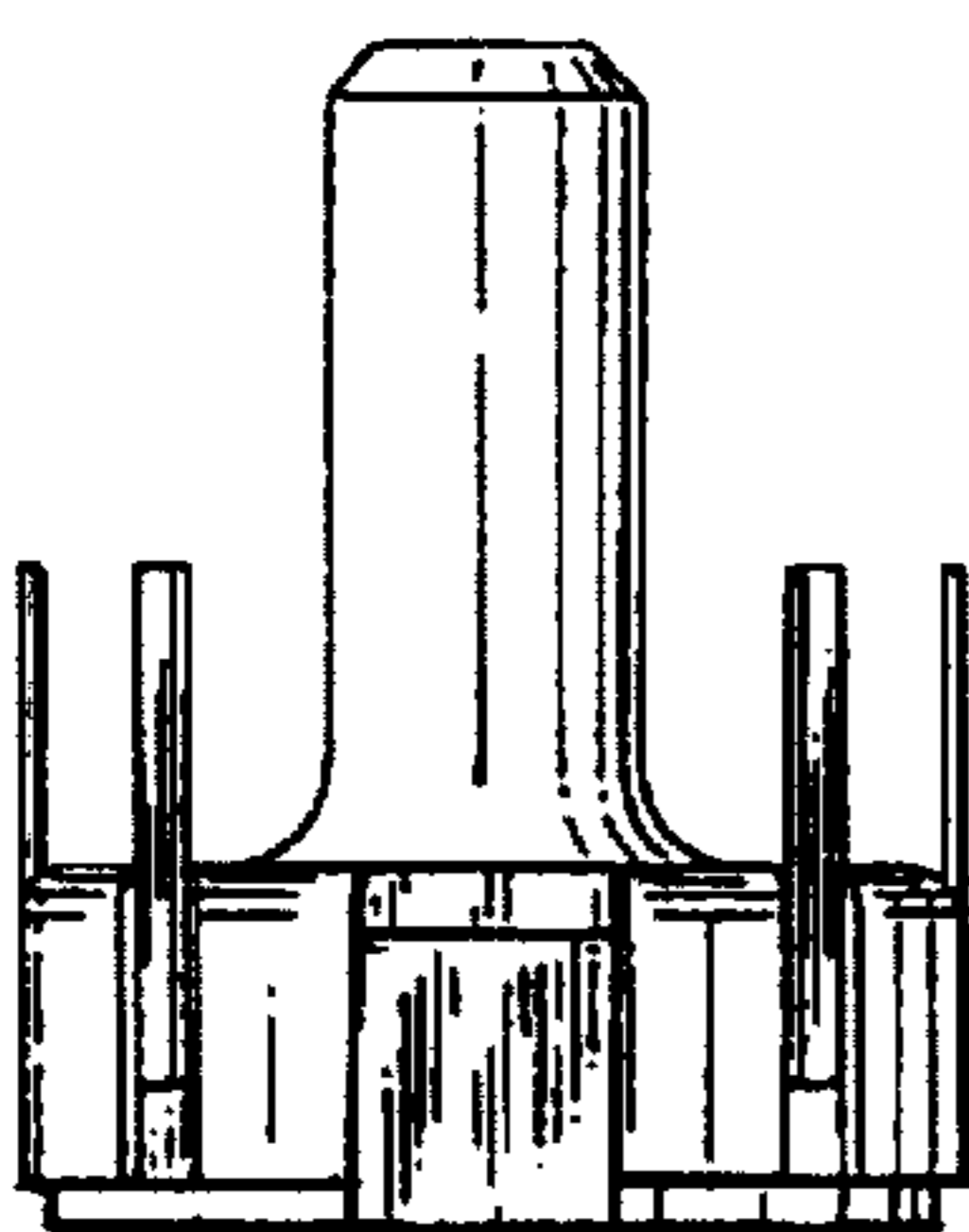


FIG. 16

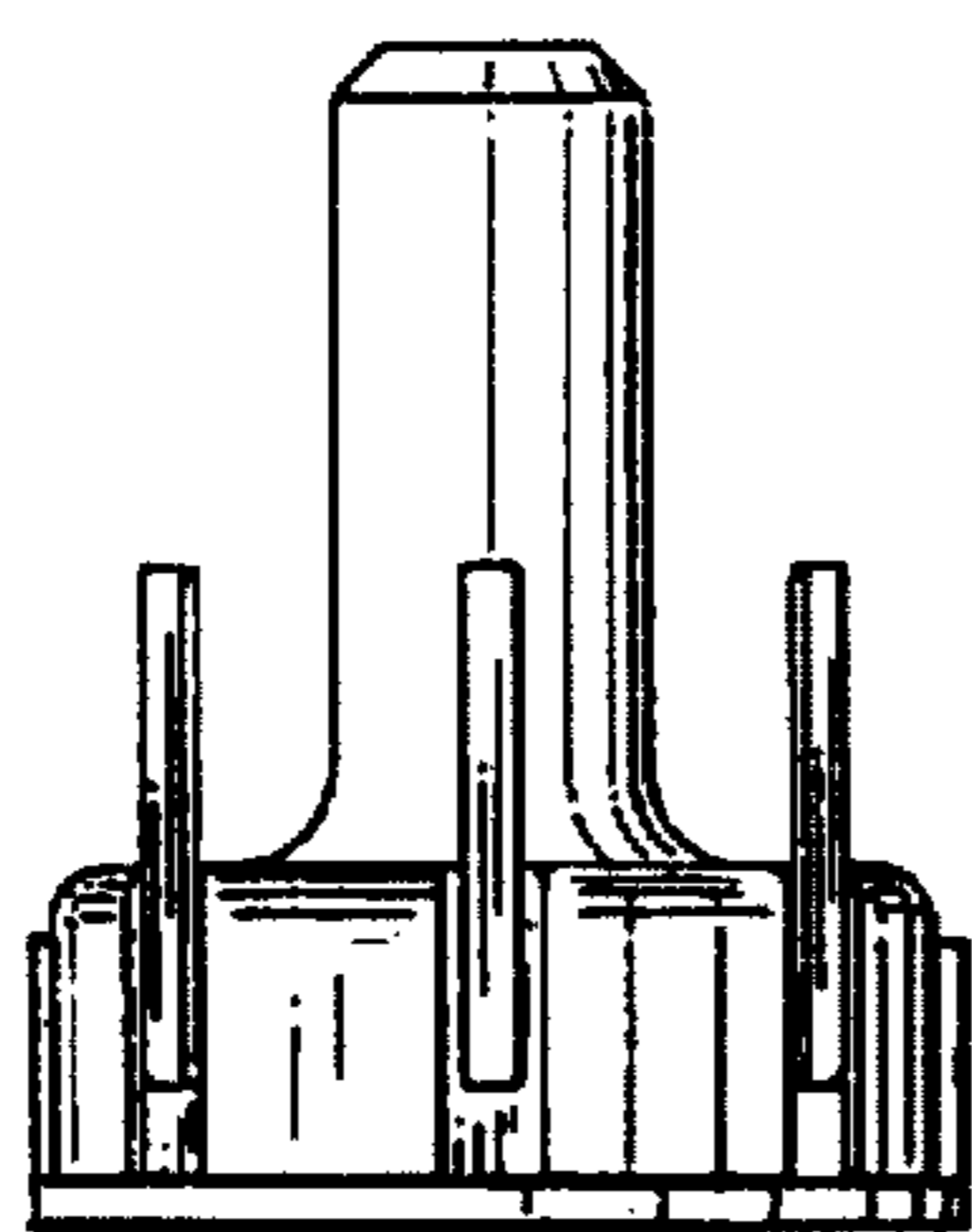


FIG. 17

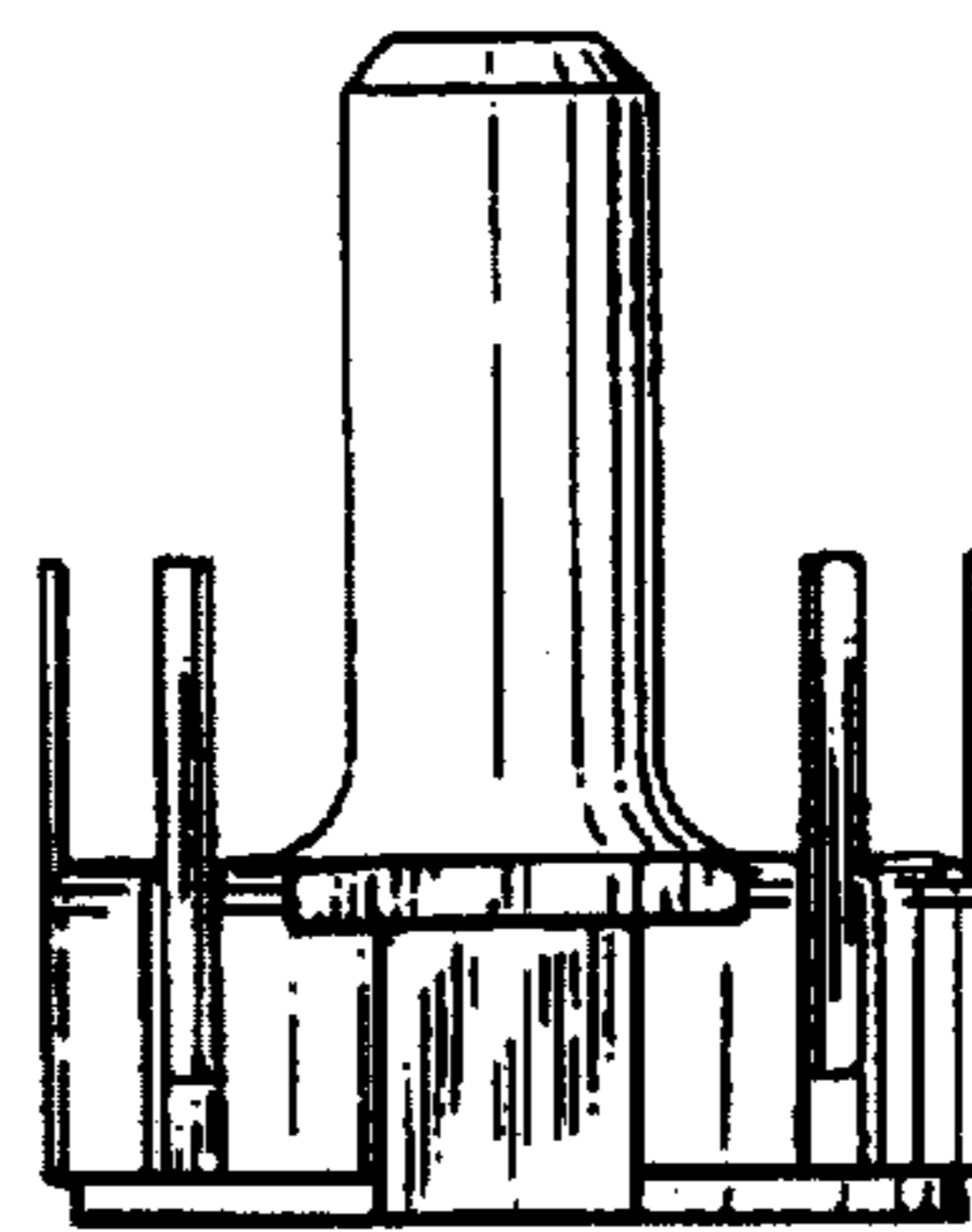


FIG. 18

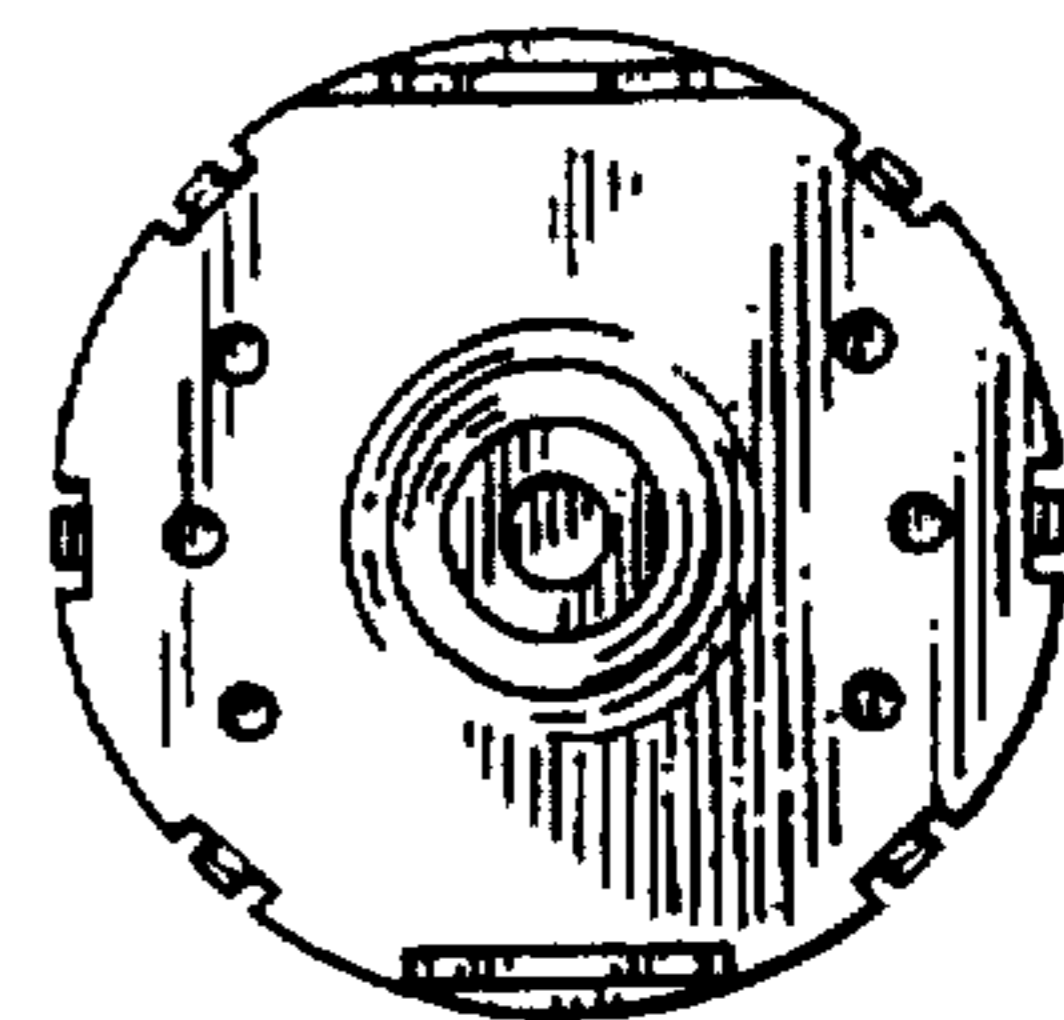


FIG. 19

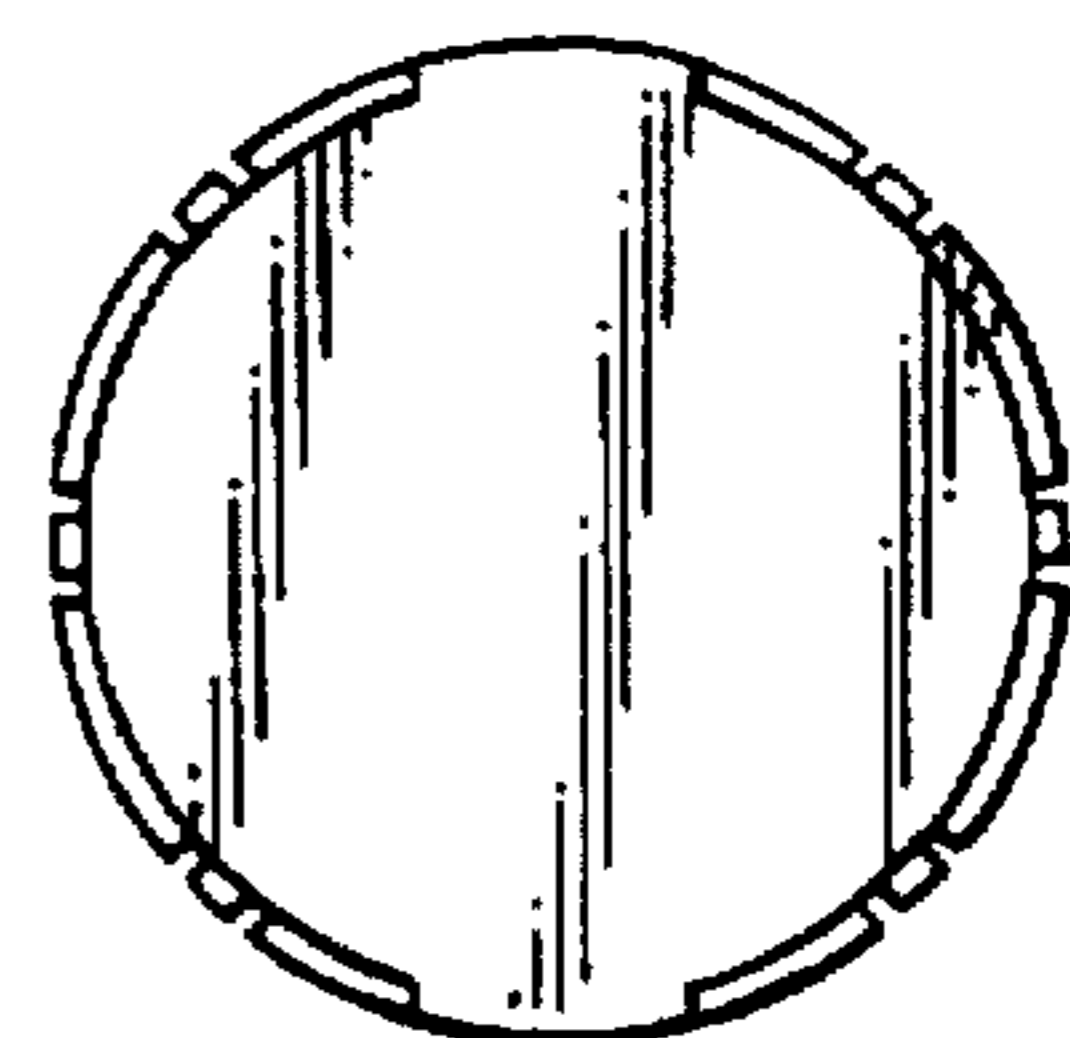


FIG. 20

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 "Piezoelectric" 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*