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United States Patent [19]

Takeda et al.

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[54] **PIEZOELECTRIC SEMICONDUCTOR ELEMENT**

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[73] Assignee: **Seiko Epson Corporation, Nagano, Japan**

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

[21] Appl. No.: **13,420**

[22] Filed: **Sep. 24, 1993**

[30] Foreign Application Priority Data

Mar. 25, 1993 [JP] Japan 5-8429

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

[58] Field of Search D13/101, 123, 125, 182;
174/52.4; 73/706, 715, 754, DIG. 4; 338/4, 42;
257/416, 417, 418

[56] References Cited

U.S. PATENT DOCUMENTS

D. 251,185	2/1979	Fanshawe	D13/101
3,968,466	7/1976	Nakamura et al.	338/42
4,596,155	6/1986	Kistler	338/5 X
4,661,653	4/1987	Aigo	174/52.4
4,732,042	3/1988	Adams	73/706
4,764,747	8/1988	Kurtz et al.	338/4 X
4,782,319	11/1988	Dell'Acqua et al.	338/5 X

5,317,921 6/1994 Kremidas 338/4 X

FOREIGN PATENT DOCUMENTS

1-10552 5/1991 Japan .

OTHER PUBLICATIONS

Japanese Watch Institute Report No. 120, p. 8, FIG. 5, Mar. 20, 1987 Electronic Technology; p. 52; Mar. 1986.

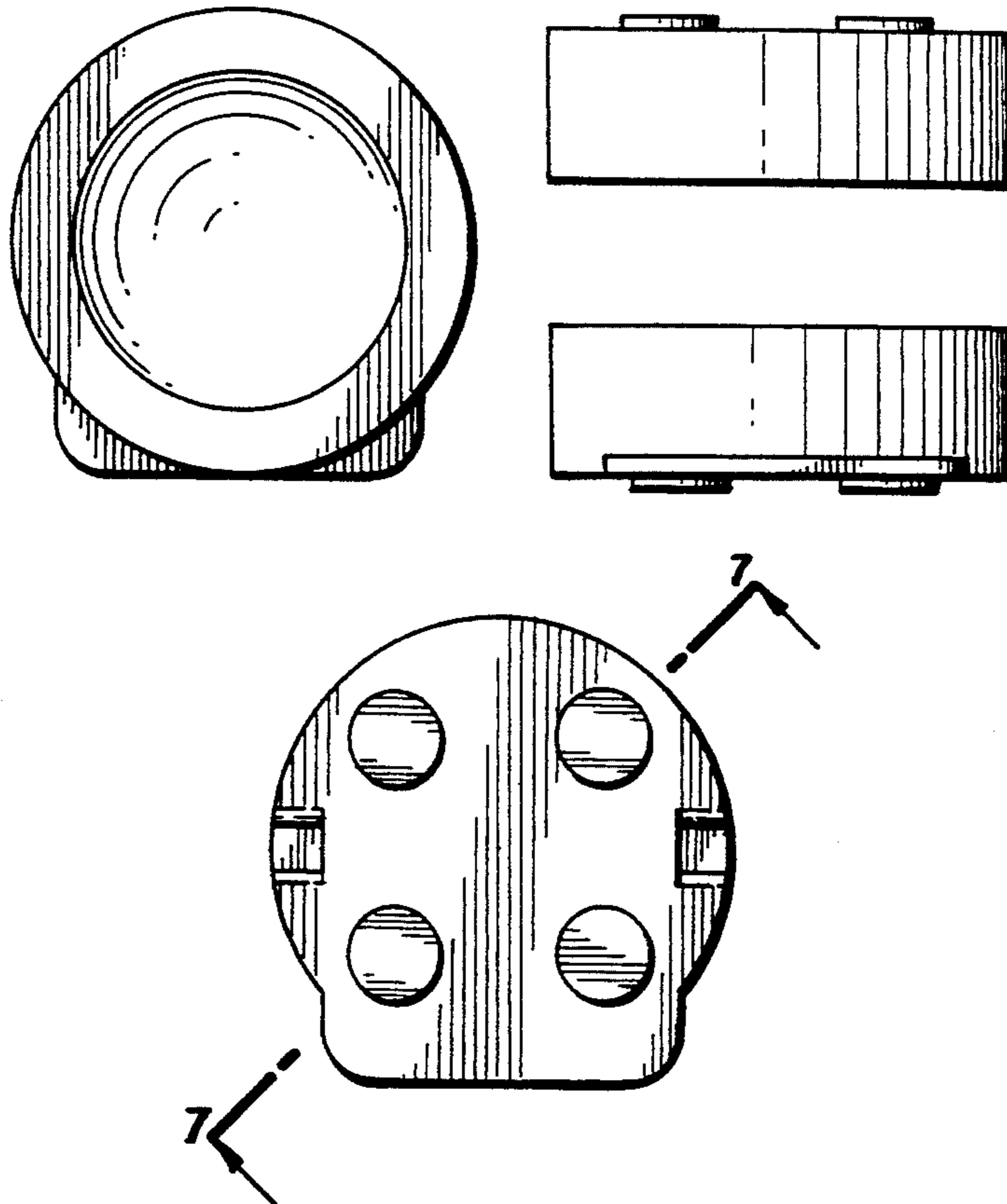
Primary Examiner—Joel Sincavage
Attorney, Agent, or Firm—Oliff & Berridge

[57] CLAIM

The ornamental design for piezoelectric semiconductor element, as shown and described.

DESCRIPTION

FIG. 1 is a front view of the inventive design for a piezoelectric semiconductor element; FIG. 2 is a top view of the inventive design of FIG. 1; FIG. 3 is a bottom view of the inventive design of FIG. 1; FIG. 4 is a left side view of the inventive design of FIG. 1; FIG. 5 is a right side view of the inventive design of FIG. 1; FIG. 6 is a rear view of the inventive design of FIG. 1; and, FIG. 7 is a cross-section view of the inventive design of FIG. 1 taken along the lines 7—7 of FIG. 6.



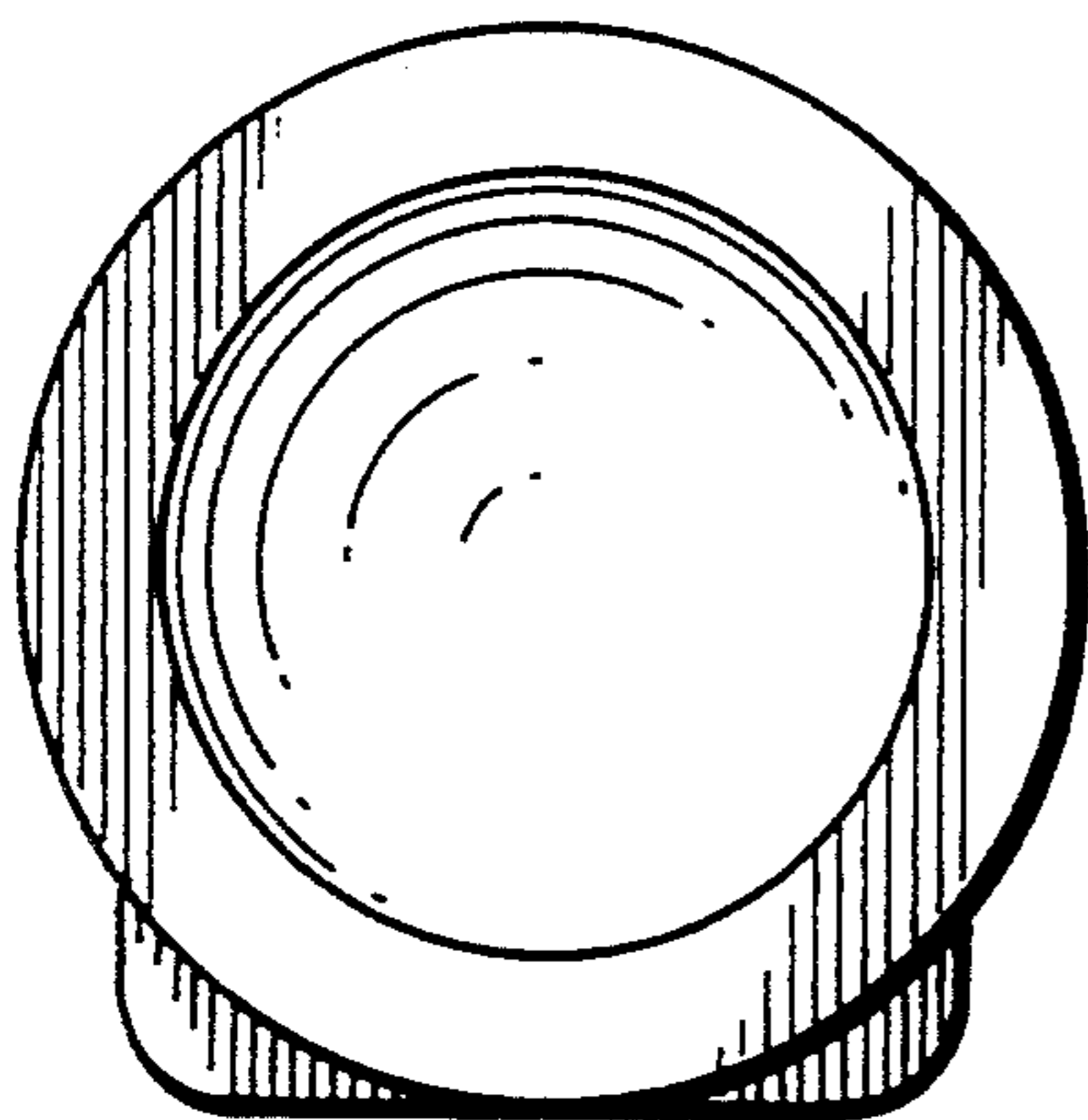


FIG. 1

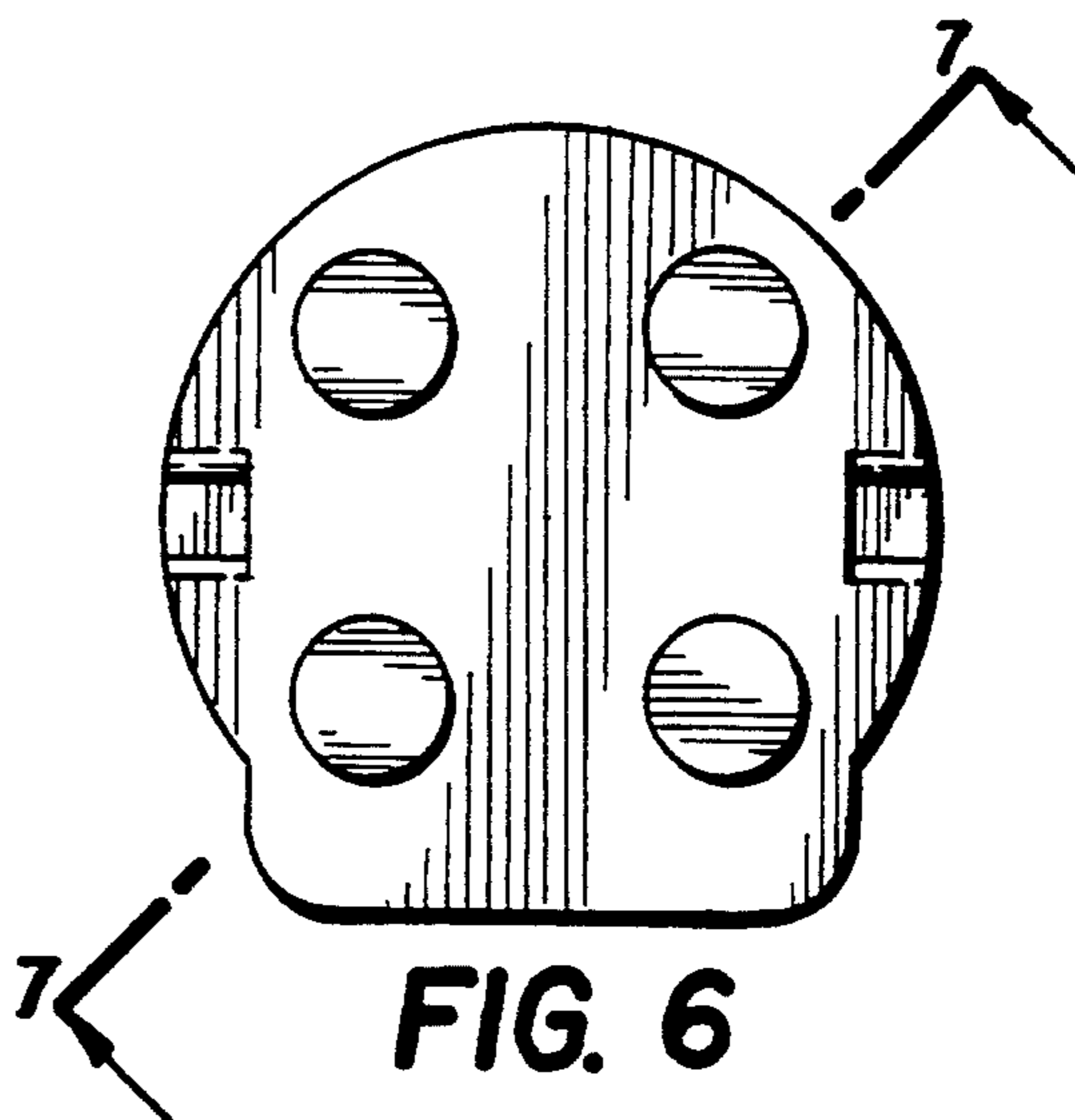


FIG. 6

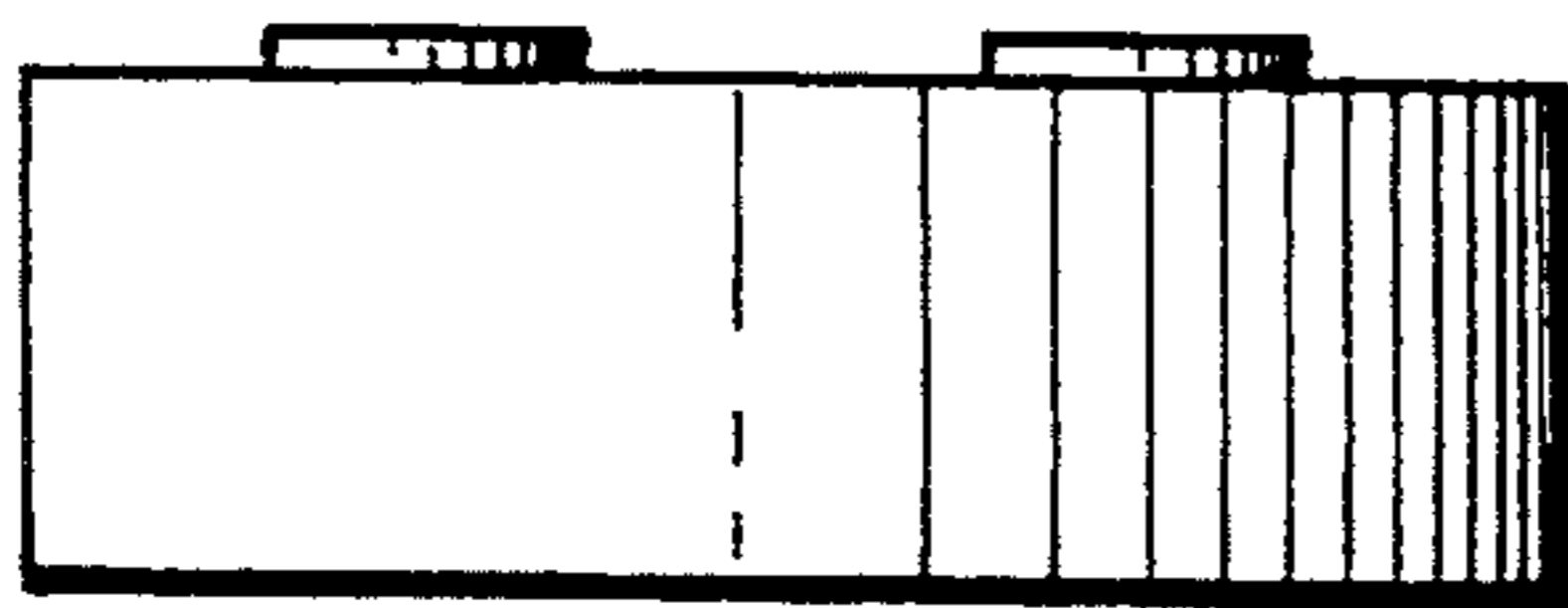


FIG. 2

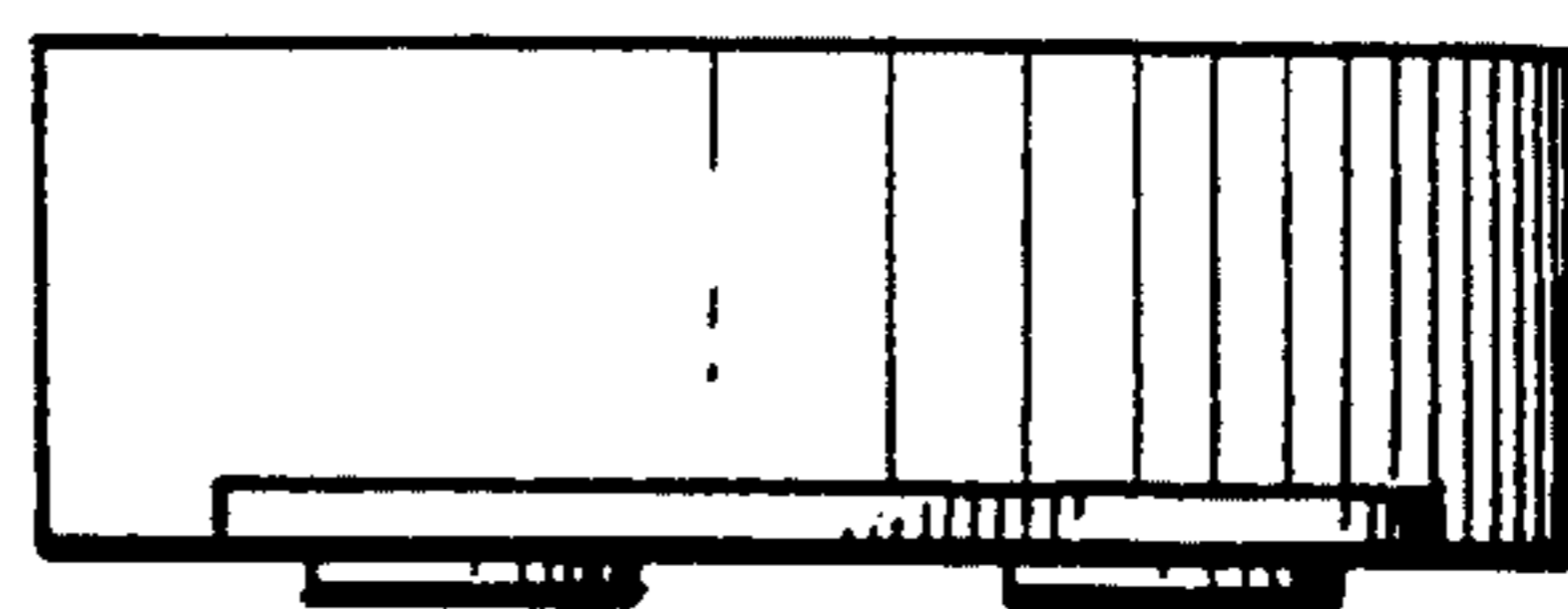


FIG. 3

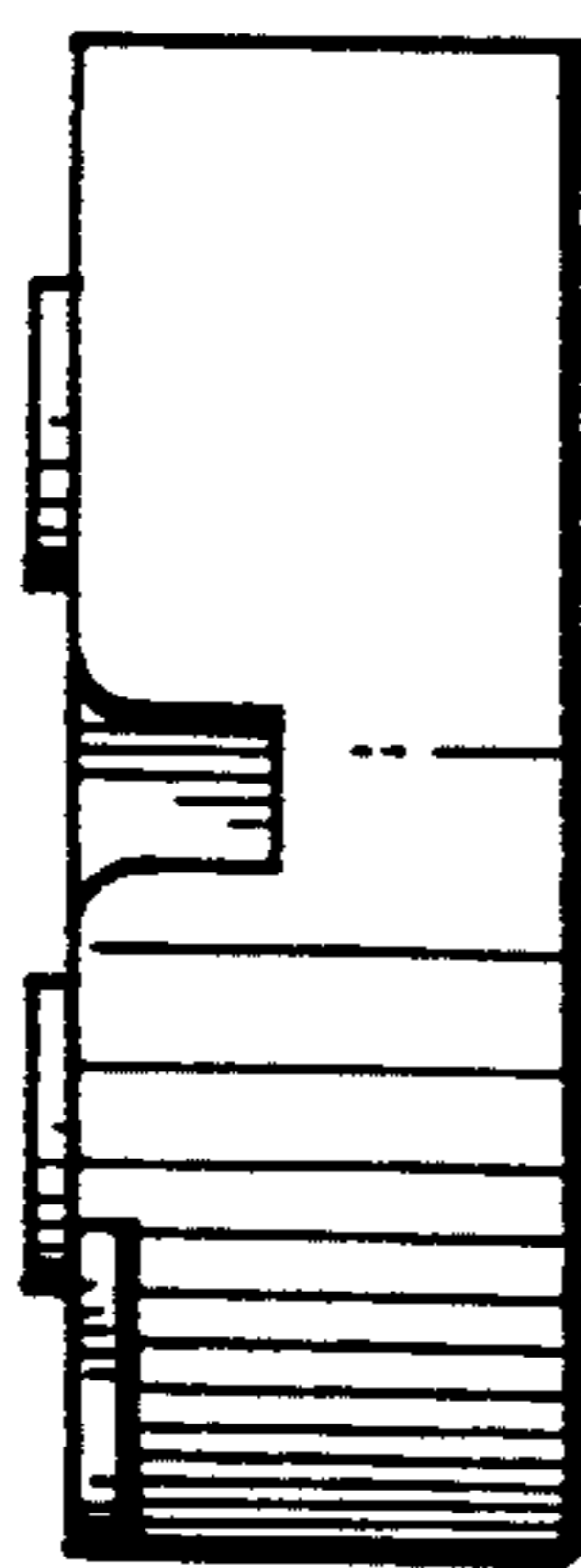


FIG. 4

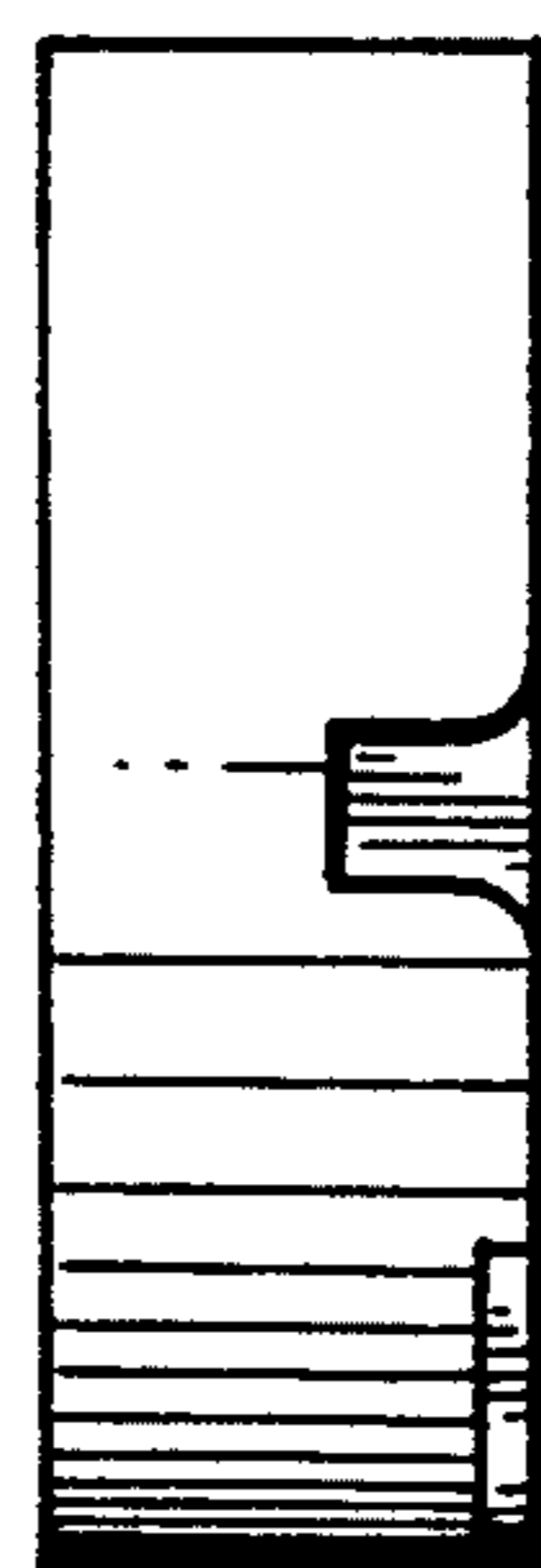


FIG. 5

FIG. 7

