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(12) **United States Design Patent**
Inaba

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(45) **Date of Patent:** **** Dec. 23, 2003**

(54) **LOOP ANTENNA**

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(73) Assignee: **Mitsumi Electric Co., Ltd.**, Tokyo (JP)

(**) Term: **14 Years**

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(30) **Foreign Application Priority Data**

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(51) **LOC (7) Cl.** **14-03**

(52) **U.S. Cl.** **D14/233**

(58) **Field of Search** D14/230, 233,
D14/238, 299; 343/895, 700 MS, 725, 741-744,
866, 867, 853, 855, 729, 728, 726

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 5,134,422 A * 7/1992 Auriol 343/895
- 5,818,390 A * 10/1998 Hill 343/700 MS
- 5,986,616 A * 11/1999 Edvardsson 343/853
- 6,160,523 A * 12/2000 Ho 343/770
- 6,166,702 A * 12/2000 Audenaerde et al. 343/795

- 6,285,322 B1 * 9/2001 Johannisson et al. 343/700 MS
- 6,559,804 B2 * 5/2003 Nakano et al. 343/700 MS
- 6,563,469 B2 * 5/2003 Miyata et al. 343/700 MS

* cited by examiner

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(57) **CLAIM**

The ornamental design for a loop antenna, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the top, front and right side of a loop antenna showing my new design;

FIG. 2 is a front elevational view, the rear elevational view being identical thereof;

FIG. 3 is a right side elevational view, the left side elevational view being identical thereof;

FIG. 4 is a top plan view thereof; and,

FIG. 5 is a bottom plan view thereof.

The broken line showing of environmental structure is for illustrative purposes only and forms no part of the claimed design.

1 Claim, 2 Drawing Sheets

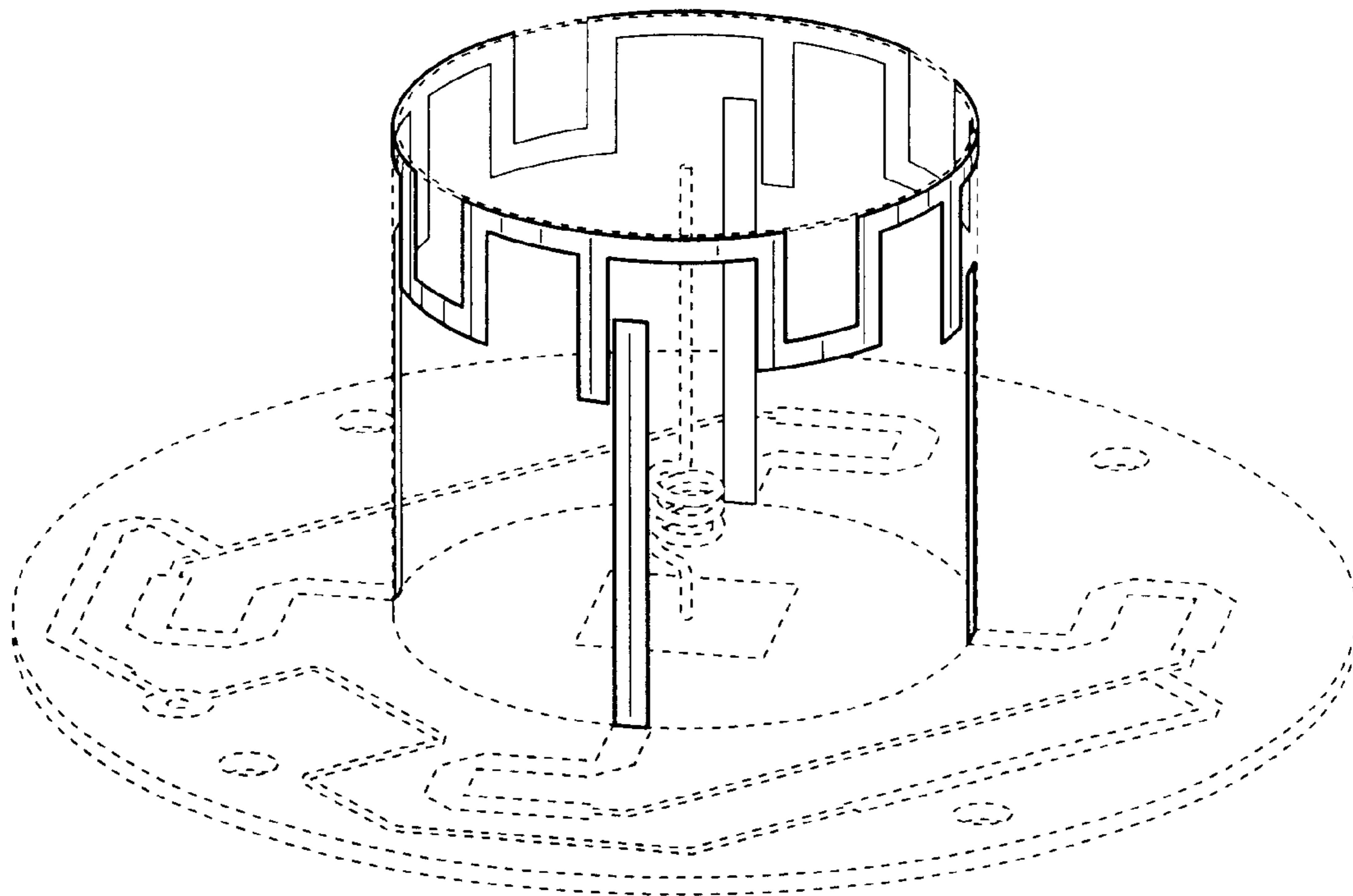


FIG. 1

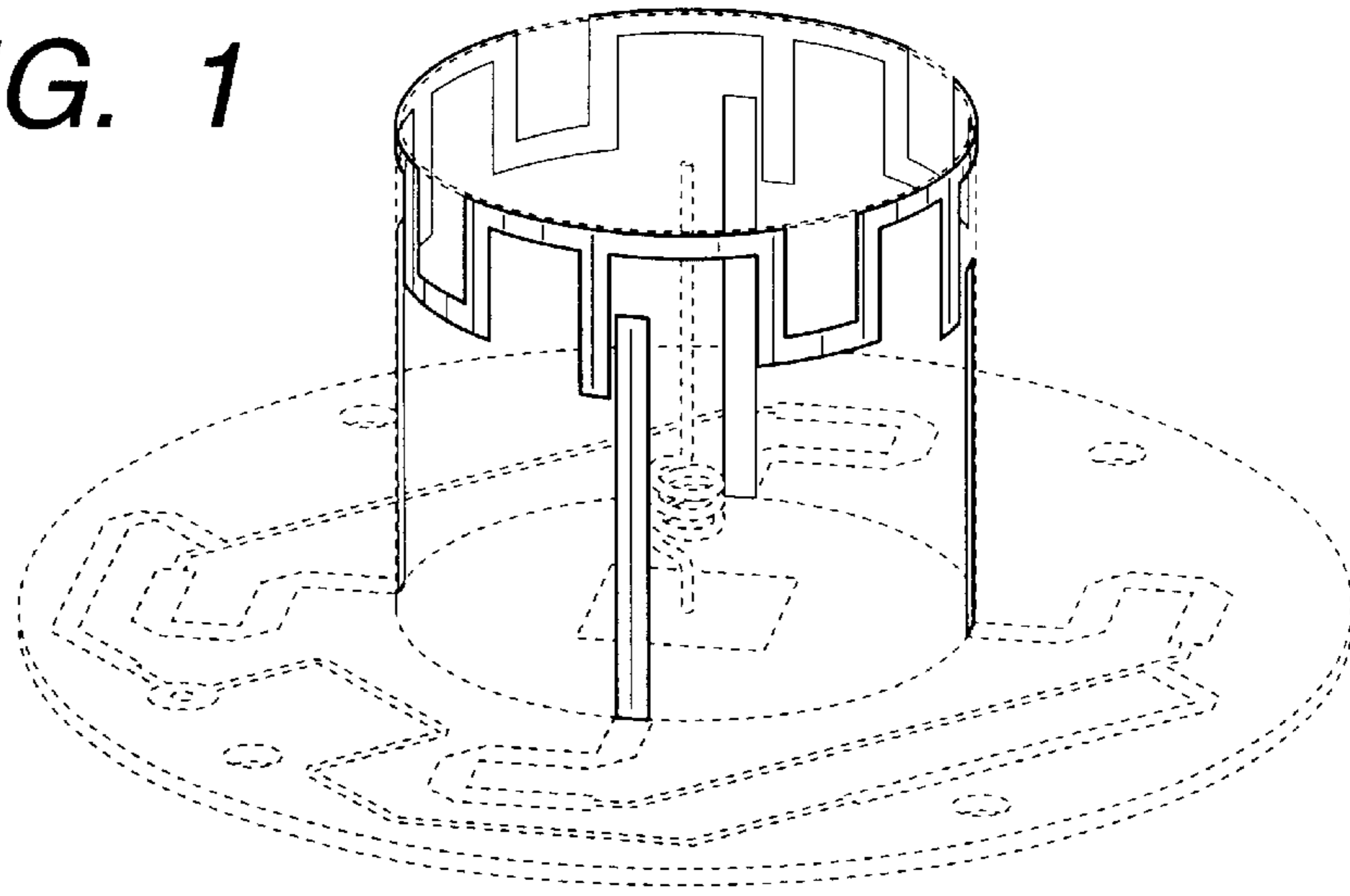


FIG. 2

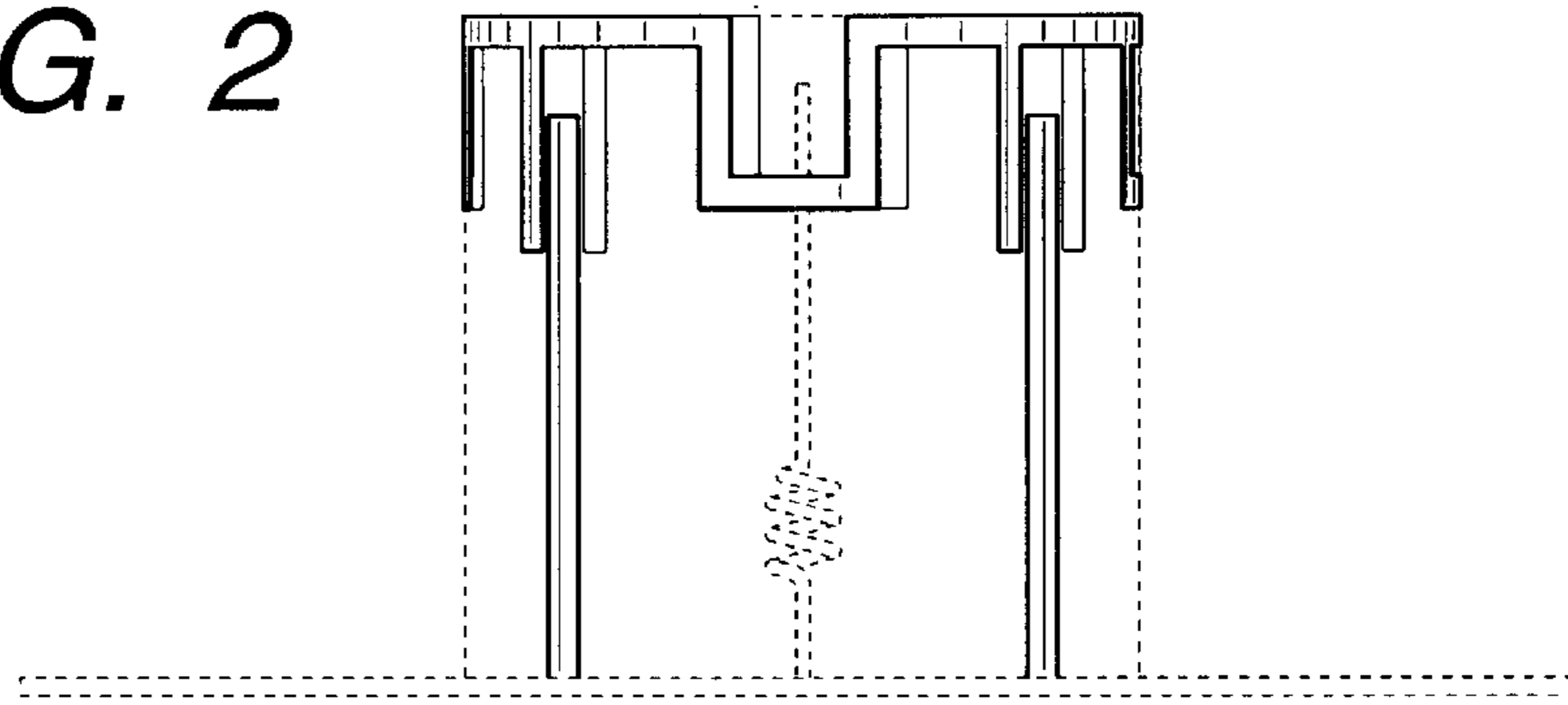


FIG. 3

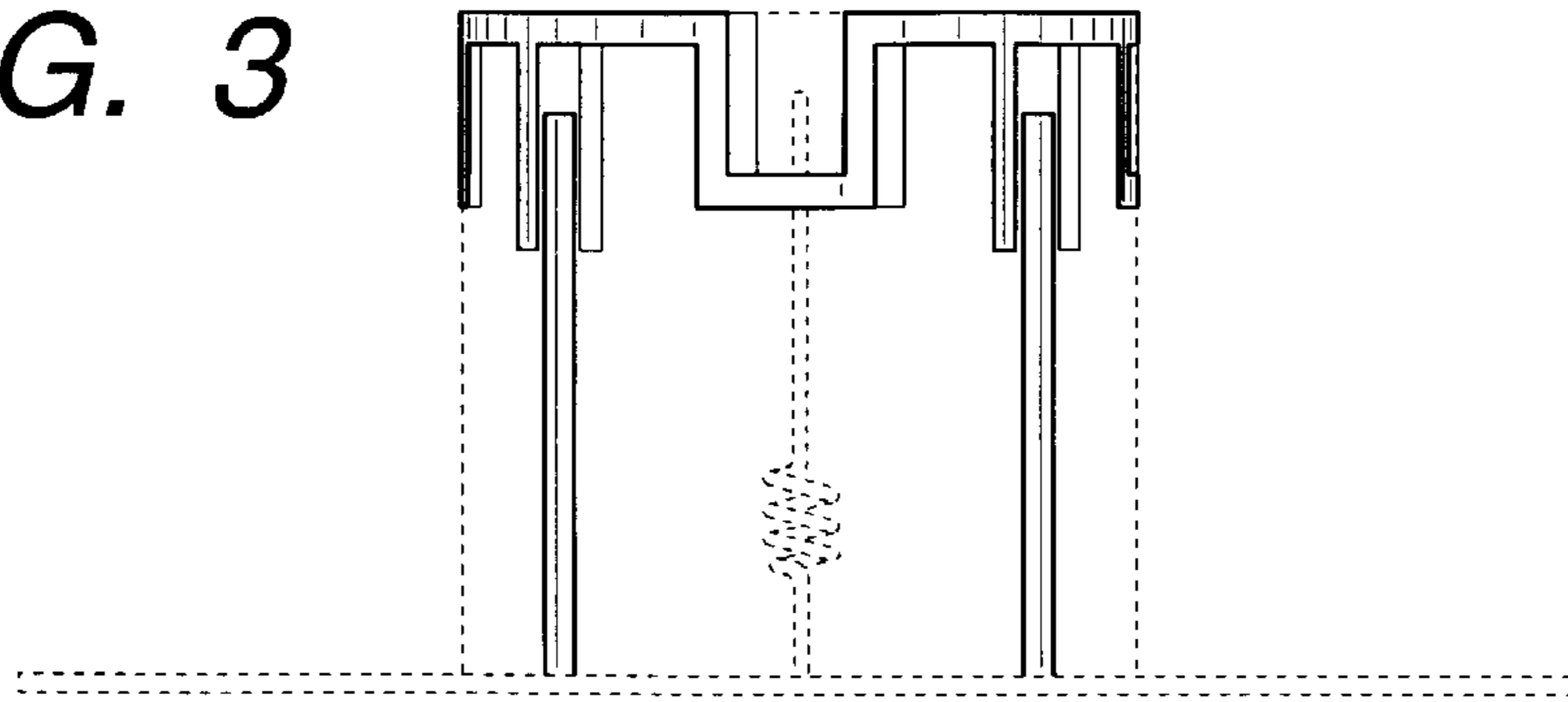


FIG. 4

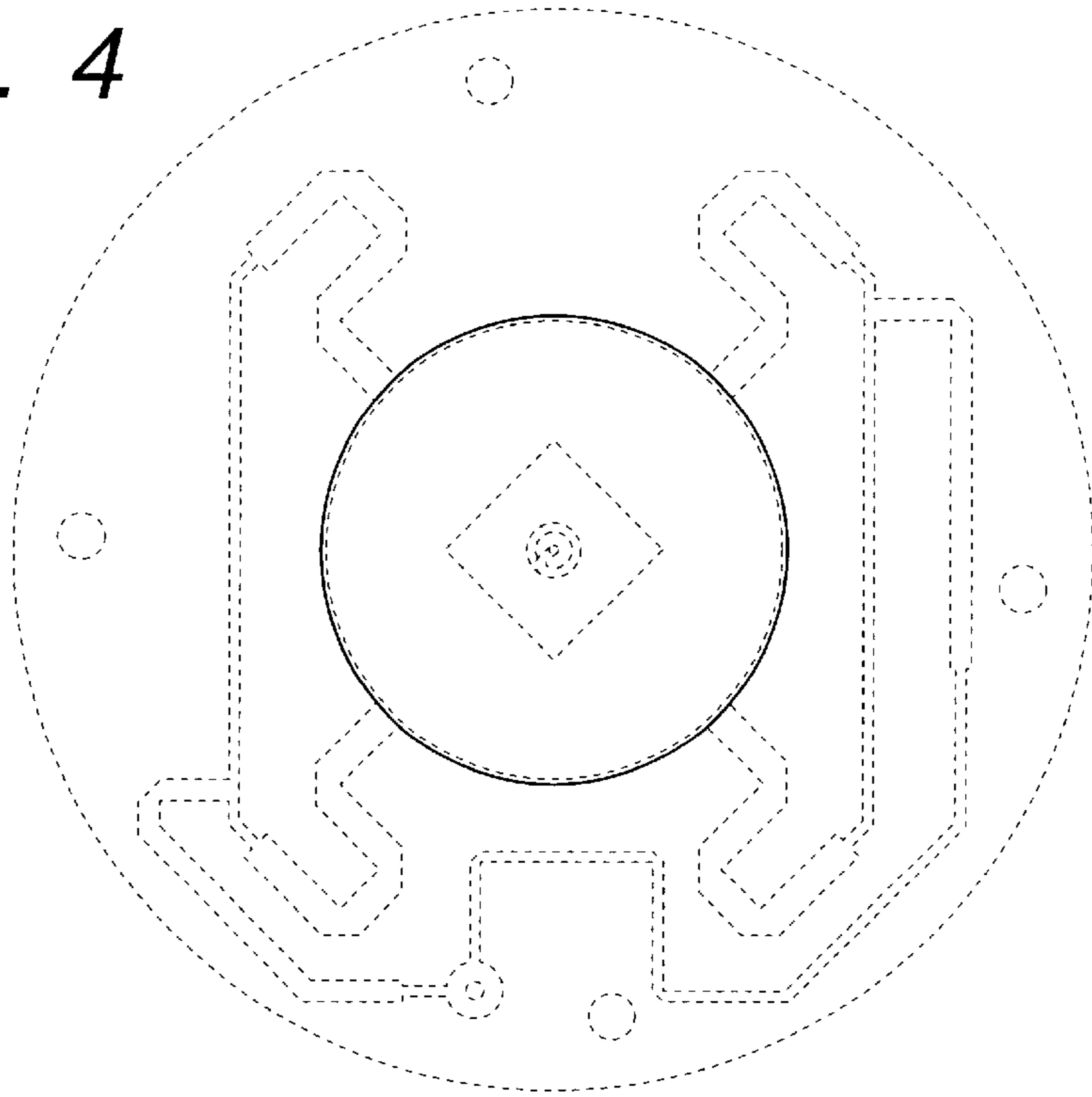


FIG. 5

