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(12) **United States Design Patent**
Kerstein et al.

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- (54) **LOUDSPEAKER DIAPHRAGM**
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- (**) Term: **14 Years**
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- (51) **LOC (10) Cl.** **14-01**
- (52) **U.S. Cl.**
USPC **D14/222**
- (58) **Field of Classification Search**
USPC D14/204, 210–216, 221, 222, 172;
181/143, 144, 147, 148, 150–153, 157,
181/198, 199; 381/300–303, 306, 332, 333,
381/336, 345, 361–364, 386–388
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D286,771 S 11/1986 Willy
- 4,965,837 A * 10/1990 Murayama et al. 381/186

- 5,418,337 A * 5/1995 Schreiber 181/171
- 5,455,396 A * 10/1995 Willard et al. 181/172
- D389,487 S 1/1998 Saraiva Lino Pires
- D556,738 S * 12/2007 Yao D14/216
- D568,300 S * 5/2008 Akaishi et al. D14/222
- D615,068 S 5/2010 Yuasa et al.
- D616,422 S 5/2010 Chen
- D626,945 S * 11/2010 Chen D14/222
- 8,230,966 B2 * 7/2012 Kajihara et al. 181/169
- 8,237,377 B2 * 8/2012 Hopper 315/294

* cited by examiner

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(57) **CLAIM**

The ornamental design for a loudspeaker diaphragm, as shown and described.

DESCRIPTION

FIG. 1 is a front elevation view of a loudspeaker diaphragm showing our new design;
 FIG. 2 is a left side elevation thereof, the right side elevation being a mirror image thereof;
 FIG. 3 is a top plan view thereof;
 FIG. 4 is a cross sectional view thereof, taken along line 4-4 of FIG. 3; and,
 FIG. 5 is an enlarged cross sectional view of the wavy part of the loudspeaker diaphragm.
 The broken lines indicate the unclaimed portions and form no part of the claimed design.

1 Claim, 5 Drawing Sheets

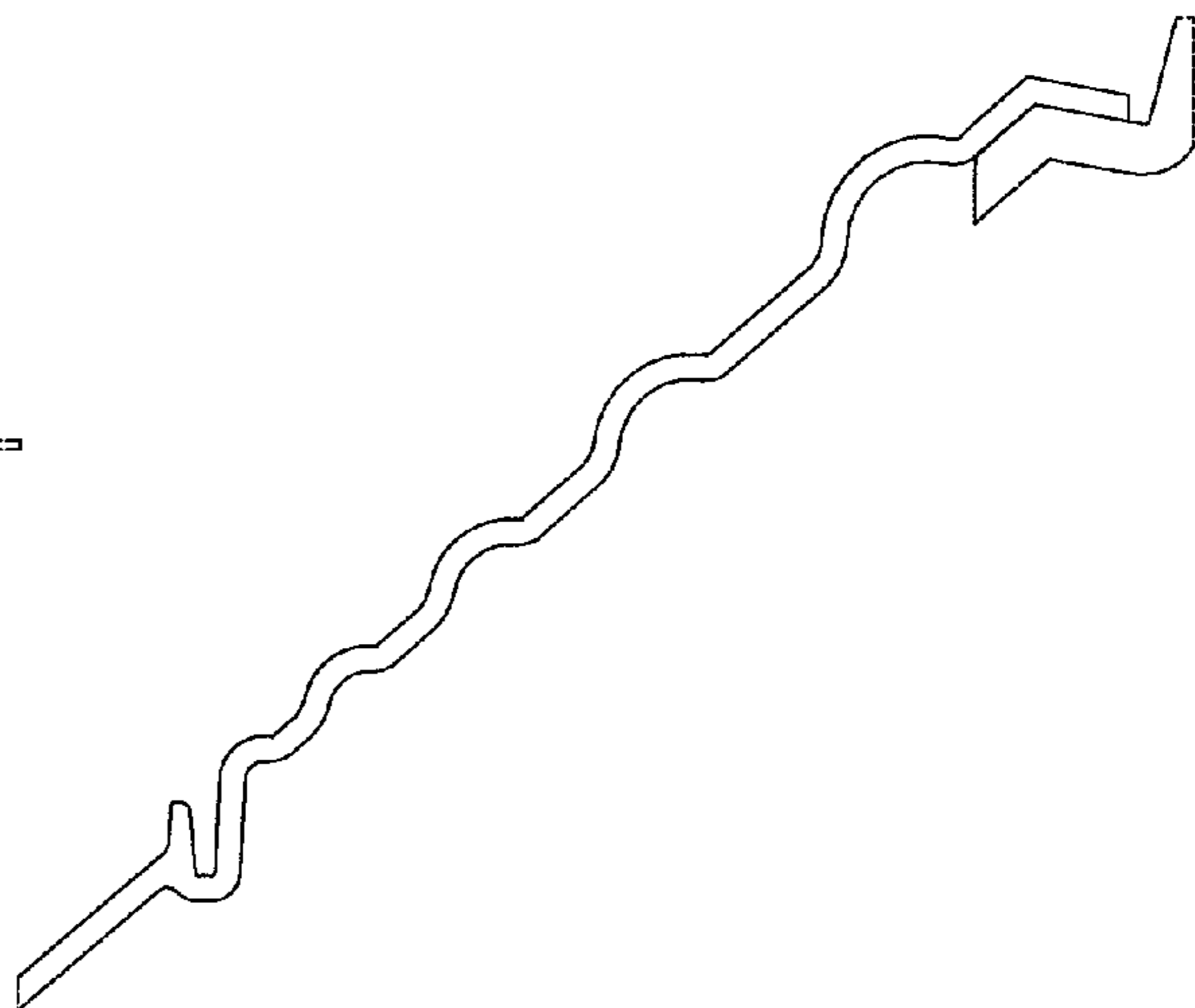
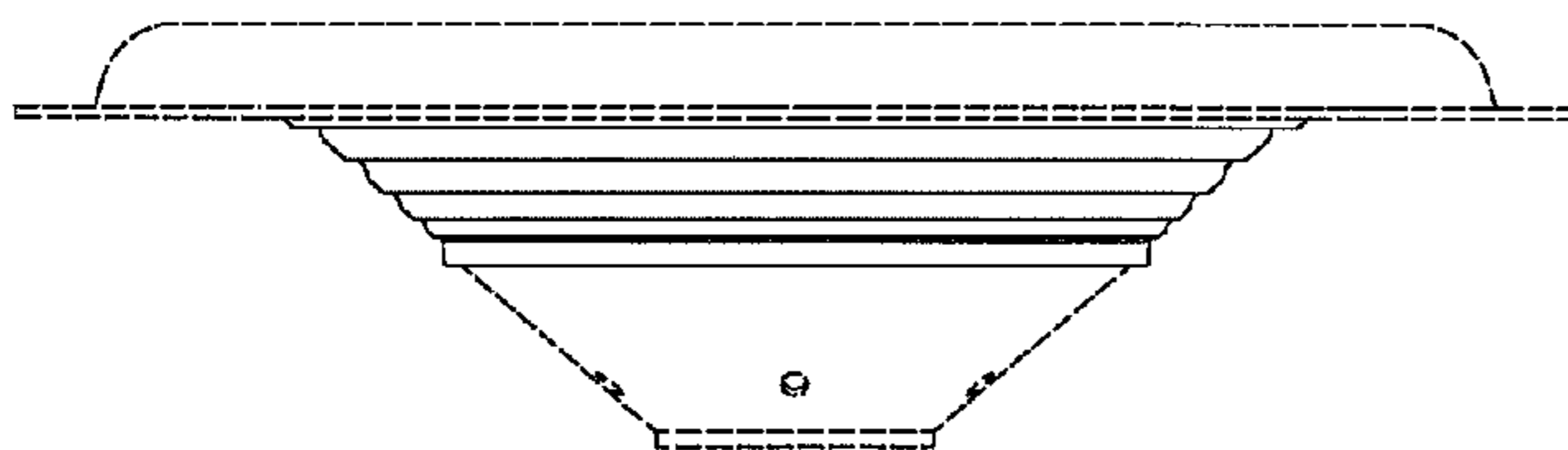


Fig. 1

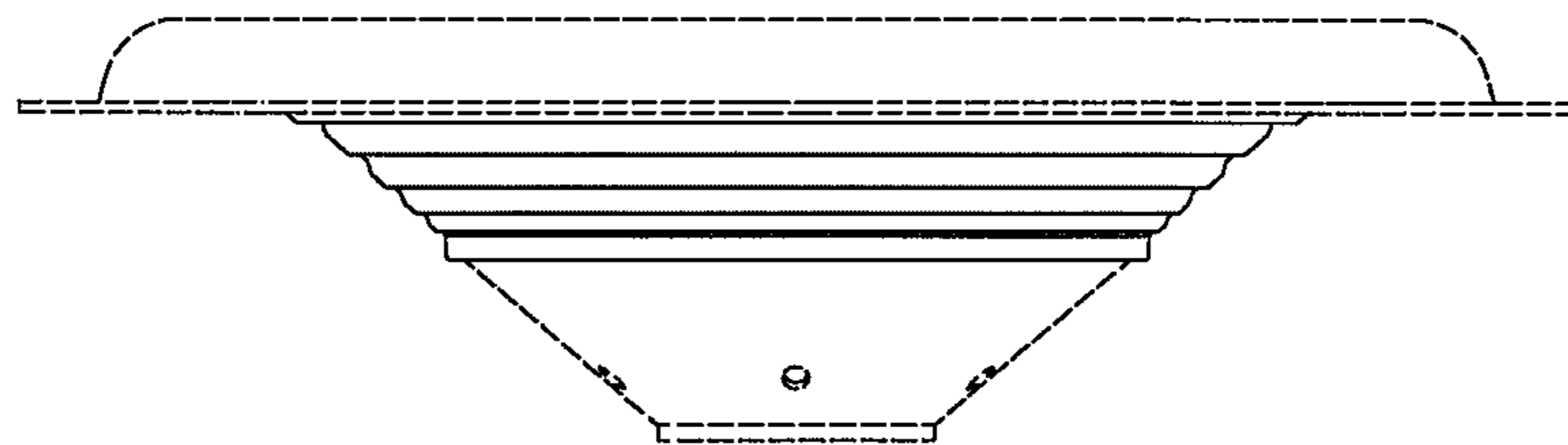


Fig. 2

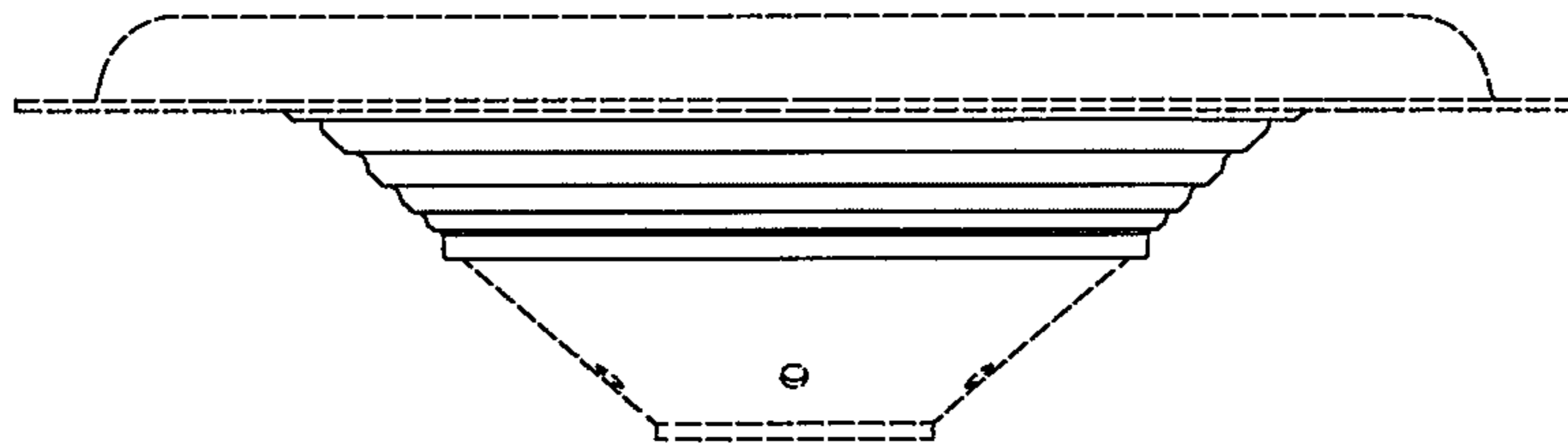


Fig. 3

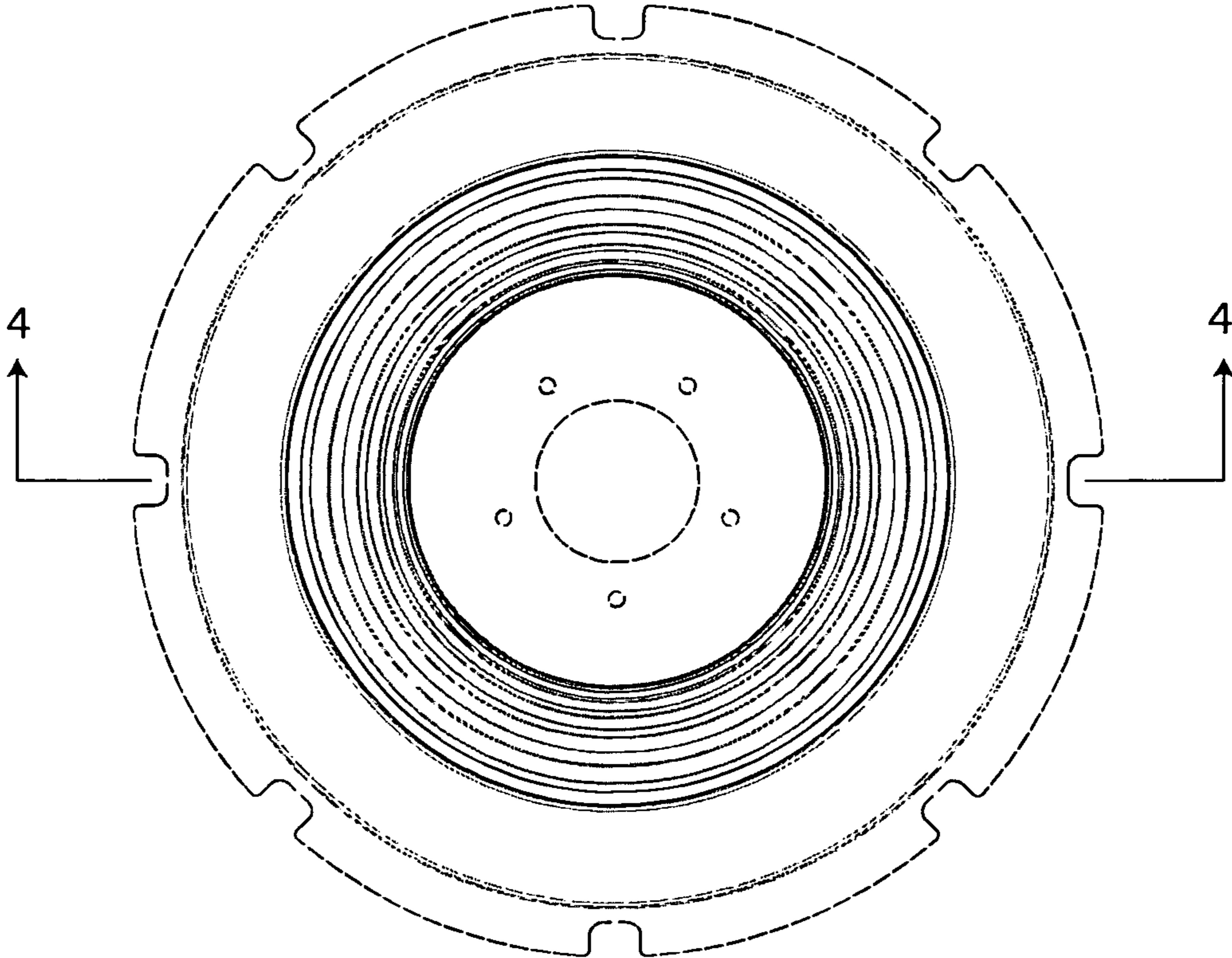


Fig. 4

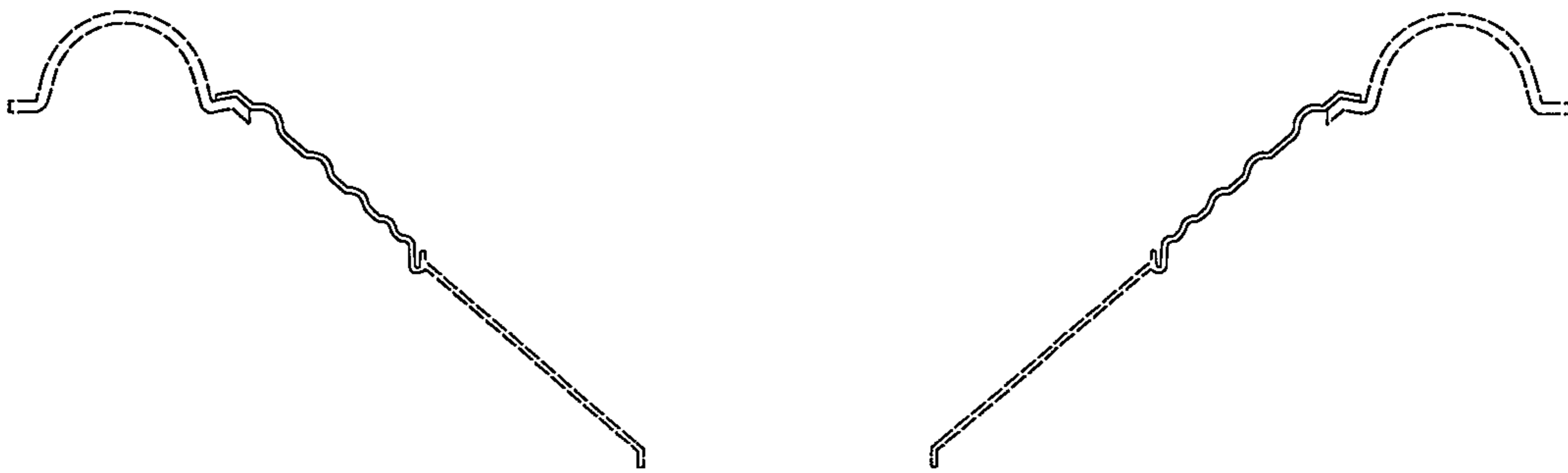


Fig. 5

