

US00D697117S

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

(10) **Patent No.:** **US D697,117 S**  
(45) **Date of Patent:** **\*\* Jan. 7, 2014**

(54) **OPHTHALMIC ROUGHING WHEEL**

- (75) Inventor: **Dennis R. Raffaelli**, Oxford, MI (US)
- (73) Assignee: **Inland Diamond Products Company**,  
Madison Heights, MI (US)
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/418,463**
- (22) Filed: **Apr. 17, 2012**

**Related U.S. Application Data**

- (60) Division of application No. 29/372,709, filed on Dec. 30, 2010, now Pat. No. Des. 660,331, which is a division of application No. 12/317,764, filed on Dec. 29, 2008, which is a continuation of application No. 11/731,667, filed on Mar. 30, 2007, now abandoned, which is a continuation of application No. 10/829,630, filed on Apr. 22, 2004, now abandoned.
- (51) **LOC (10) Cl.** ..... **15-09**
- (52) **U.S. Cl.**  
USPC ..... **D16/126**
- (58) **Field of Classification Search**  
USPC ..... D8/70, 90, 98; D15/124, 126, 127, 132,  
D15/138, 139; 83/589, 663, 676;  
451/548-551  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,049,874 A 8/1933 Sherk  
3,711,999 A 1/1973 Held

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE 19538841 2/1997  
EP 1518642 A2 3/2005

(Continued)

**OTHER PUBLICATIONS**

Krey Optical Brochure, Retrieved on Sep. 18, 2003 from www.krey-optical.com/materials.htm, 4 Pages.

(Continued)

*Primary Examiner* — Patricia Palasik  
(74) *Attorney, Agent, or Firm* — Warn Partners, P.C.

(57) **CLAIM**

The ornamental design for an ophthalmic roughing wheel, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of an ophthalmic roughing wheel, in accordance with a first embodiment of the present invention;

FIG. 2 is a front elevation view of the ophthalmic roughing wheel depicted in FIG. 1, in accordance with the present invention;

FIG. 3 is a top plan view of the ophthalmic roughing wheel depicted in FIGS. 1-2, in accordance with the present invention;

FIG. 4 is an enlarged detailed side view of the ophthalmic roughing wheel depicted in FIGS. 1-3 as shown in circle 4, in accordance with the present invention;

FIG. 5 is a perspective view of an ophthalmic roughing wheel, in accordance with a second embodiment of the present invention;

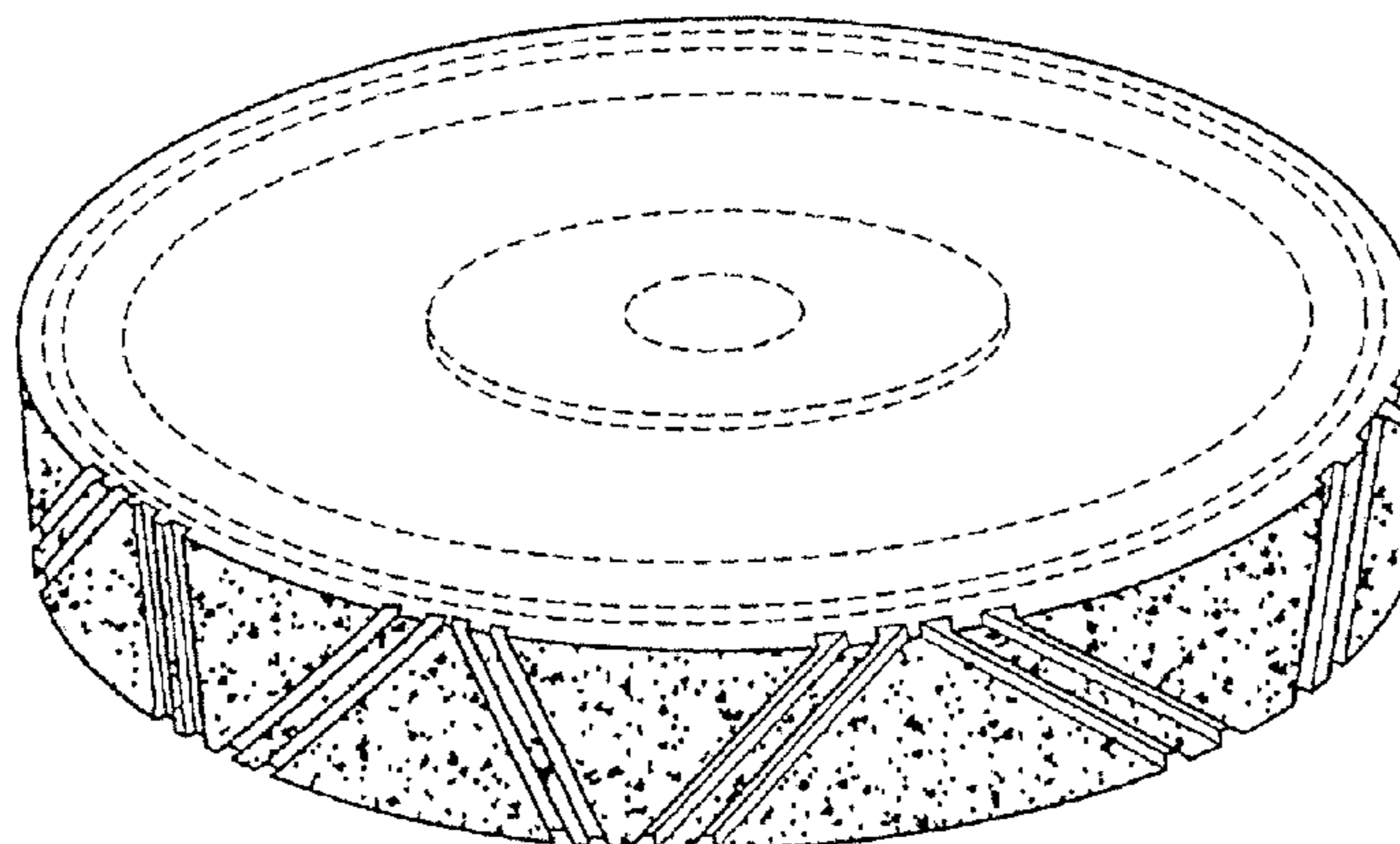
FIG. 6 is a front elevation view of the ophthalmic roughing wheel depicted in FIG. 5, in accordance with the present invention;

FIG. 7 is a top plan view of the ophthalmic roughing wheel depicted in FIGS. 5 and 6, in accordance with the present invention; and,

FIG. 8 is an enlarged detailed side view of the ophthalmic roughing wheel depicted in FIGS. 5-7 as shown in circle 8, in accordance with the present invention.

The broken lines in the figures showing other portions of an ophthalmic roughing wheel are for illustrative purposes only and form no part of the claimed ornamental design.

**1 Claim, 3 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

3,841,034 A 10/1974 Held  
3,916,579 A 11/1975 Waller et al.  
D377,362 S \* 1/1997 Mihailovic ..... D15/126  
5,611,724 A 3/1997 deGraaff  
5,655,958 A 8/1997 Lupi  
5,846,125 A 12/1998 Robichon  
5,951,381 A 9/1999 Videocoq et al.  
6,074,278 A 6/2000 Wu et al.  
6,840,851 B1 1/2005 Raffaelli

FOREIGN PATENT DOCUMENTS

EP 1518647 A2 3/2005  
FR 2413182 7/1979

JP 57003561 U 1/1982  
JP 52121889 A 10/1997  
JP 2000354969 12/2000  
JP 2001246560 A 9/2001  
JP 2002318813 A 10/2002  
JP 2003175464 A 6/2003  
WO 0226432 A1 4/2002

OTHER PUBLICATIONS

PPG Optical Monomers and Coatings Brochure, Retrieved on Sep. 18, 2003 from [www.ppg.com/chm\\_optical/trivex\\_ppg.htm](http://www.ppg.com/chm_optical/trivex_ppg.htm), 3 pages.

European Search Report for Application No. 04255851.0-2302 Dated Dec. 1, 2005, 4 pages.

\* cited by examiner

FIG - 1

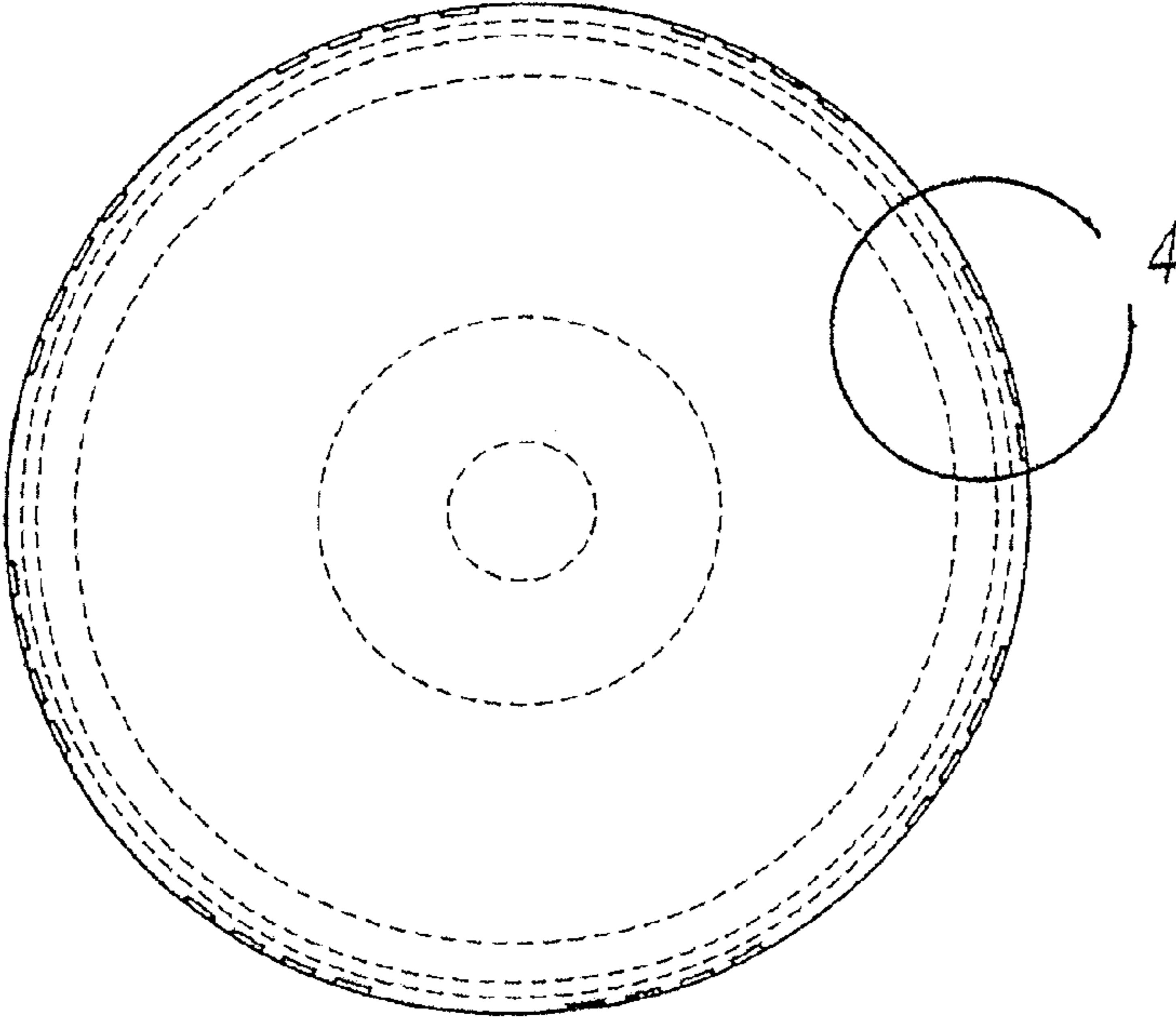
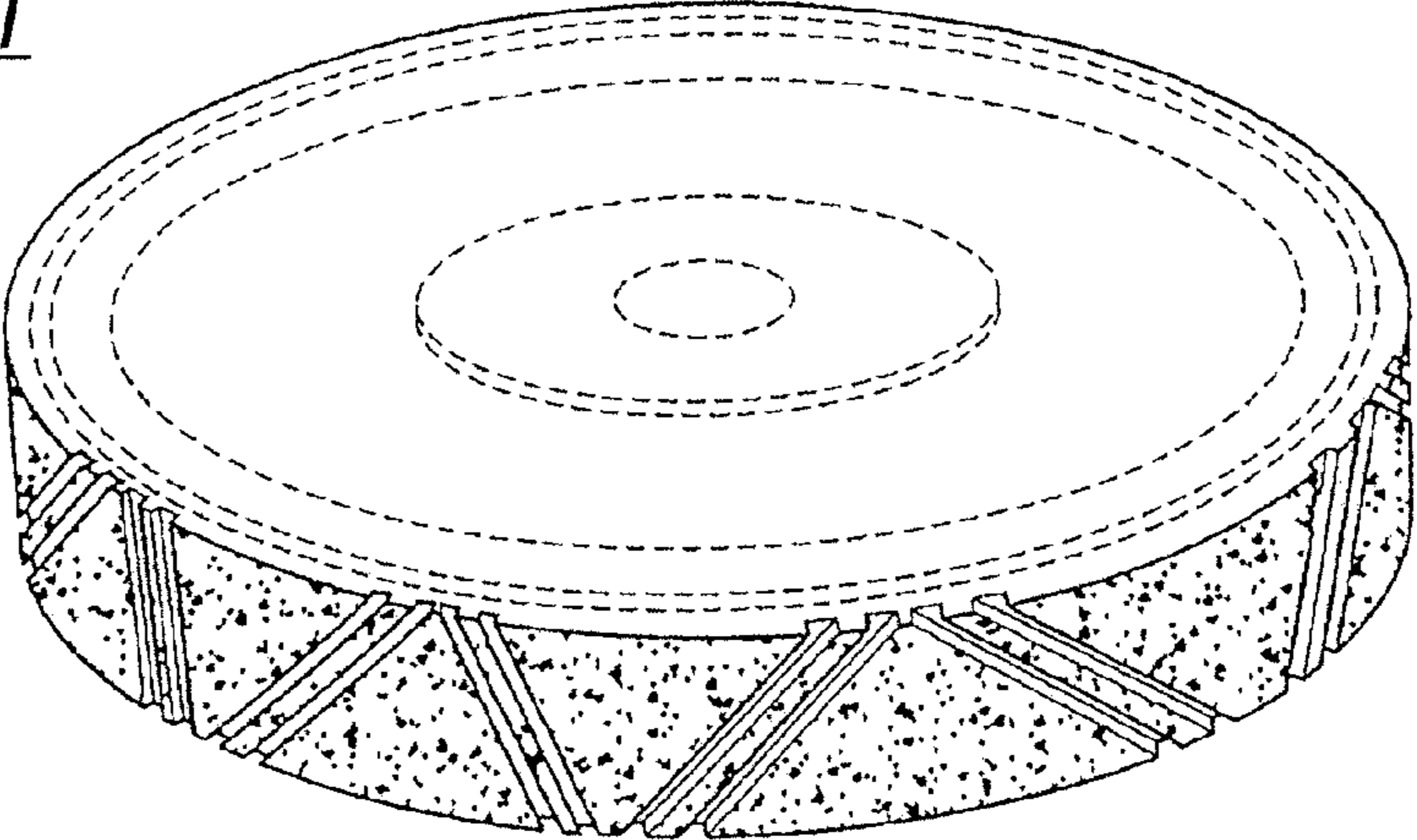


FIG - 2



FIG - 3

FIG - 4

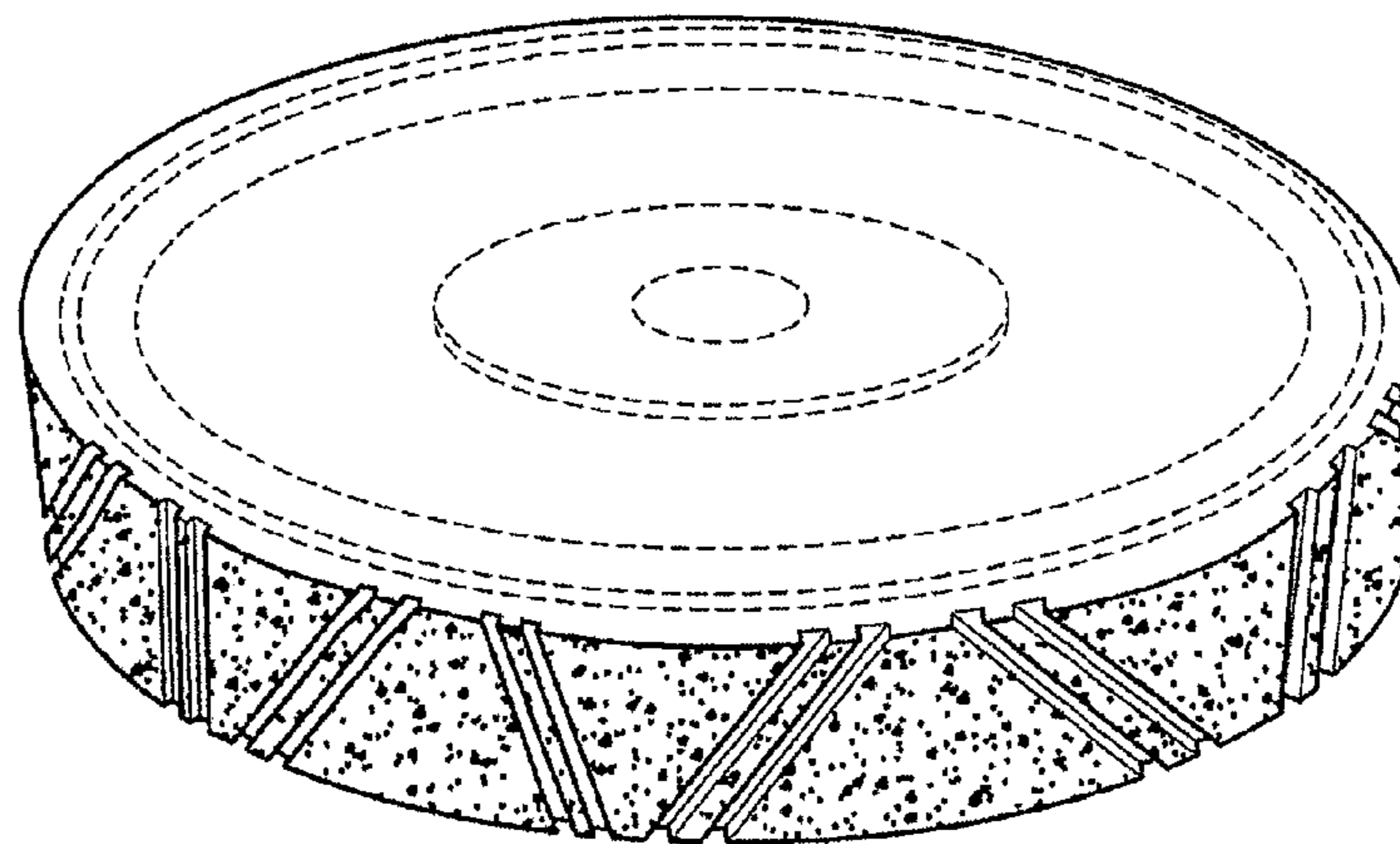
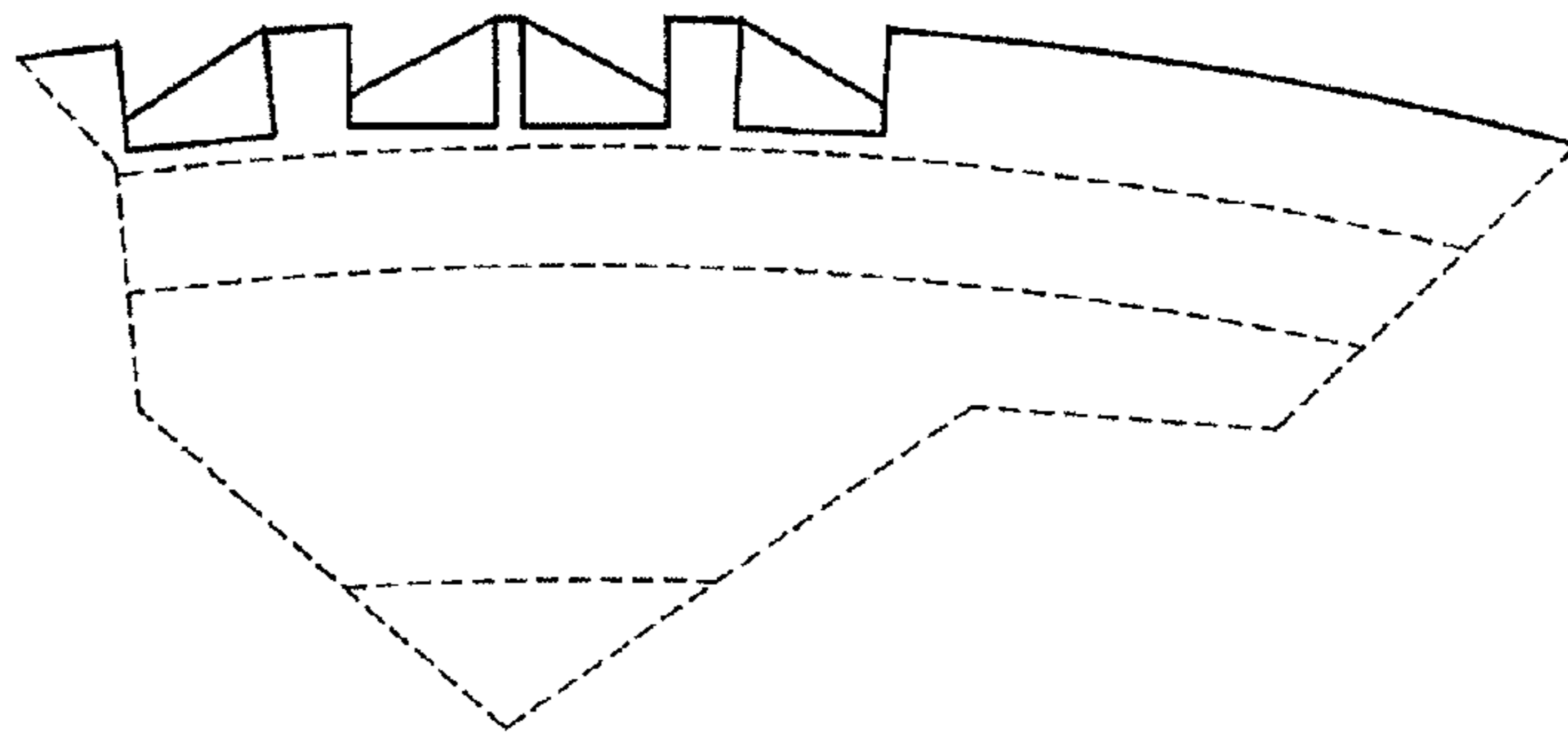


FIG - 5



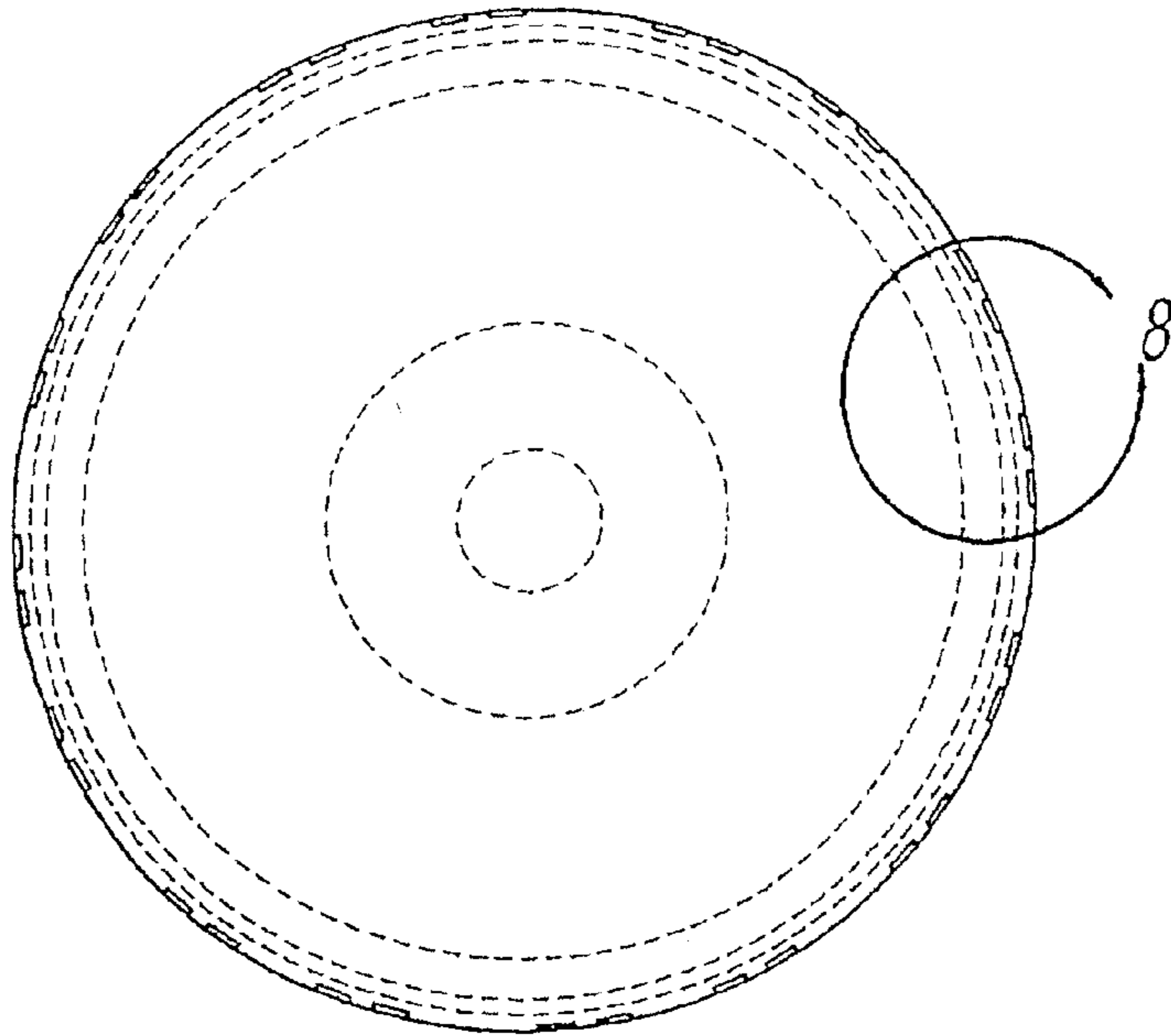


FIG - 6

FIG - 7

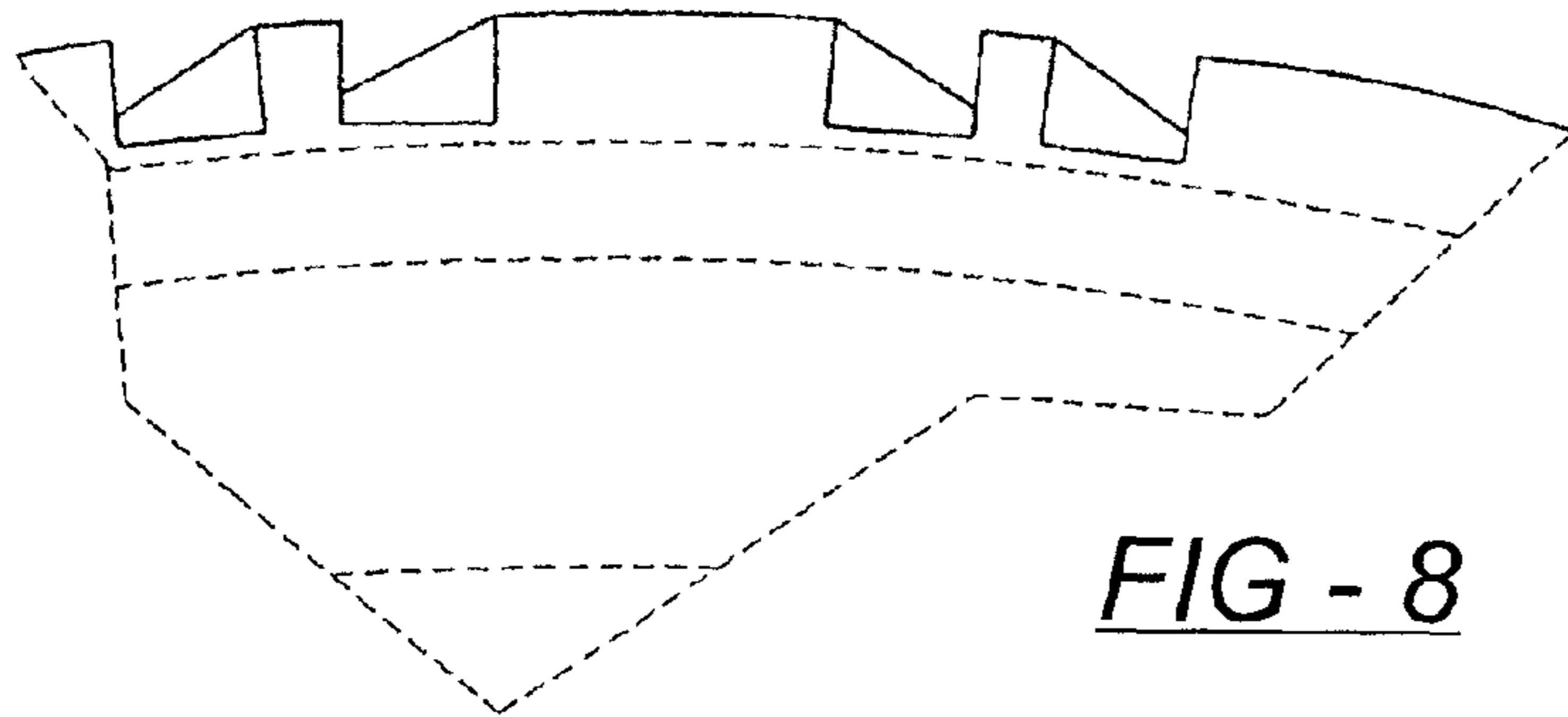


FIG - 8