



US00D859767S

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

(10) **Patent No.:** **US D859,767 S**

(45) **Date of Patent:** **** Sep. 10, 2019**

(54) **FLEXIBLE ABRASIVE PAD**

(71) Applicant: **Inland Diamond Products Company,**
Madison Heights, MI (US)

(72) Inventors: **Ronald C. Wiand,** Troy, MI (US);
Kevin Emery, White Lake, MI (US)

(73) Assignee: **Inland Diamond Products Company,**
Madison Heights, MI (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/609,980**

(22) Filed: **Jul. 7, 2017**

(51) **LOC (12) Cl.** **07-05**

(52) **U.S. Cl.**
USPC **D32/40**

(58) **Field of Classification Search**
USPC D32/39-46, 49-52; D34/4; D6/598;
D21/600

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,409,163 A * 10/1946 Stever B24D 9/08
451/511
2,991,596 A * 7/1961 Walters B24B 23/04
132/73.6

(Continued)

FOREIGN PATENT DOCUMENTS

CN 303028422 * 12/2014
JP D1171763 * 4/2003

OTHER PUBLICATIONS

Diamond Floor Polishing Pad, 3 inch and 4 inch Diamond Floor
Pol., website 2018, http://www.dlstonetools.com/3-inch-and-4-inch-diamond-floor-polishing-pad_p19.html, site visited May 25, 2018.*

(Continued)

Primary Examiner — John Windmuller

Assistant Examiner — John R Yeh

(74) *Attorney, Agent, or Firm* — Warn Partners, P.C.

(57) **CLAIM**

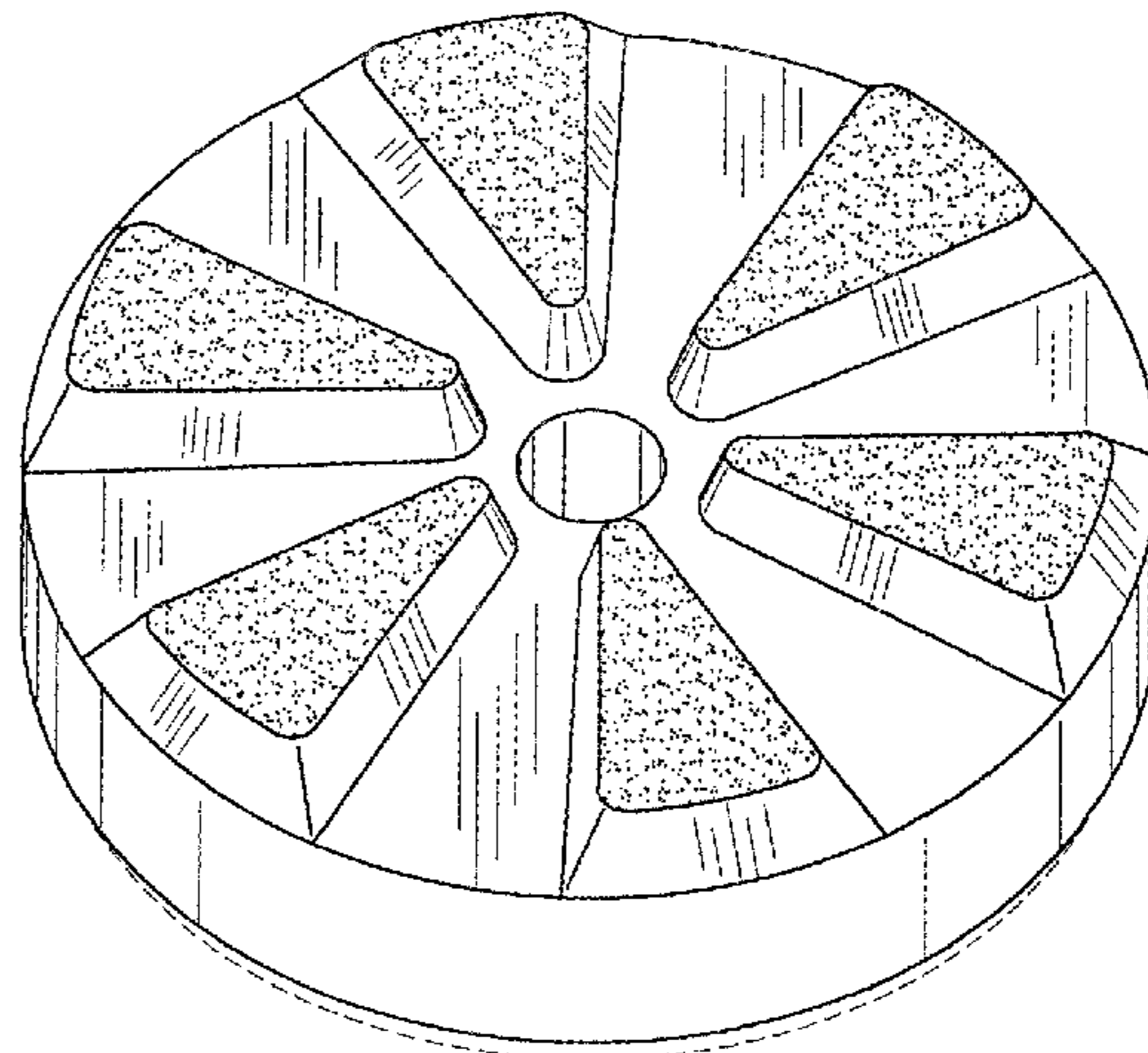
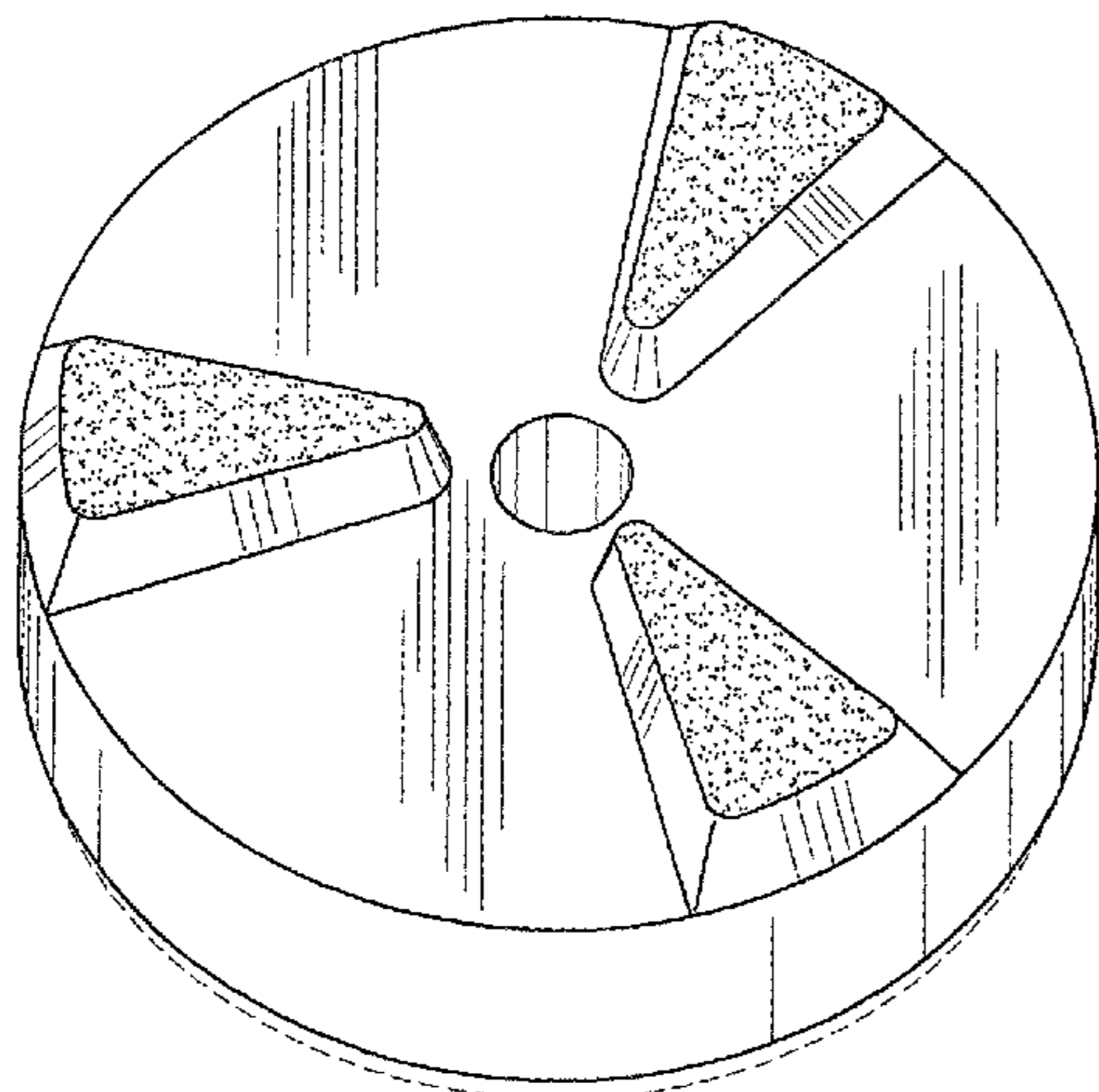
The ornamental design for flexible abrasive pad, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of our design for a flexible abrasive pad;
FIG. 2 is a top view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a left side view thereof;
FIG. 6 is a right side view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is a perspective view of a second embodiment of our design for a flexible abrasive pad;
FIG. 9 is a top view thereof;
FIG. 10 is a front view thereof;
FIG. 11 is a rear view thereof;
FIG. 12 is a left side view thereof;
FIG. 13 is a right side view thereof;
FIG. 14 is a bottom view thereof;
FIG. 15 is a perspective view of a third embodiment of our design for a flexible abrasive pad;
FIG. 16 is a top view thereof;
FIG. 17 is a front view thereof;
FIG. 18 is a rear view thereof;
FIG. 19 is a left side view thereof;
FIG. 20 is a right side view thereof; and,
FIG. 21 is a bottom view thereof.

The broken lines in the figures showing other portions of an abrasive wheel with closed profiles in cutting surface are for illustrative purposes only and form no part of the claimed ornamental design.

1 Claim, 6 Drawing Sheets



(58) **Field of Classification Search**

CPC . A47K 7/02; A61M 1/00; A47L 13/00; A47L
13/10; B32B 5/18; B24D 11/00; B24D
3/00; B24D 3/34

See application file for complete search history.

7,533,848 B2 * 5/2009 Miura G11B 23/037
242/348
D716,640 S * 11/2014 Martinson D8/356
D787,143 S * 5/2017 Ishibashi D32/40
D803,650 S * 11/2017 Umbrell D8/70
D803,651 S * 11/2017 Umbrell D8/70
2005/0252093 A1 * 11/2005 Degarie A01C 3/028
52/3
2013/0344785 A1 * 12/2013 Weder B24D 3/002
451/529
2015/0105006 A1 * 4/2015 Beaucage B24D 5/12
451/541
2015/0190902 A1 * 7/2015 Woo B24D 3/20
451/59
2017/0066099 A1 * 3/2017 Nakamura B24B 37/245
2018/0104794 A1 * 4/2018 Pierednik B24D 11/02
2018/0111882 A1 * 4/2018 Rateick, Jr. C04B 37/001

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,337,659 A * 7/1982 Ragle G11B 23/28
73/865.9
4,726,534 A * 2/1988 Chenoweth B65H 75/22
242/578.2
D351,153 S * 10/1994 Kim D14/484
D363,930 S * 11/1995 Bailey D14/484
D370,908 S * 6/1996 Weisburn D14/484
5,524,850 A * 6/1996 Liao B65H 75/22
242/608.5
D532,945 S * 11/2006 Charmoille D32/25
7,223,165 B2 * 5/2007 Wuensch B24B 23/00
451/490

OTHER PUBLICATIONS

Inland Diamnd 2011 catalog, p. 45, <https://inlanddiamond.com/wp-content/uploads/2014/09/Catalog.pdf>, site visisted May 25, 2018.*

* cited by examiner

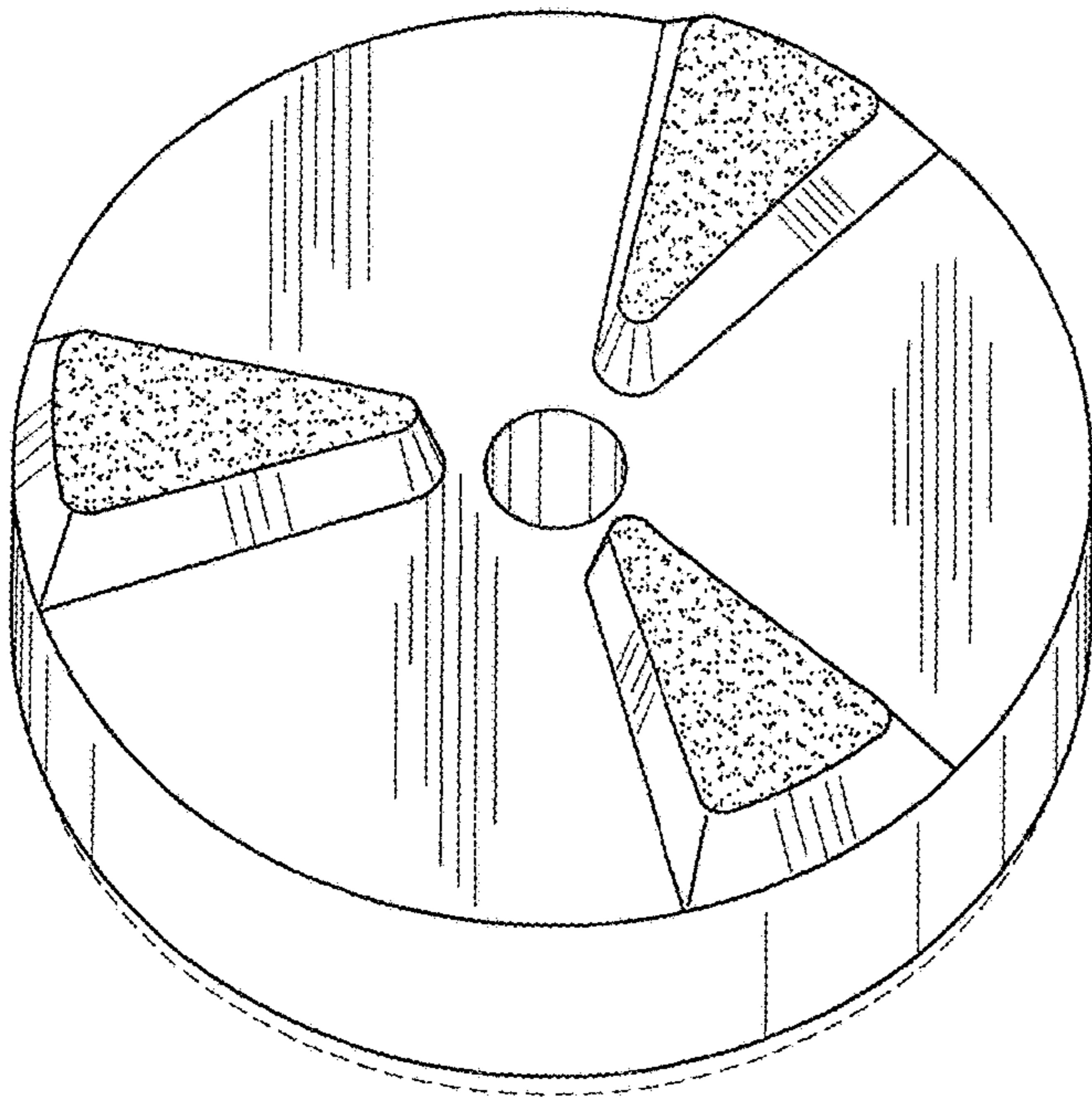


FIG - 1

FIG - 2

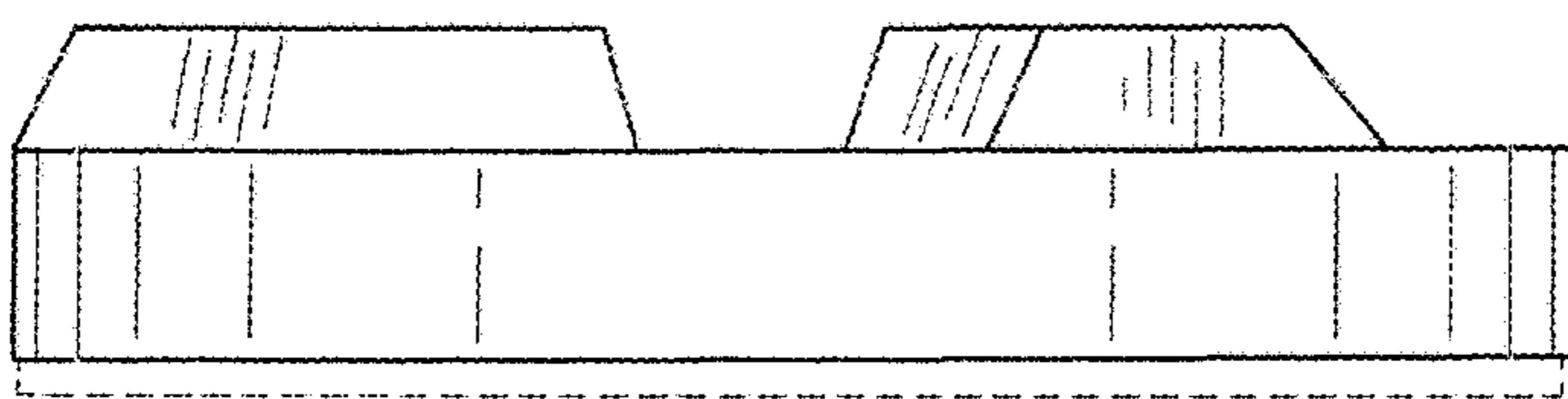
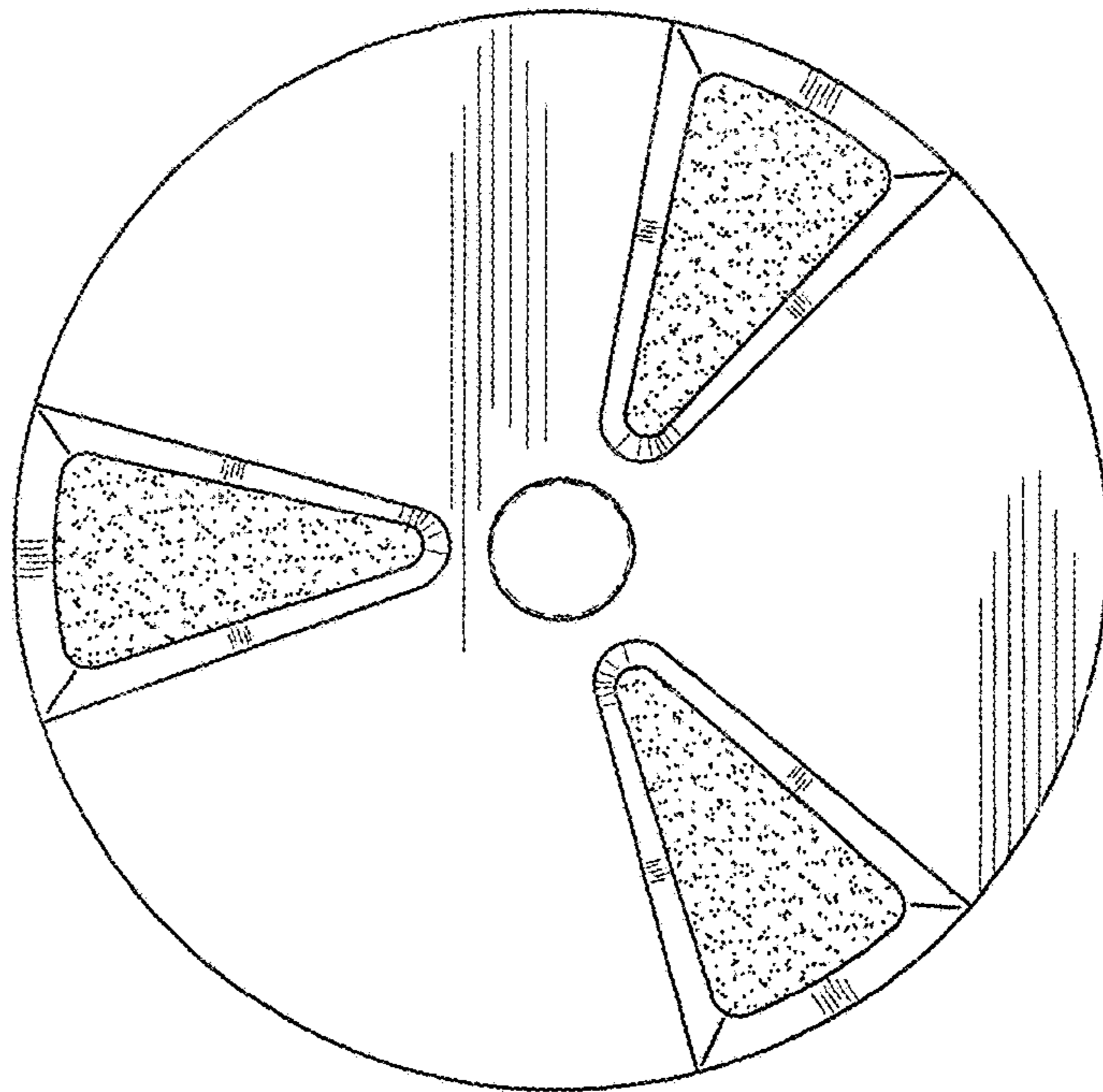


FIG - 3

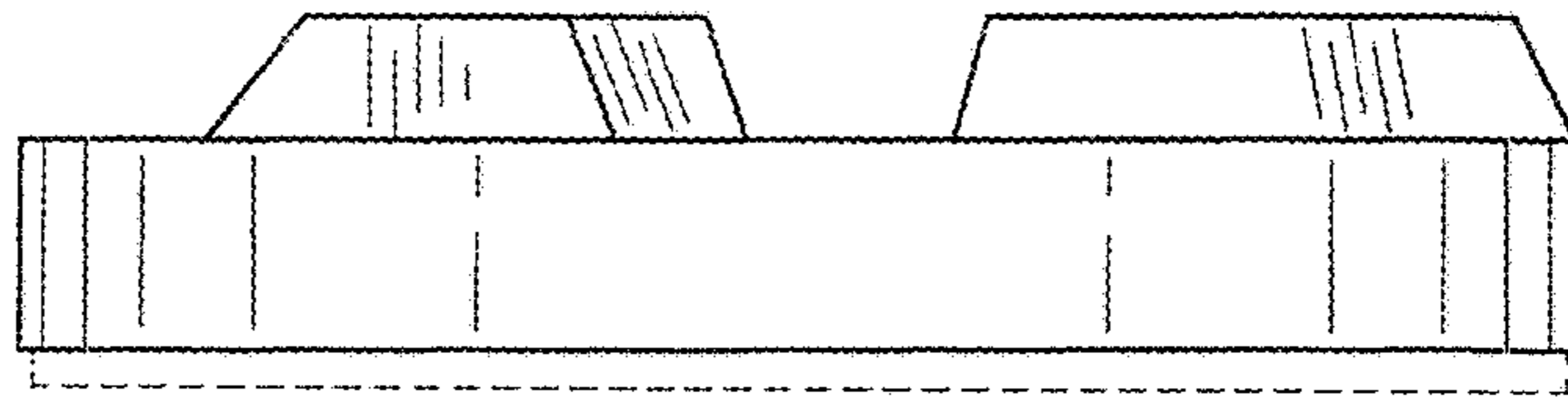


FIG - 4

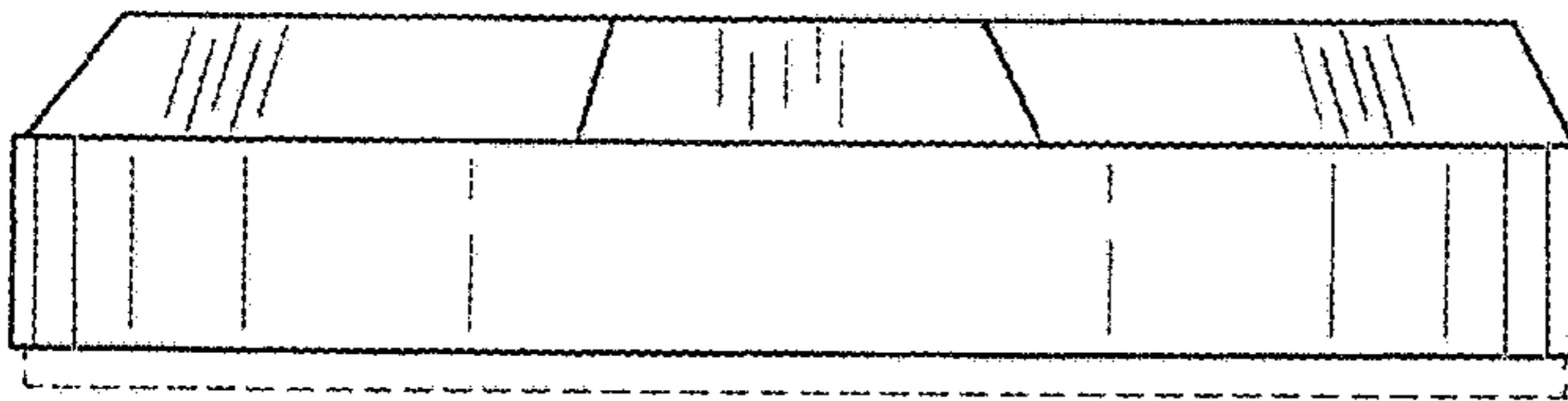


FIG - 5

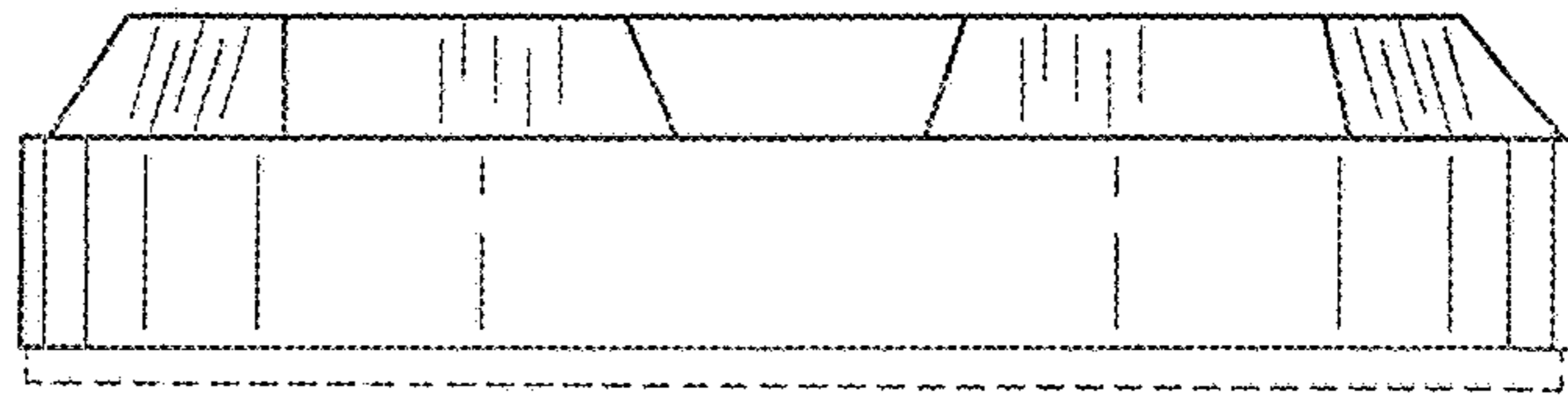


FIG - 6

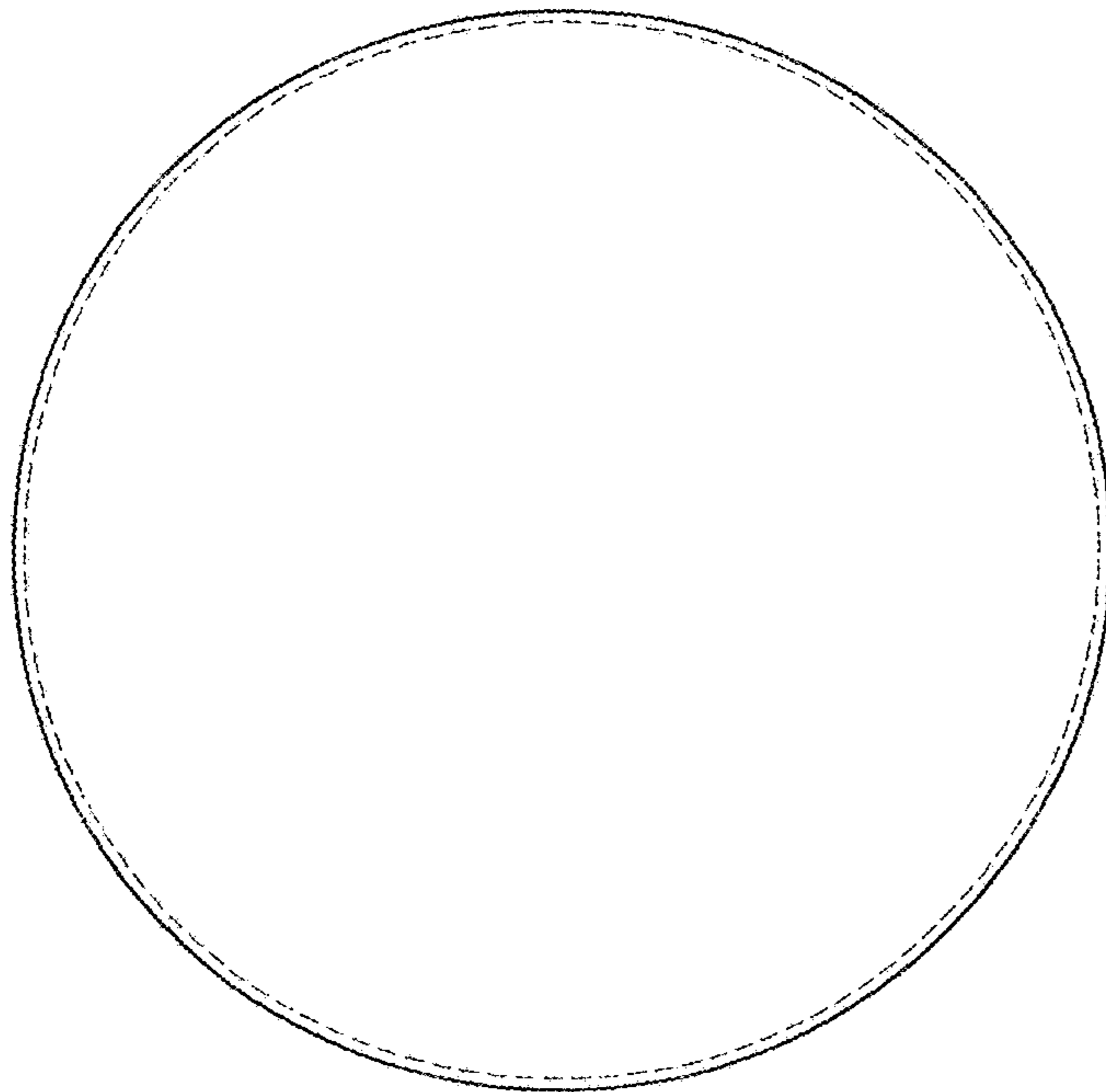


FIG - 7

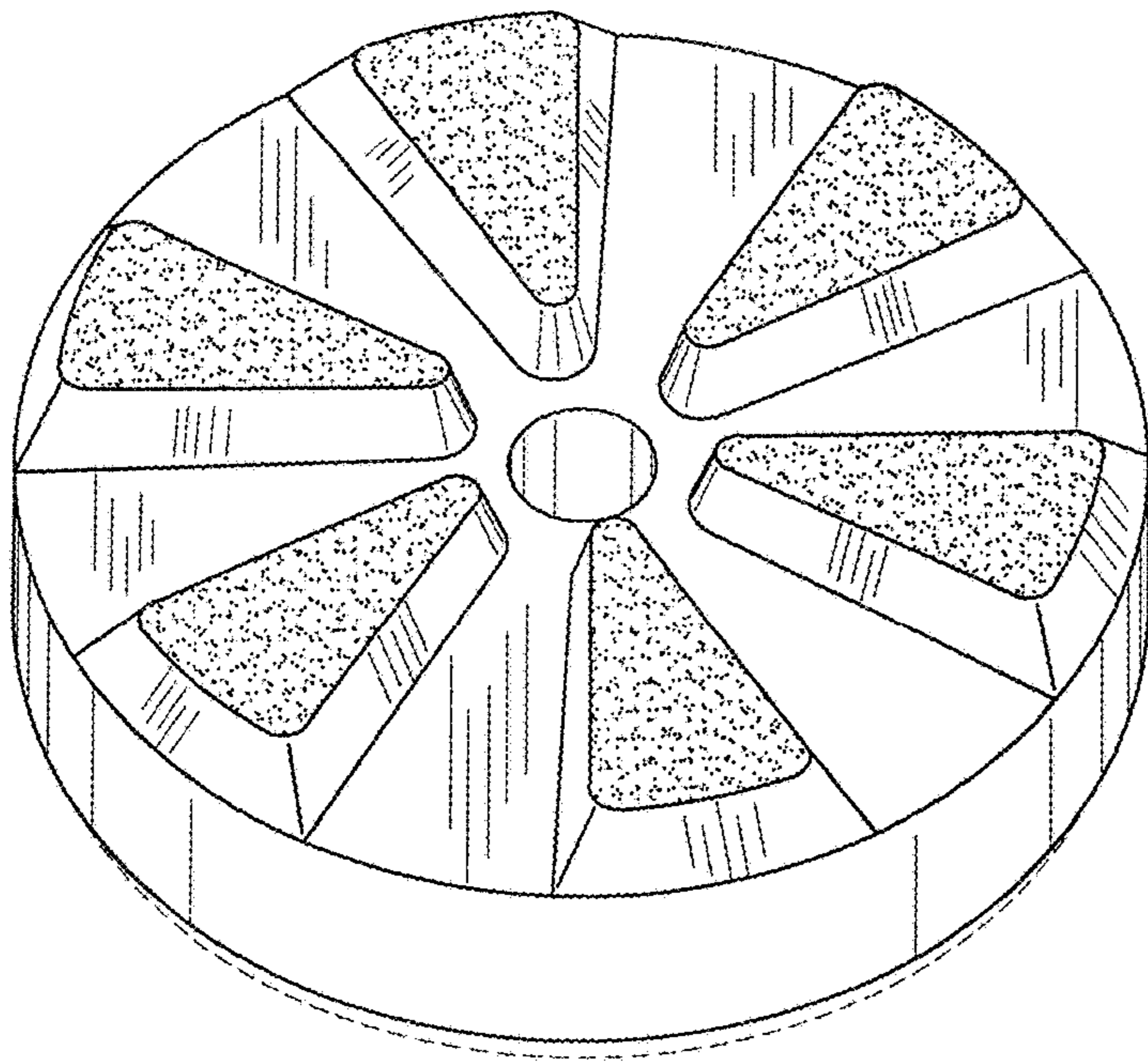


FIG - 8

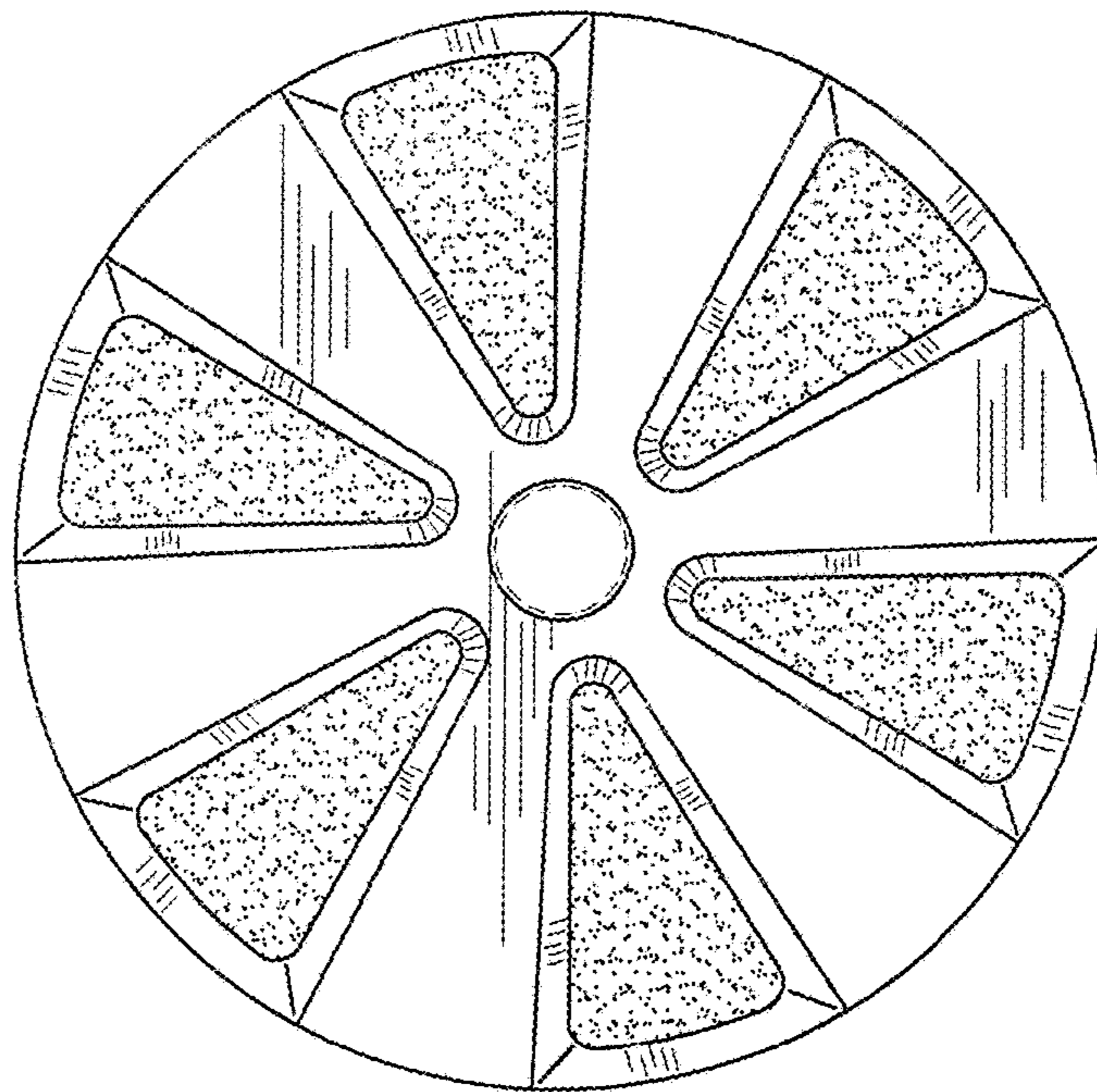


FIG - 9

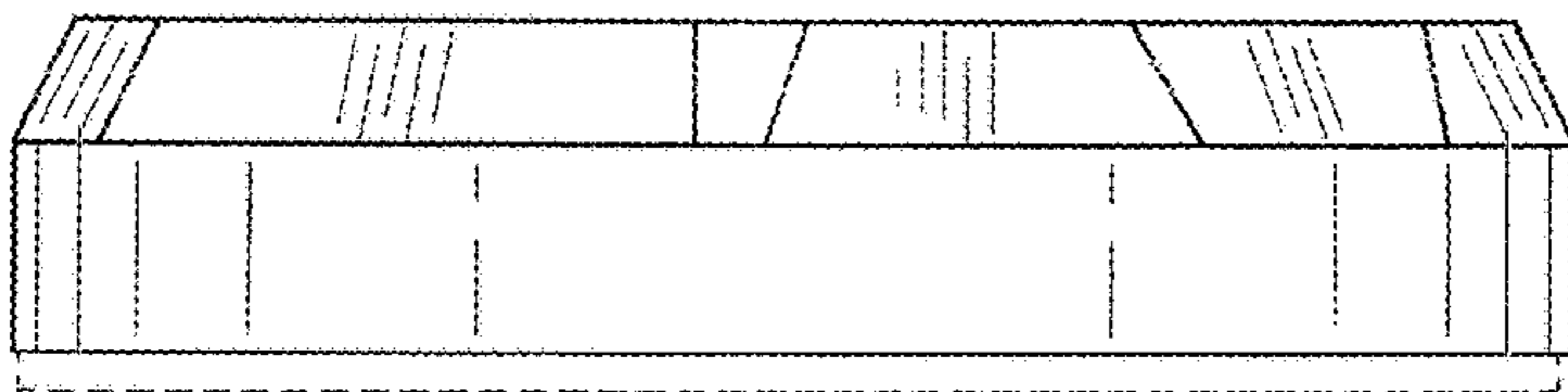


FIG - 10

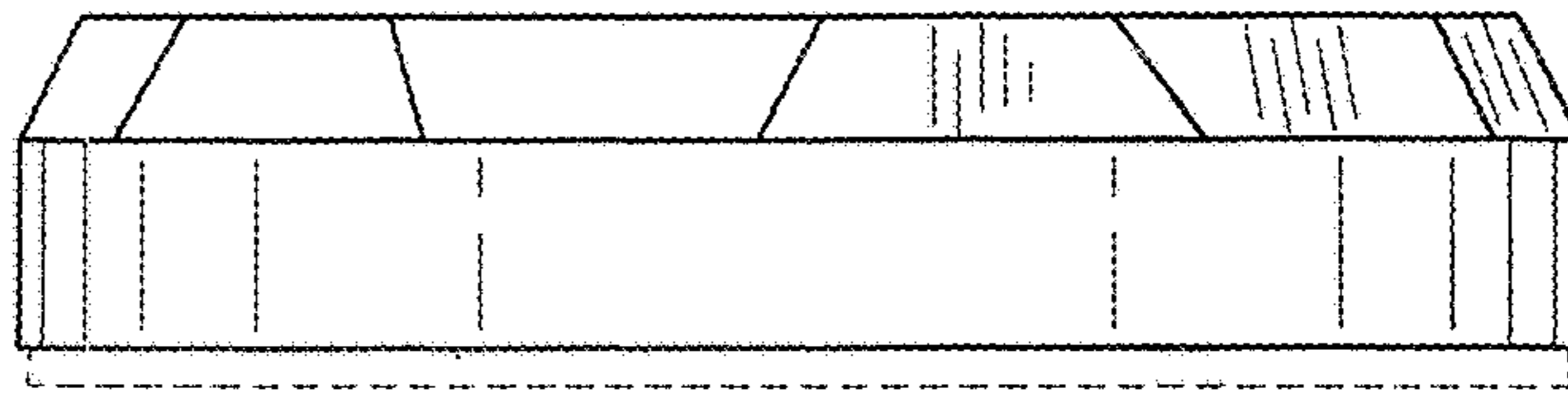


FIG - 11

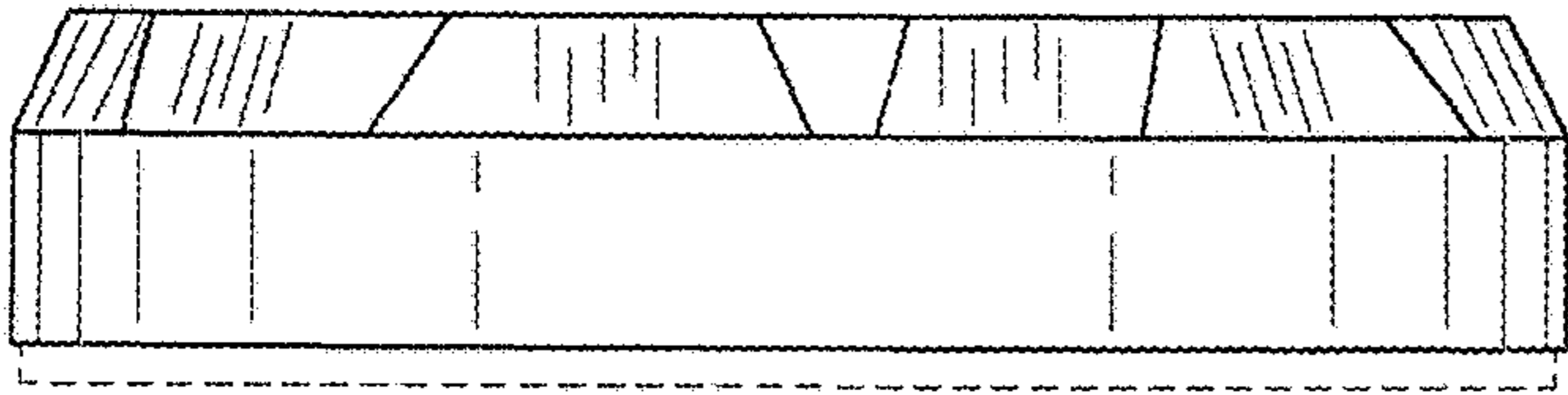


FIG - 12

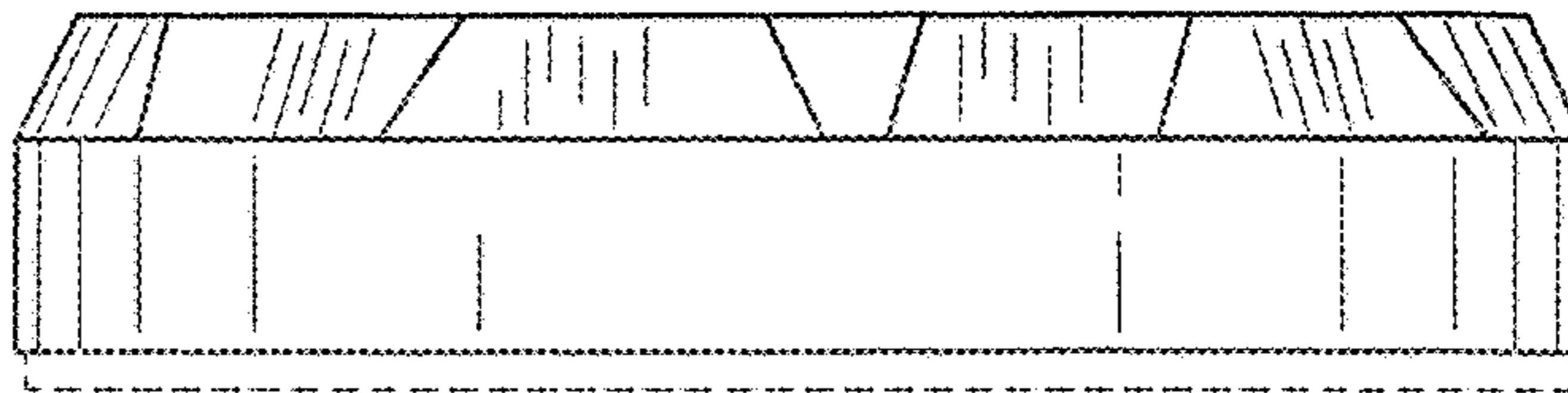


FIG - 13

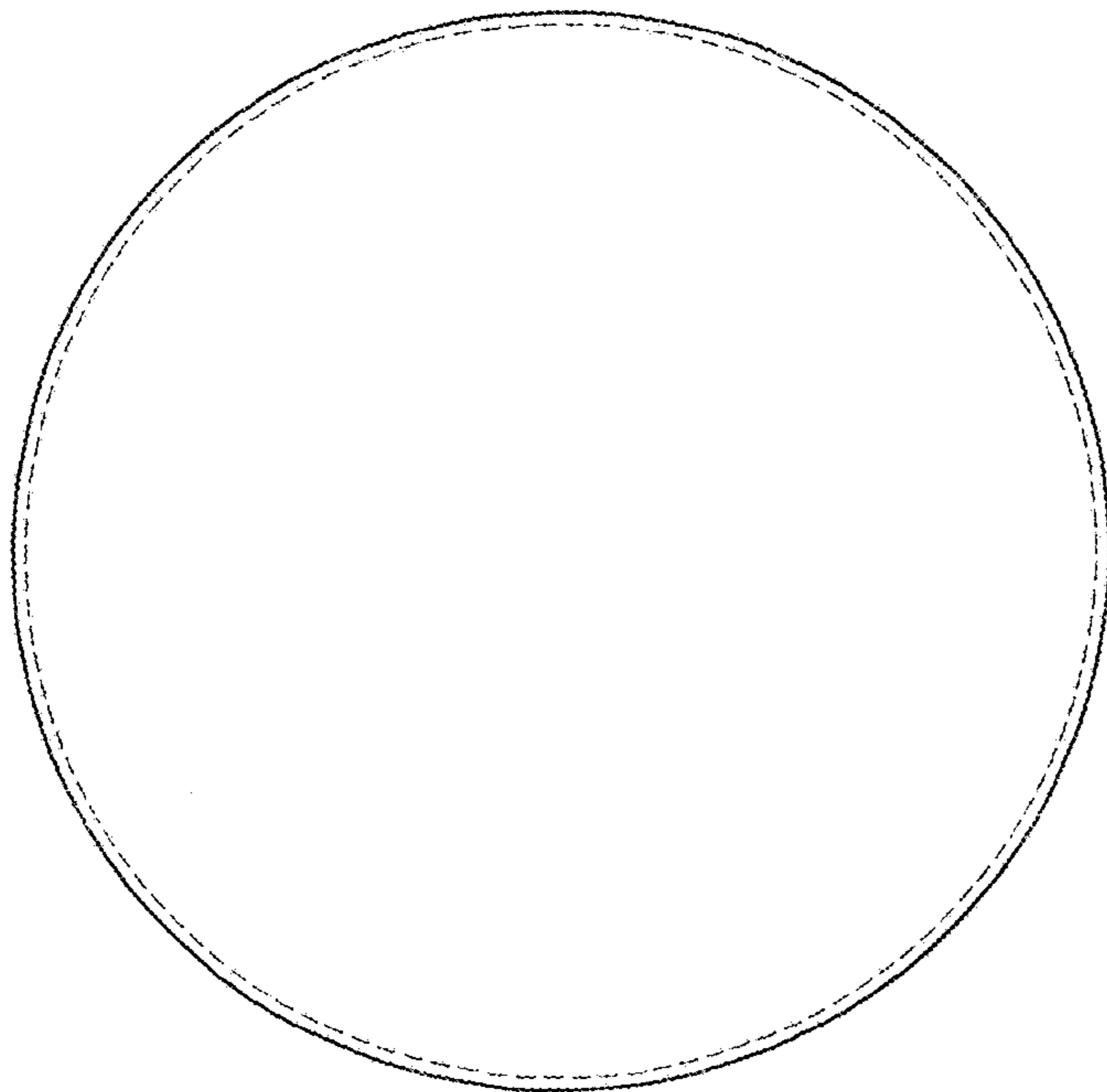


FIG - 14

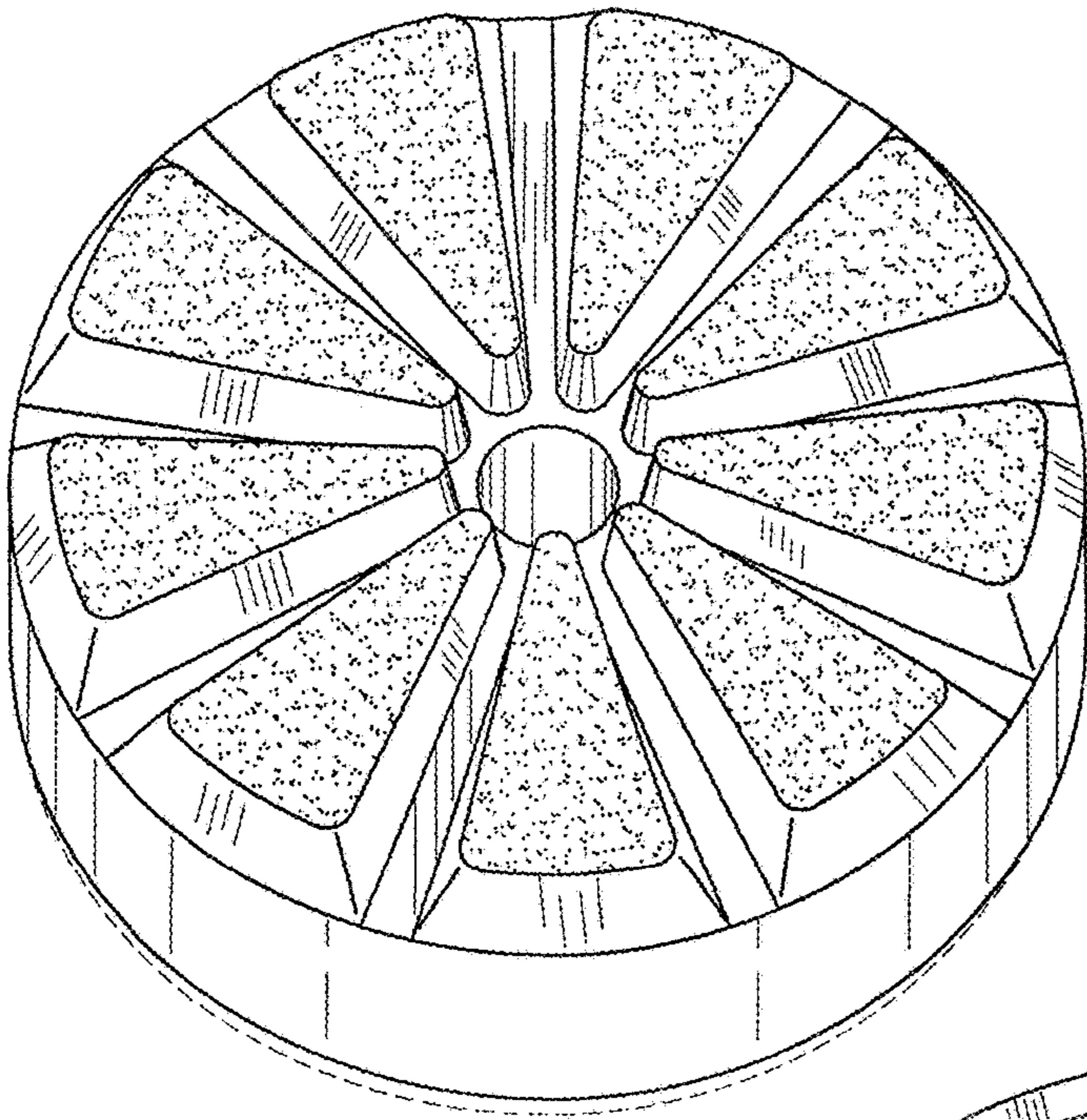


FIG - 15

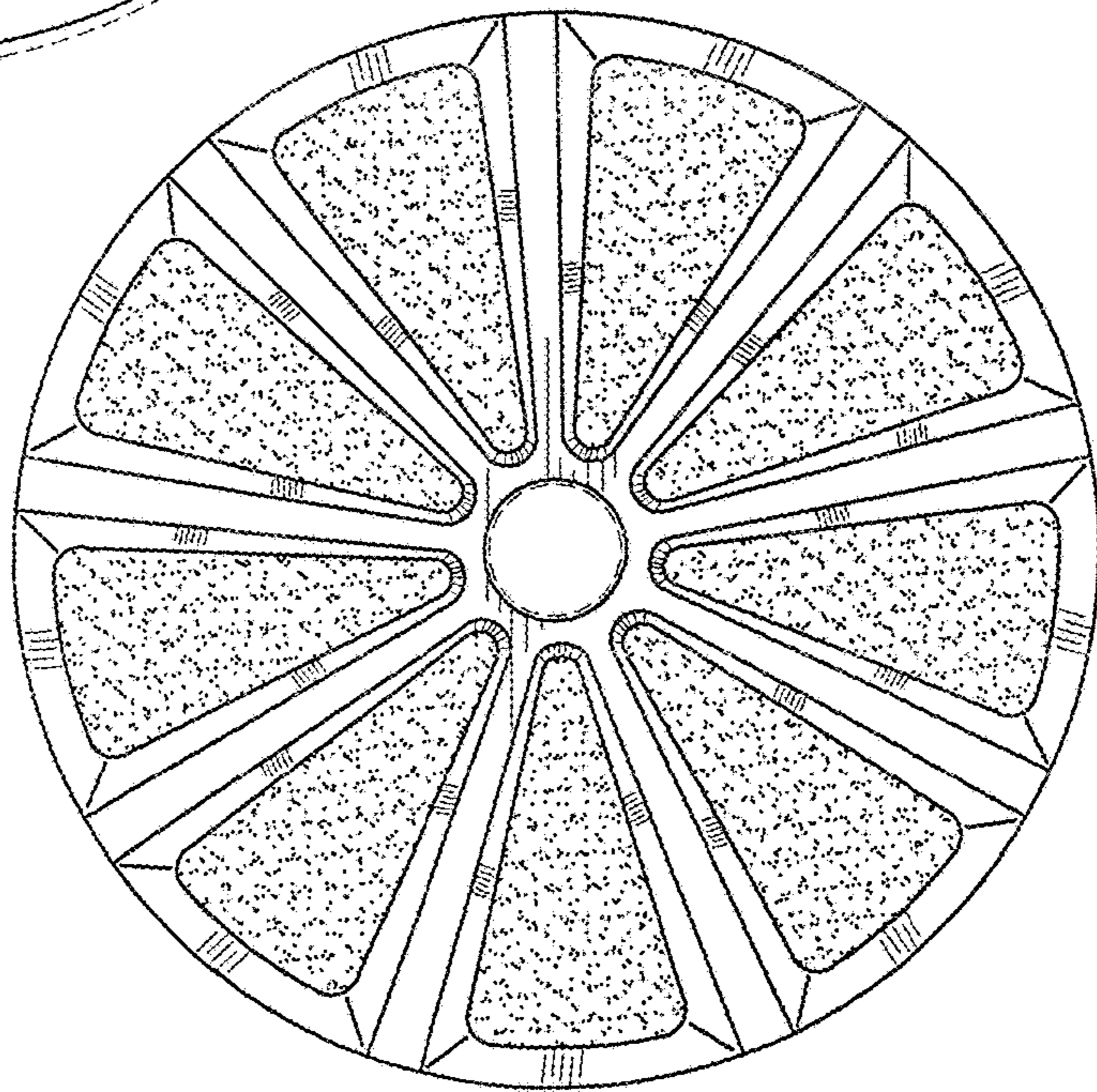


FIG - 16

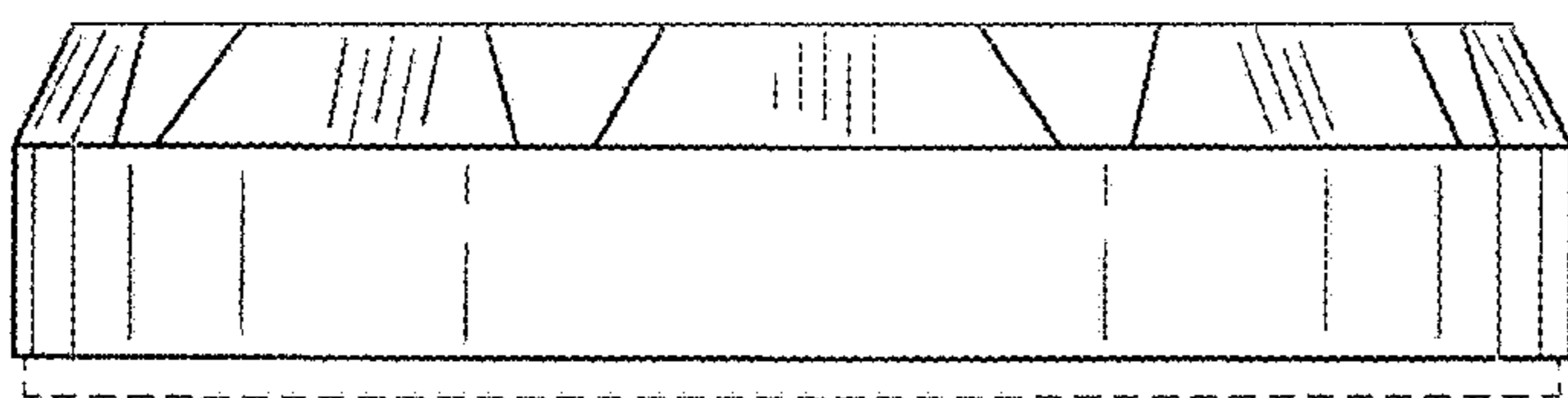


FIG - 17

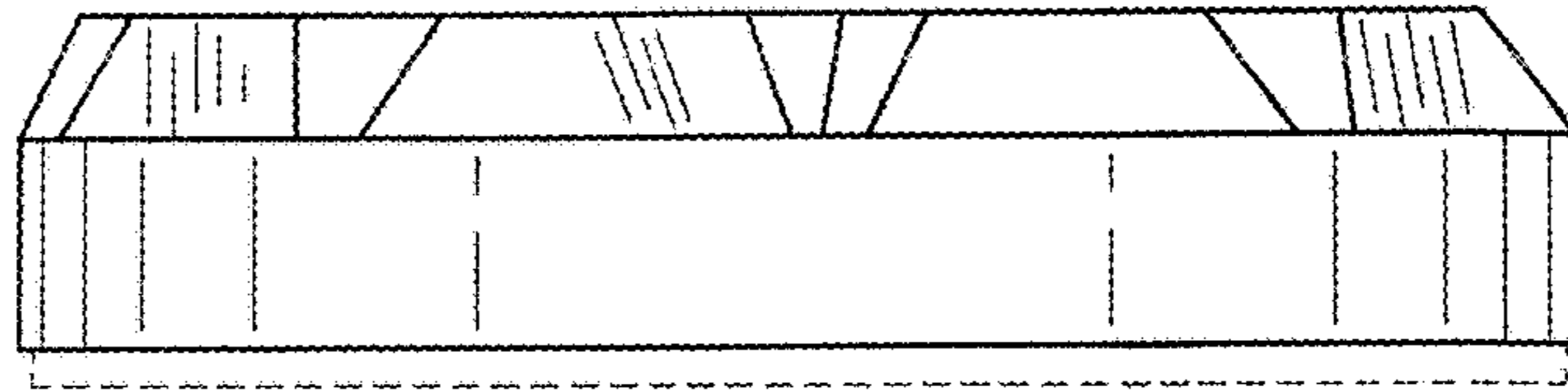


FIG - 18

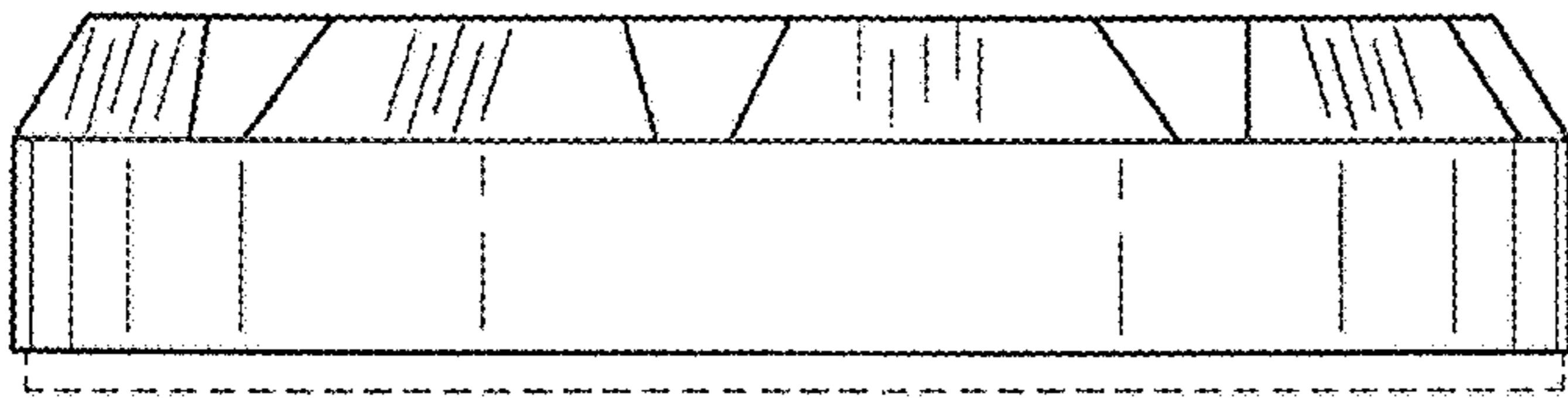


FIG - 19

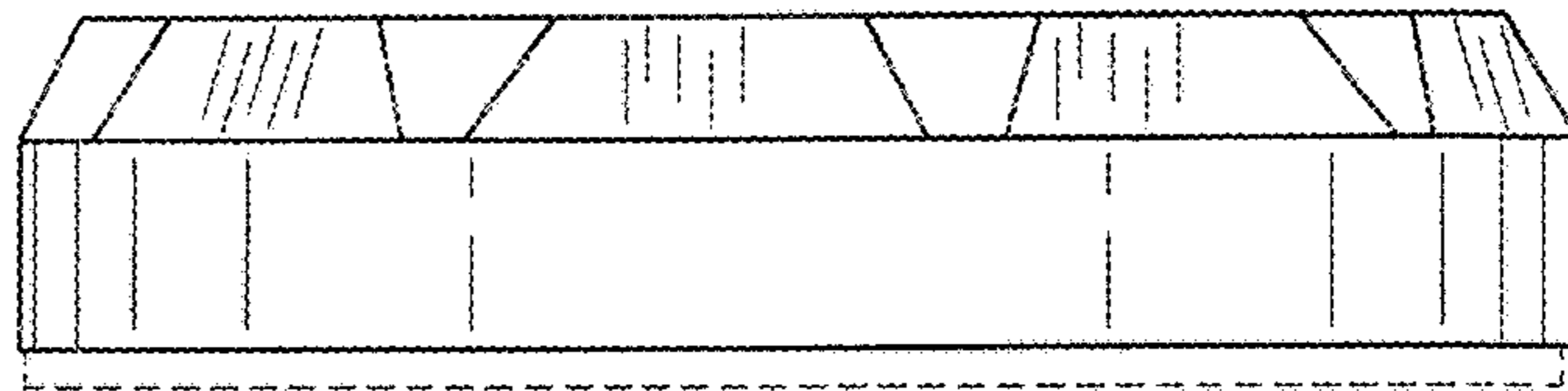


FIG - 20

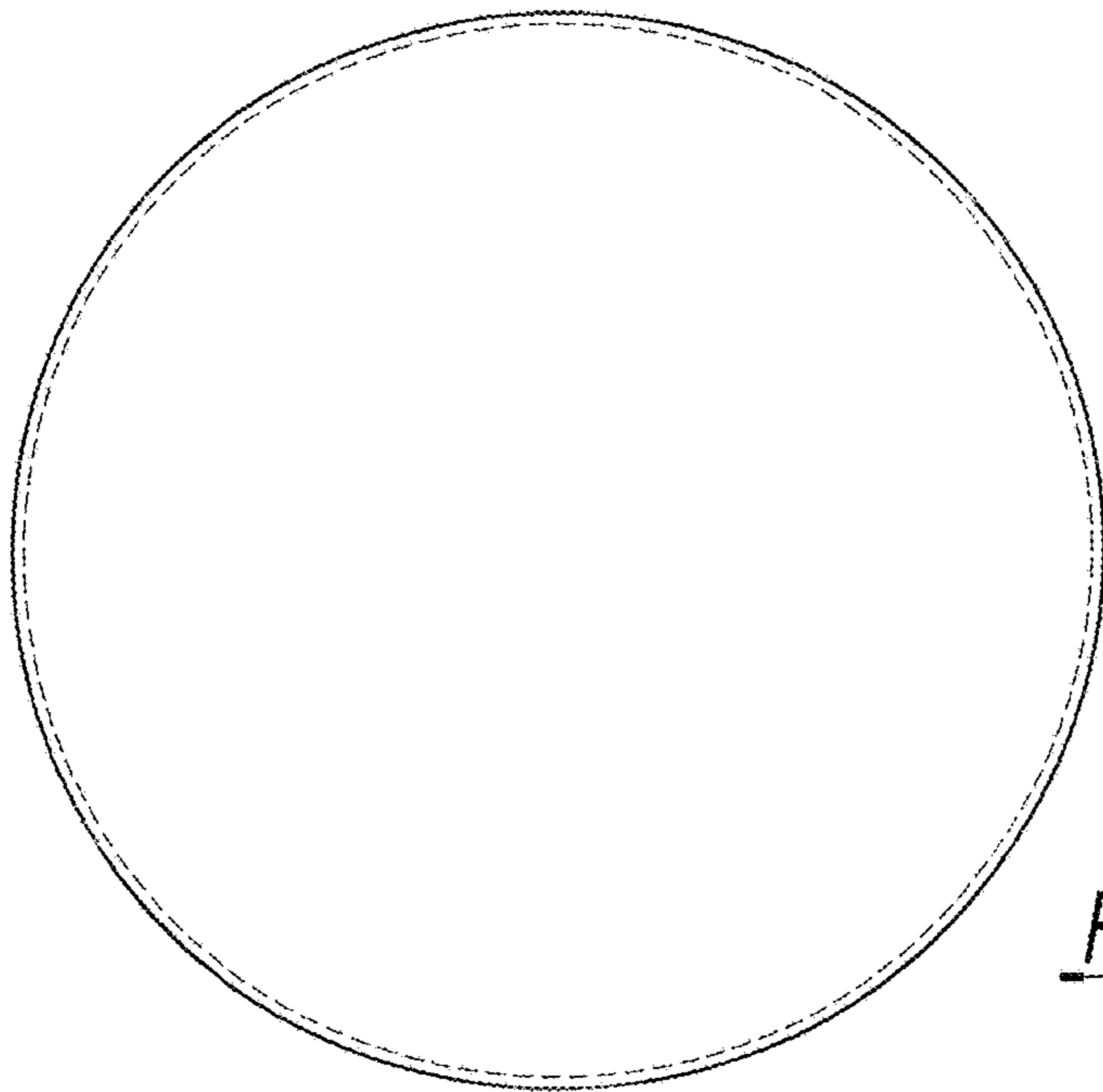


FIG - 21