



US00D640716S

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

(10) **Patent No.:** **US D640,716 S**

(45) **Date of Patent:** **** Jun. 28, 2011**

(54) **CUTTING INSERT**

(75) Inventors: **Hidebumi Takahashi**, Ibaraki-ken (JP);
Hiroshi Hoki, Ibaraki-ken (JP); **Hiroaki Hayashizaki**, Ibaraki-ken (JP)

(73) Assignee: **Mitsubishi Materials Corporation**,
Tokyo (JP)

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

(21) Appl. No.: **29/294,338**

(22) Filed: **Jan. 4, 2008**

(30) **Foreign Application Priority Data**

Jul. 5, 2007	(JP)	.....	2007-018147
Dec. 5, 2007	(JP)	.....	2007-033430
Dec. 5, 2007	(JP)	.....	2007-033431
Dec. 5, 2007	(JP)	.....	2007-33432

(51) **LOC (9) Cl.** **15-09**

(52) **U.S. Cl.** **D15/139**

(58) **Field of Classification Search** D8/70;
D15/138, 139, 140; 407/33-52, 77, 107-120
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,079,912	A *	6/2000	Rothballer	.....	407/114
D482,706	S *	11/2003	Svensson	.....	D15/139
6,641,337	B1 *	11/2003	Rothballer	.....	407/114
6,935,815	B2 *	8/2005	Schwaner et al.	.....	407/114
2004/0007115	A1 *	1/2004	Schwaner et al.	.....	83/835

FOREIGN PATENT DOCUMENTS

JP D1321033 2/2008

* cited by examiner

(74) *Attorney, Agent, or Firm* — Leason Ellis LLP.

(57) **CLAIM**

The ornamental design for a cutting insert, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of the cutting insert.

FIG. 2 is a front elevation view thereof. A rear elevation view is identical with the front elevation view.

FIG. 3 is a top plan view thereof.

FIG. 4 is a bottom plan view thereof.

FIG. 5 is a right side elevation view thereof. A left side elevation view is identical with the right side elevation view.

FIG. 6 is a cross-sectional view thereof taken along line 6—6 in FIG. 2.

FIG. 7 is a cross-sectional view thereof taken along line 7—7 in FIG. 2.

FIG. 8 is a perspective view of a second embodiment of the cutting insert.

FIG. 9 is a front elevation view thereof. A rear elevation view is identical with the front elevation view.

FIG. 10 is a top plan view thereof.

FIG. 11 is a bottom plan view thereof.

FIG. 12 is a right side elevation view thereof. A left side elevation view is identical with the right side elevation view.

FIG. 13 is a cross-sectional view thereof taken along line 13—13 in FIG. 9.

FIG. 14 is a perspective view of a third embodiment of the cutting insert.

FIG. 15 is a front elevation view thereof. A rear elevation view is identical with the front elevation view.

FIG. 16 is a top plan view thereof.

FIG. 17 is a bottom plan view thereof.

FIG. 18 is a right side elevation view thereof. A left side elevation view is identical with the right side elevation view; and,

FIG. 19 is a cross-sectional view thereof taken along line 19—19 in FIG. 15.

Primary Examiner — Patricia Palasik

1 Claim, 19 Drawing Sheets

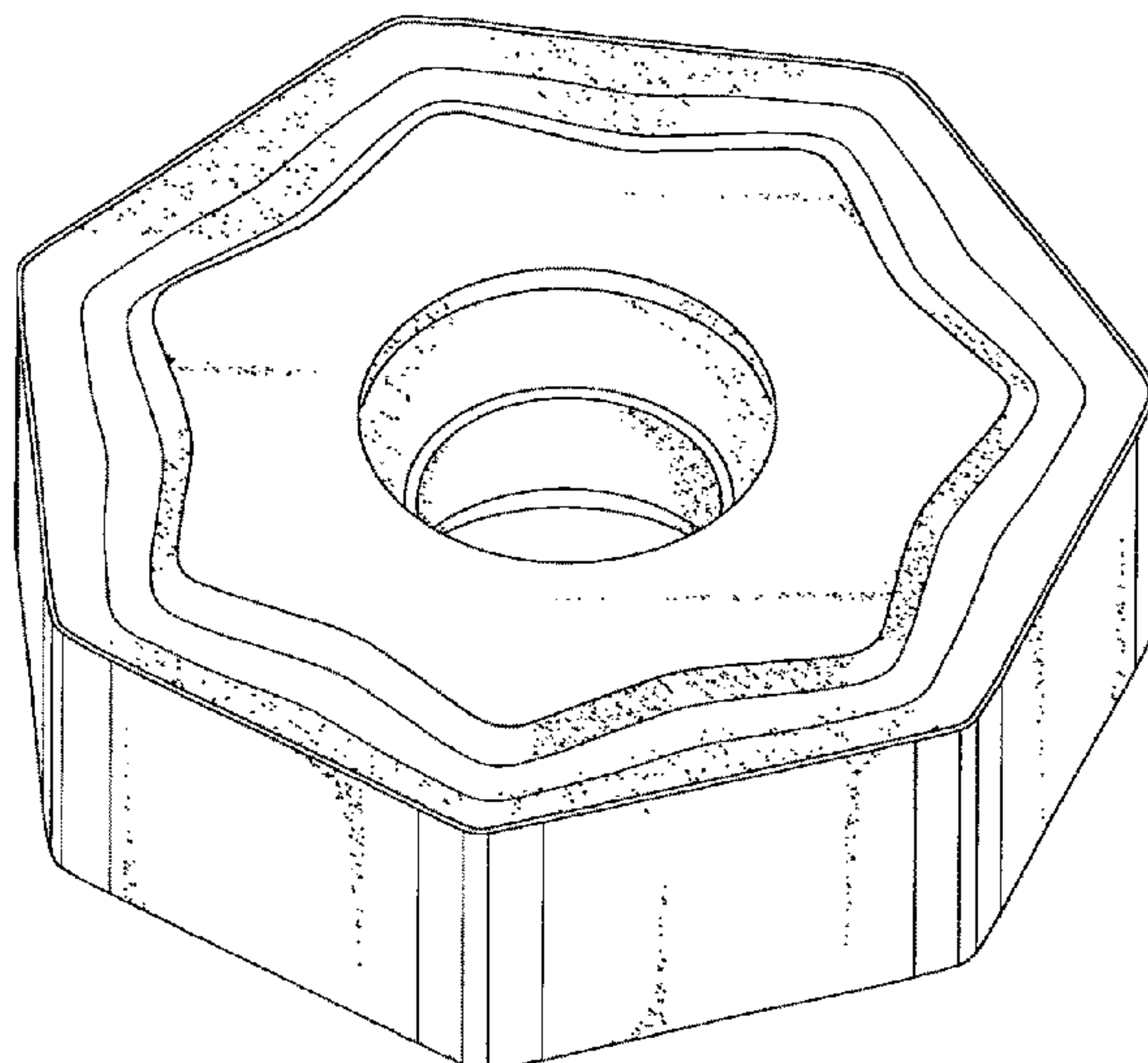


FIG. 1

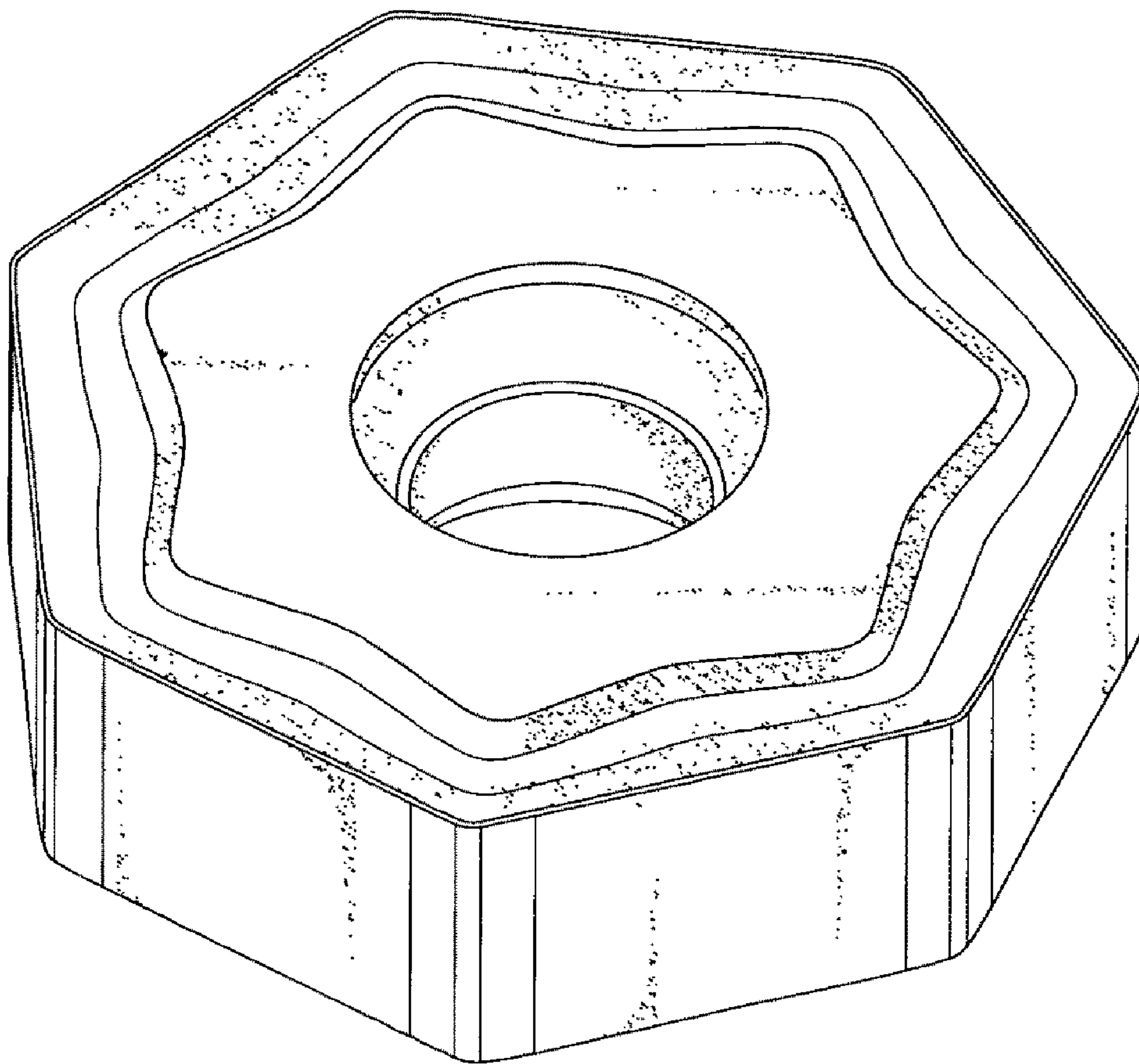


FIG. 2

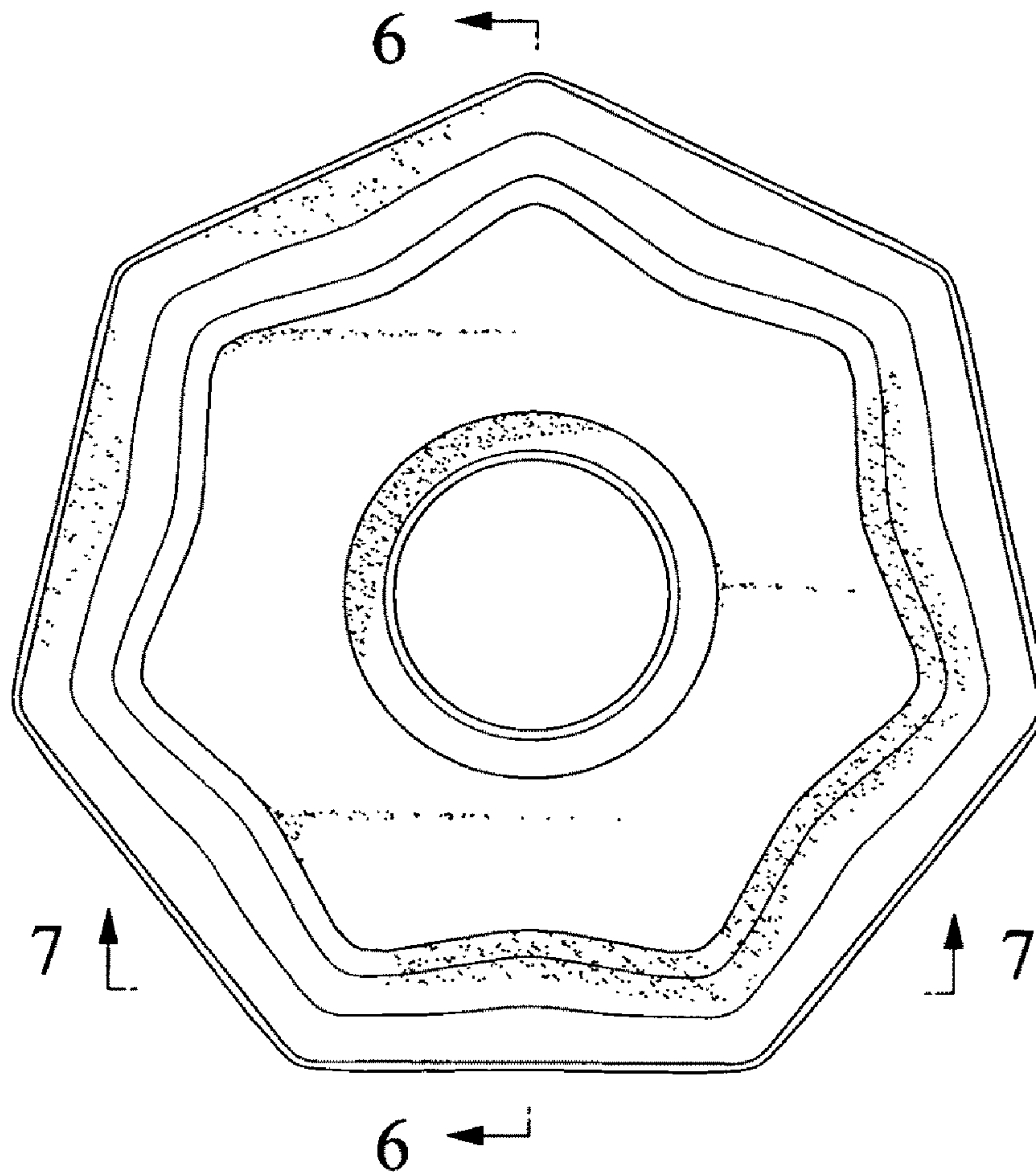


FIG. 3

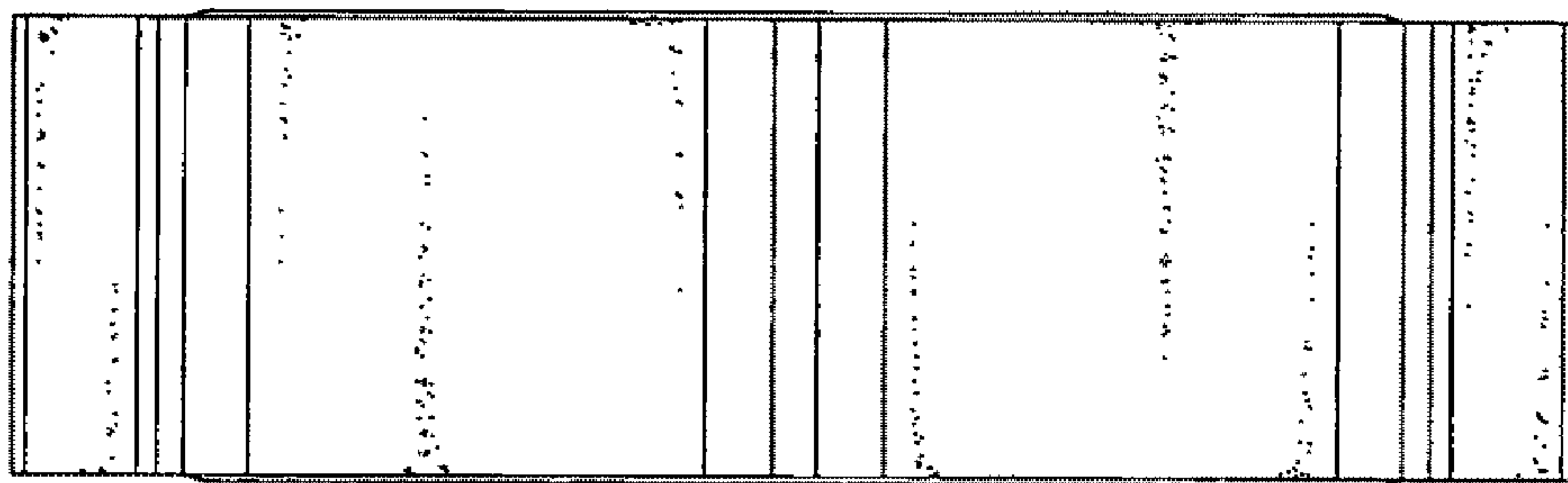


FIG. 4

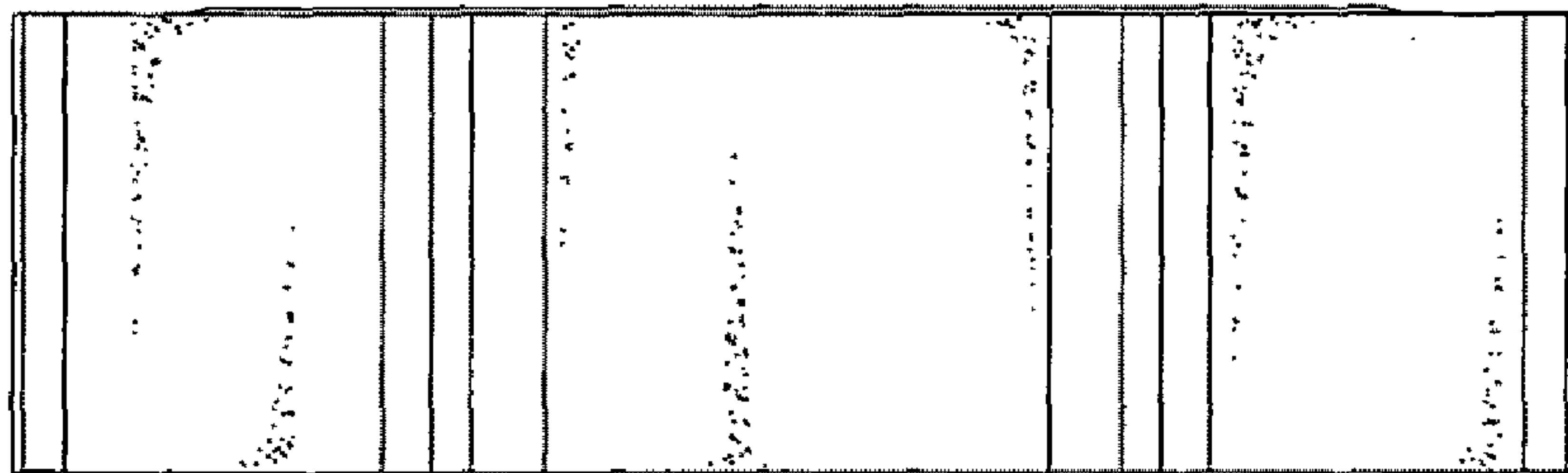


FIG. 5

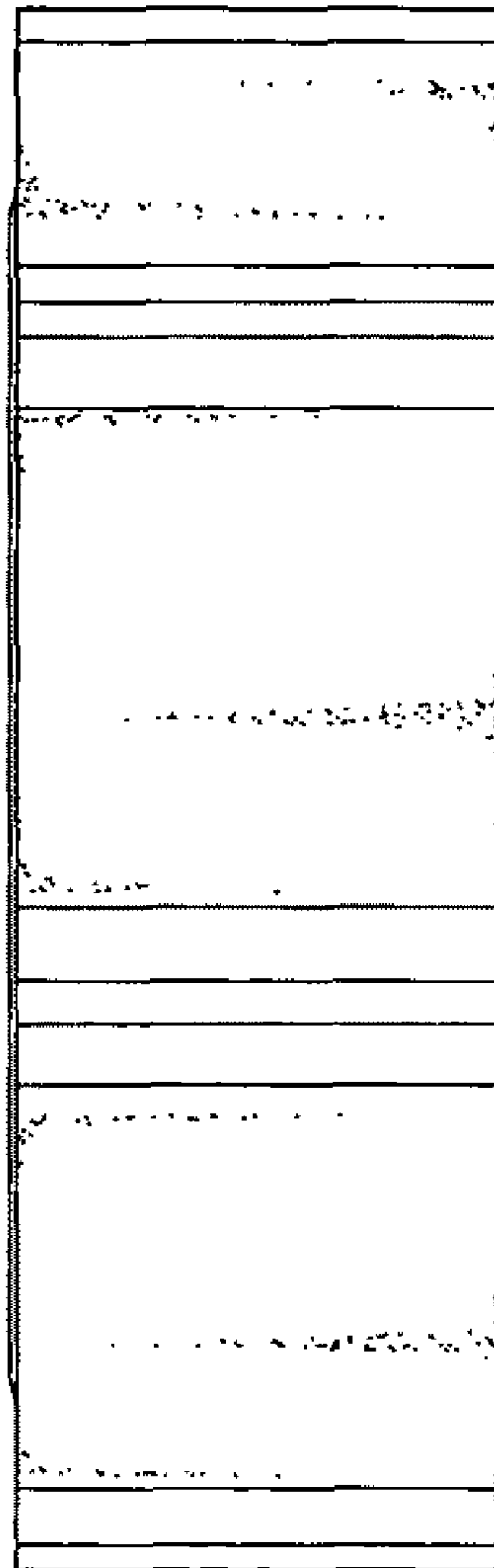


FIG. 6

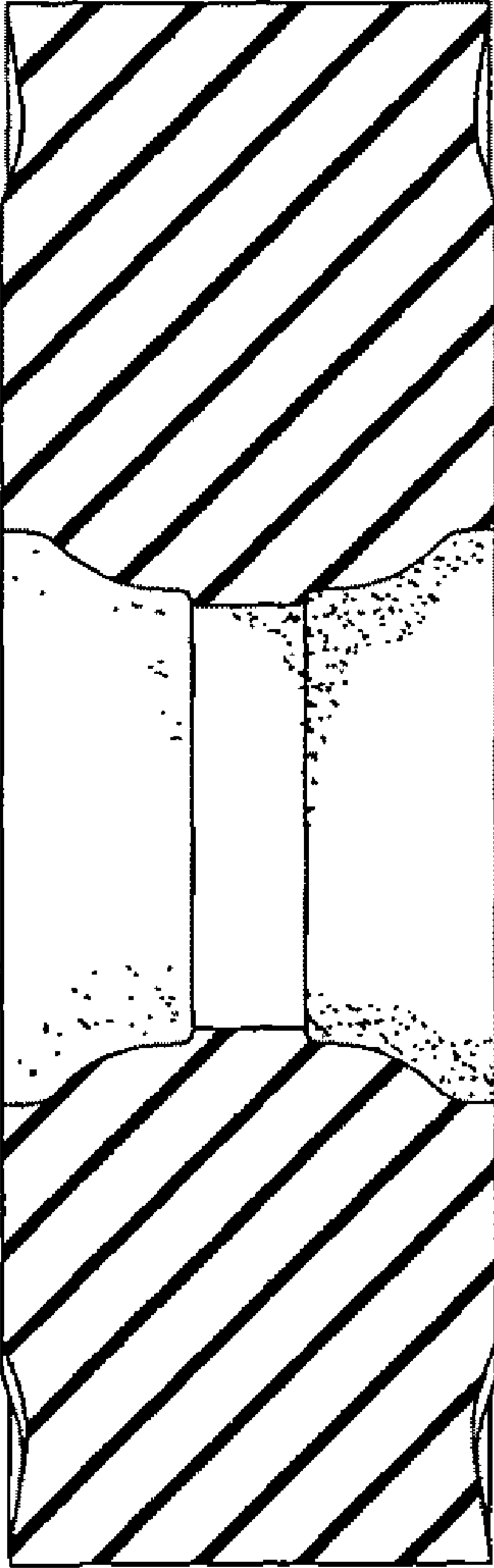


FIG. 7

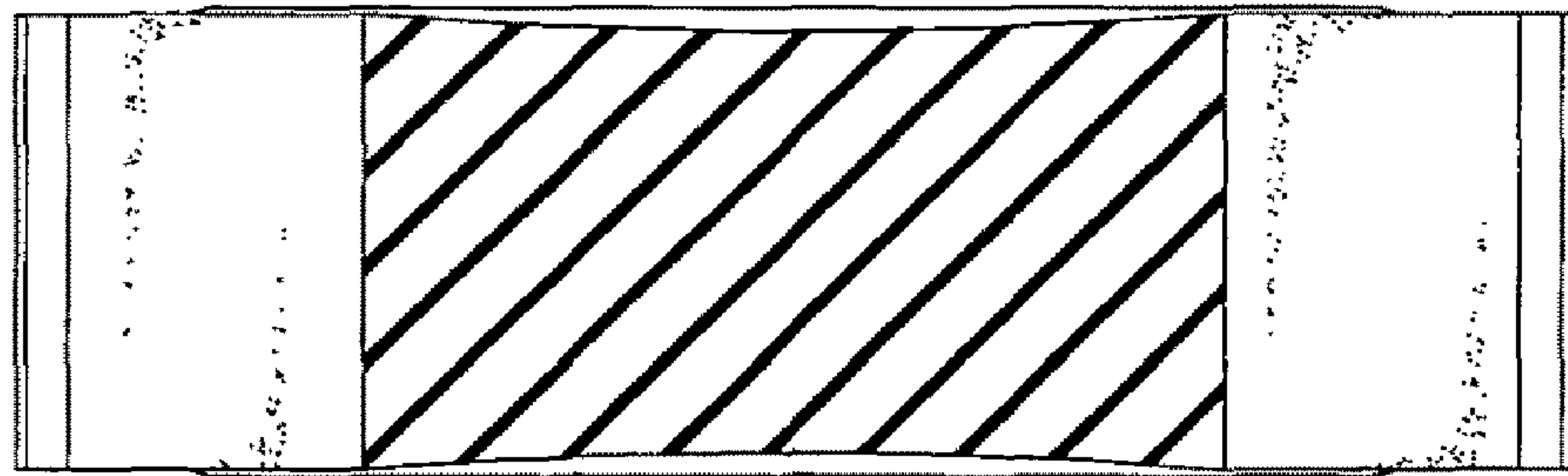


FIG. 8

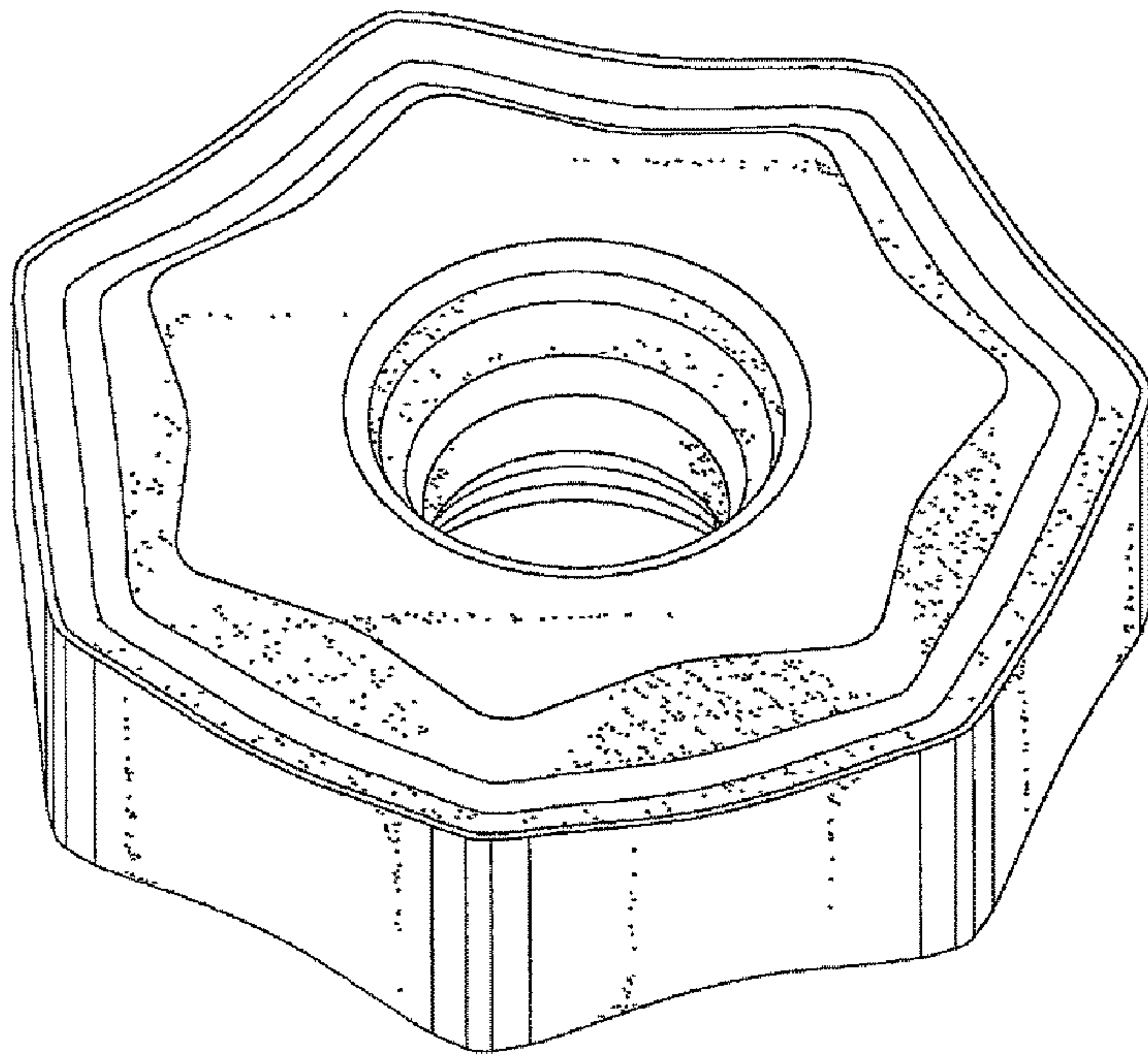


FIG. 9

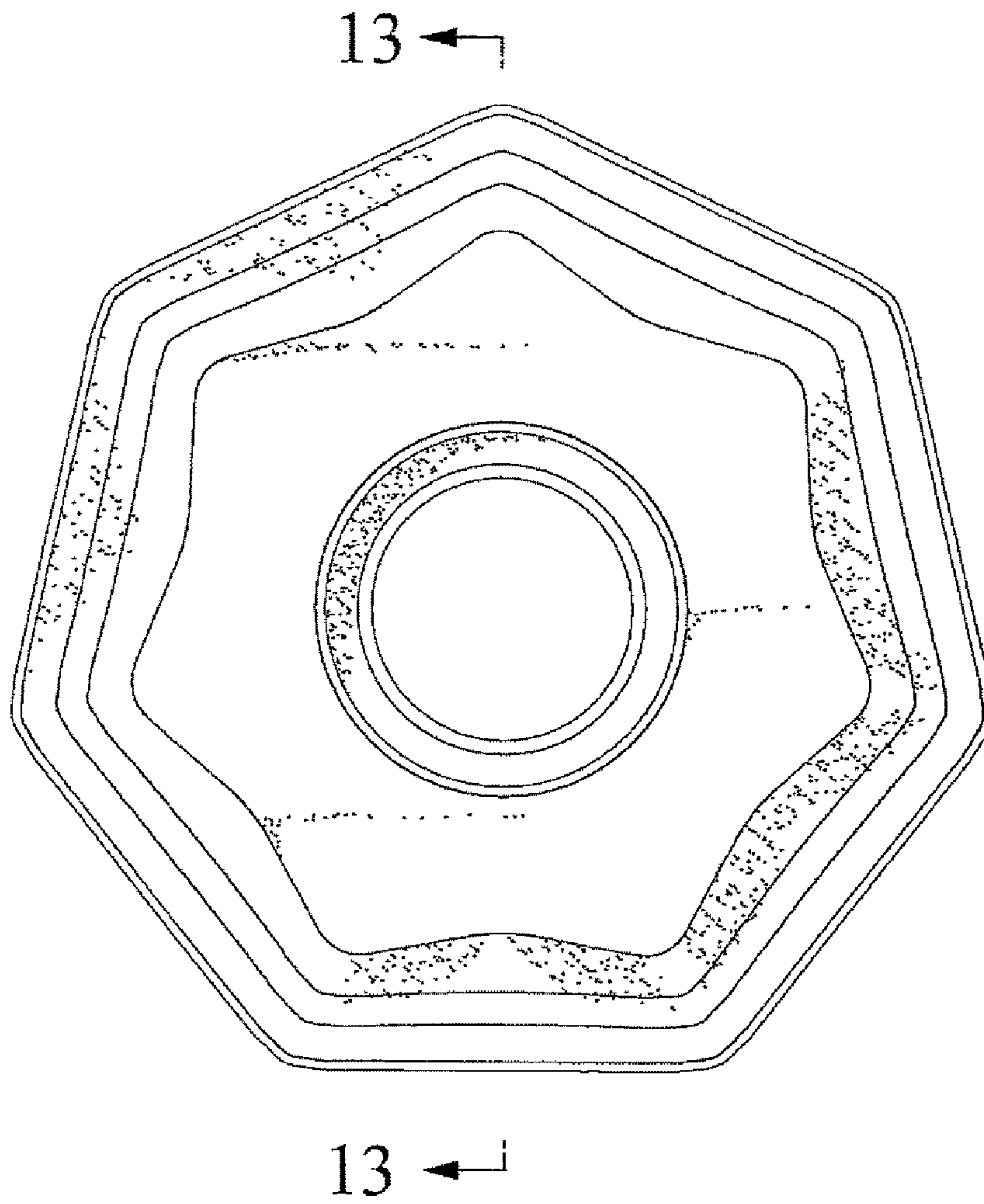


FIG. 10

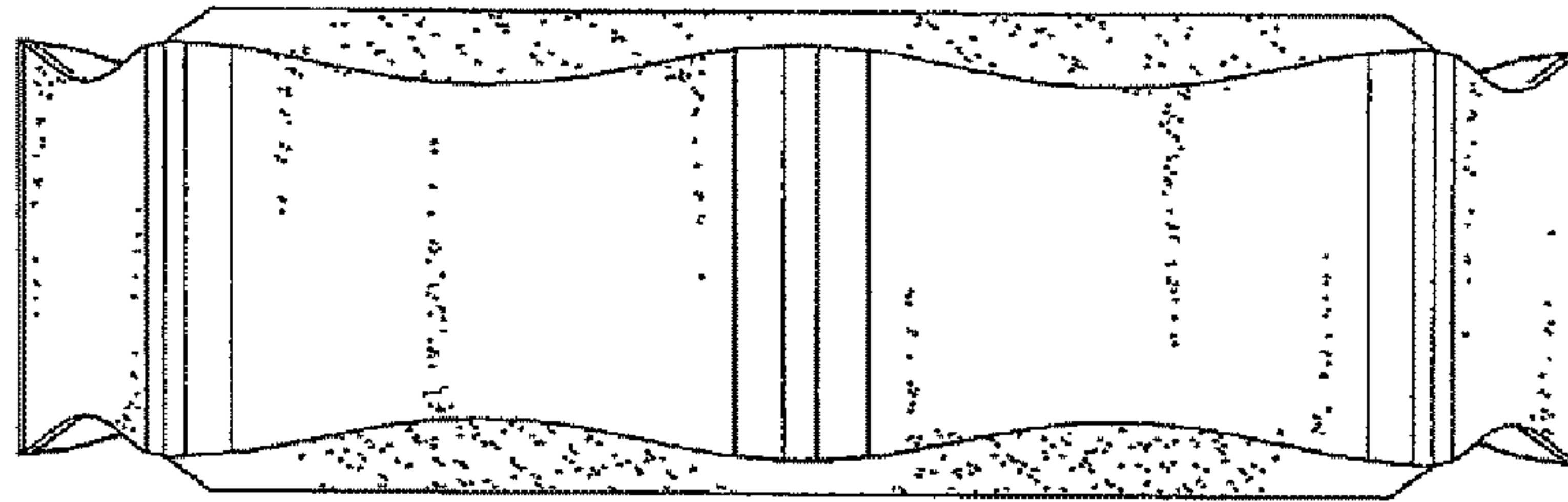


FIG. 11

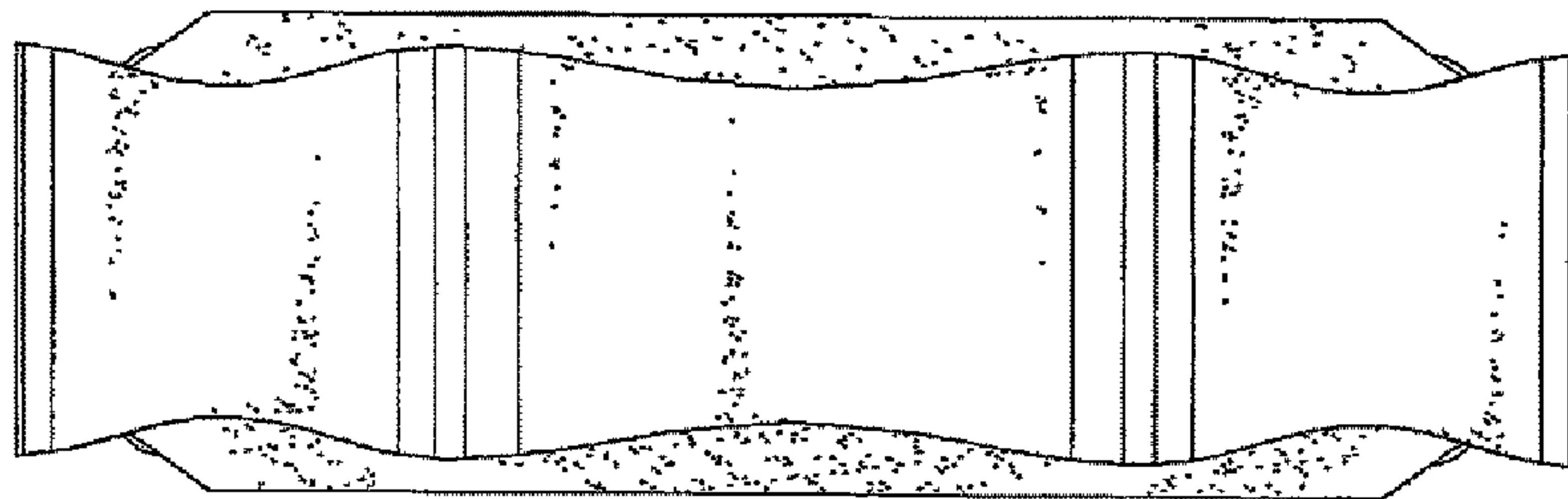


FIG. 12

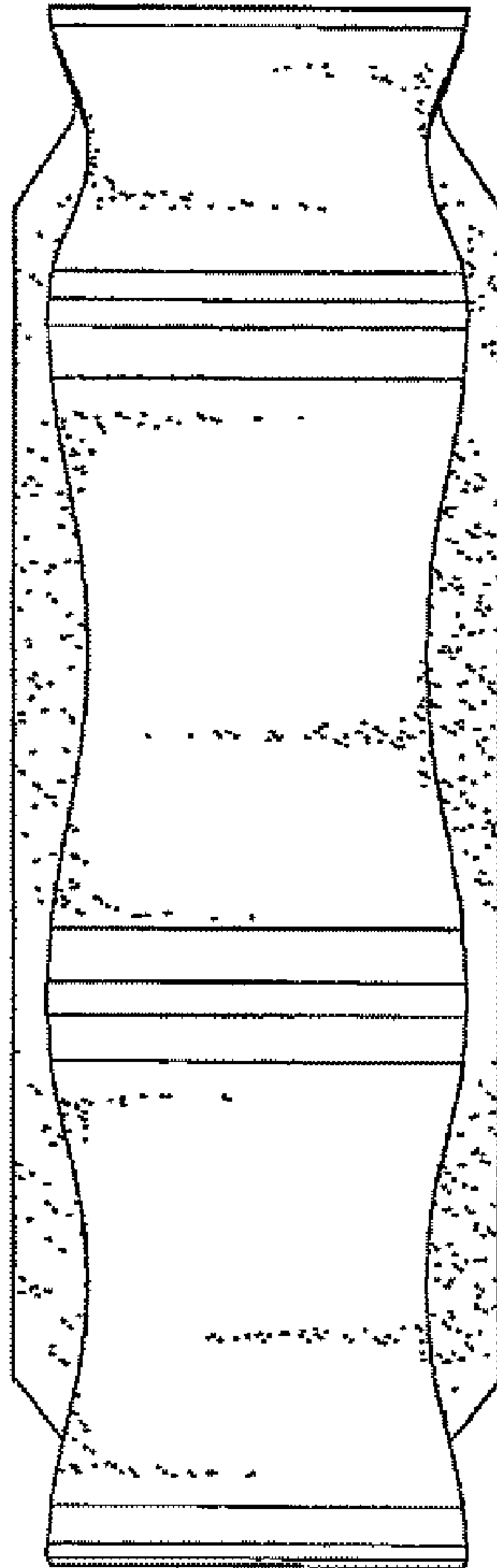


FIG. 13

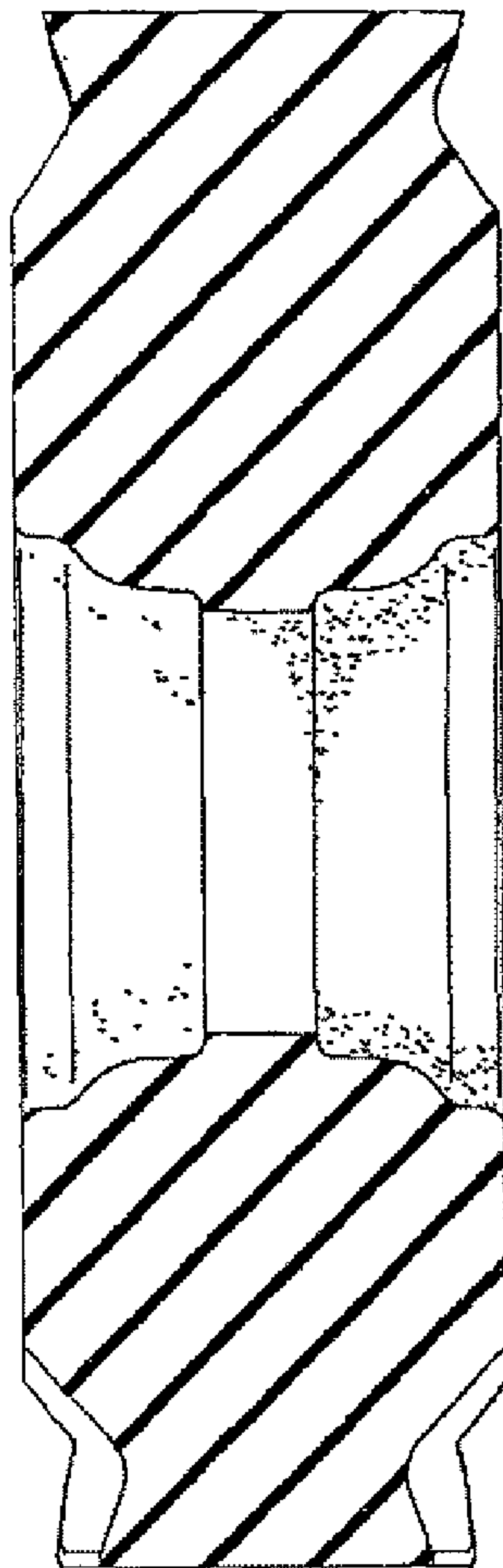


FIG. 14

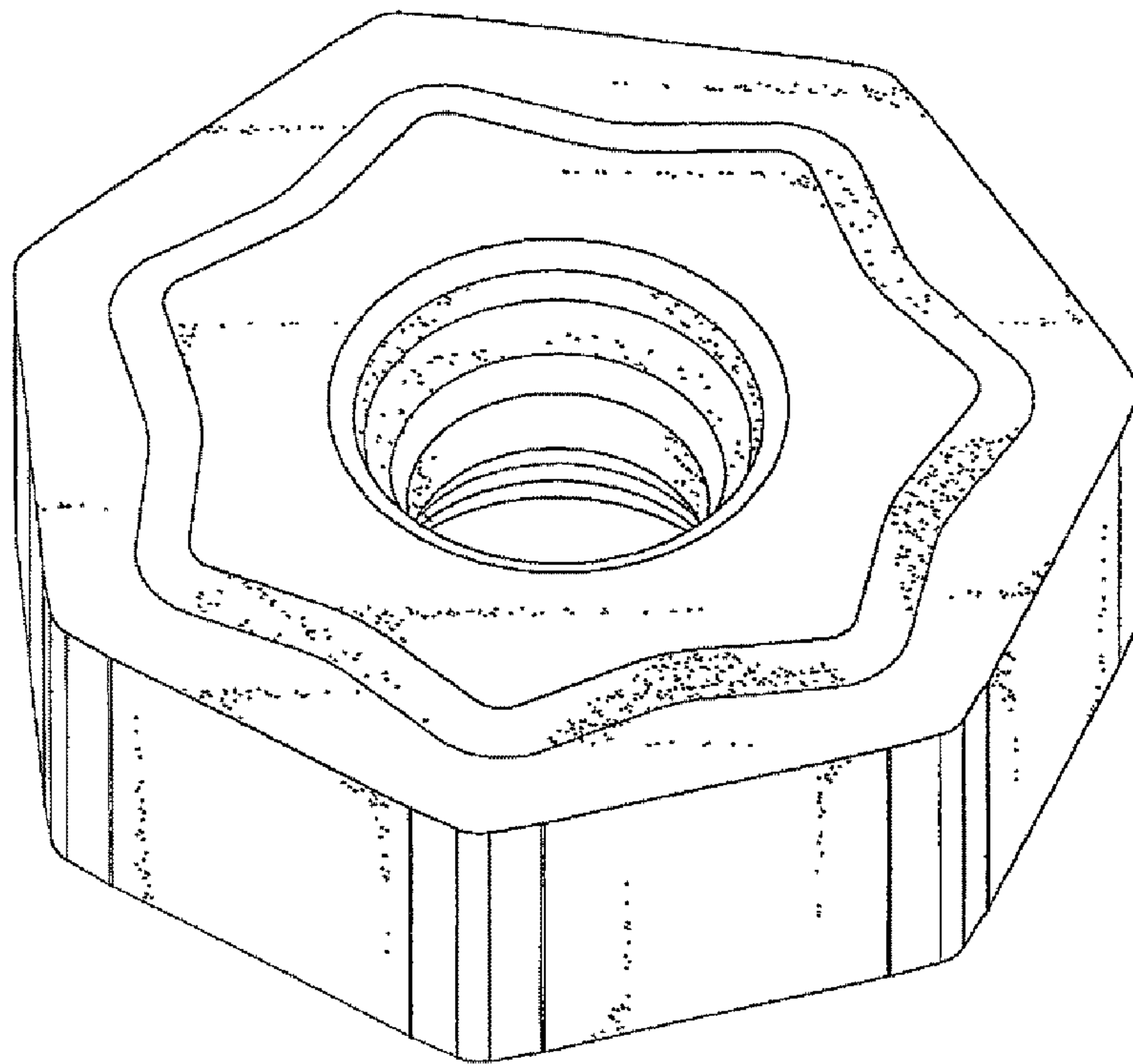


FIG. 15

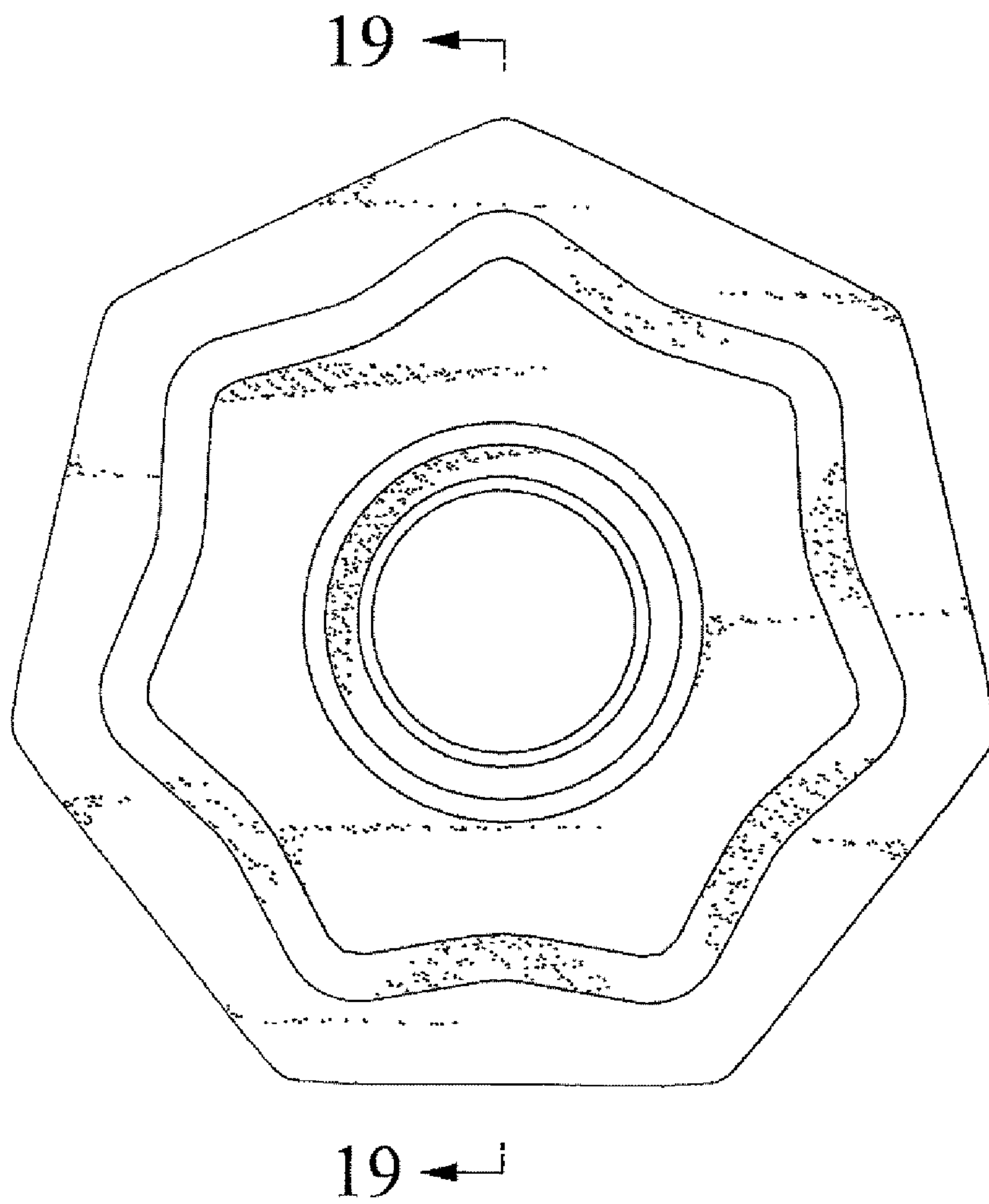


FIG. 16

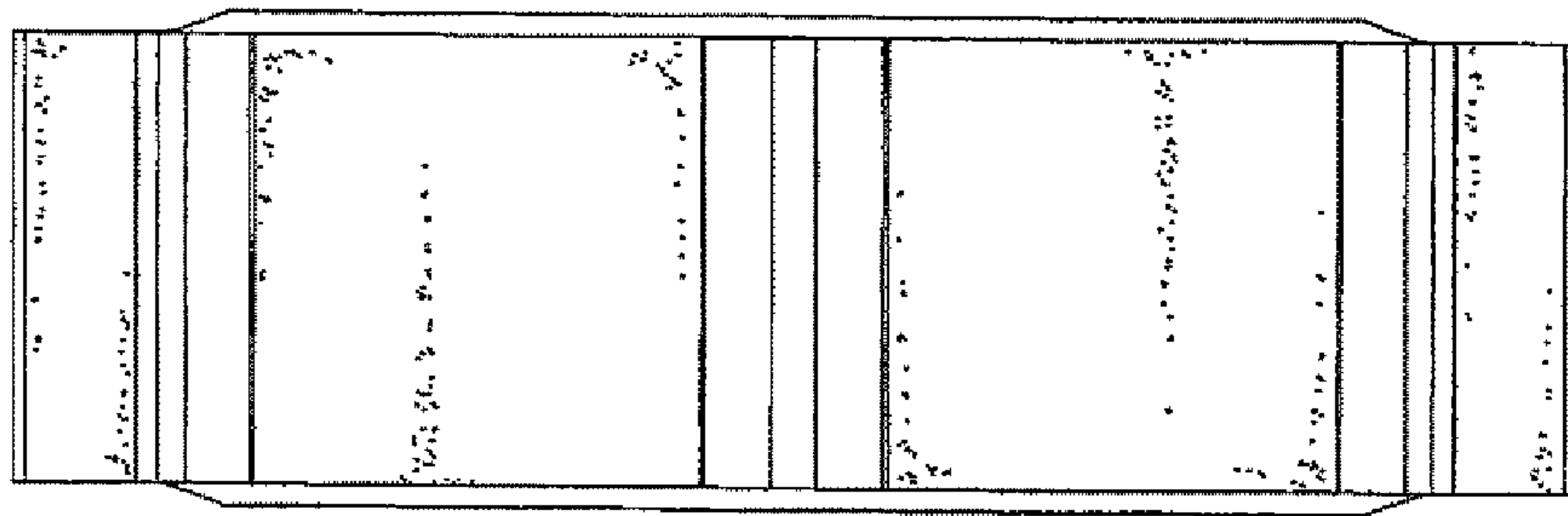


FIG. 17

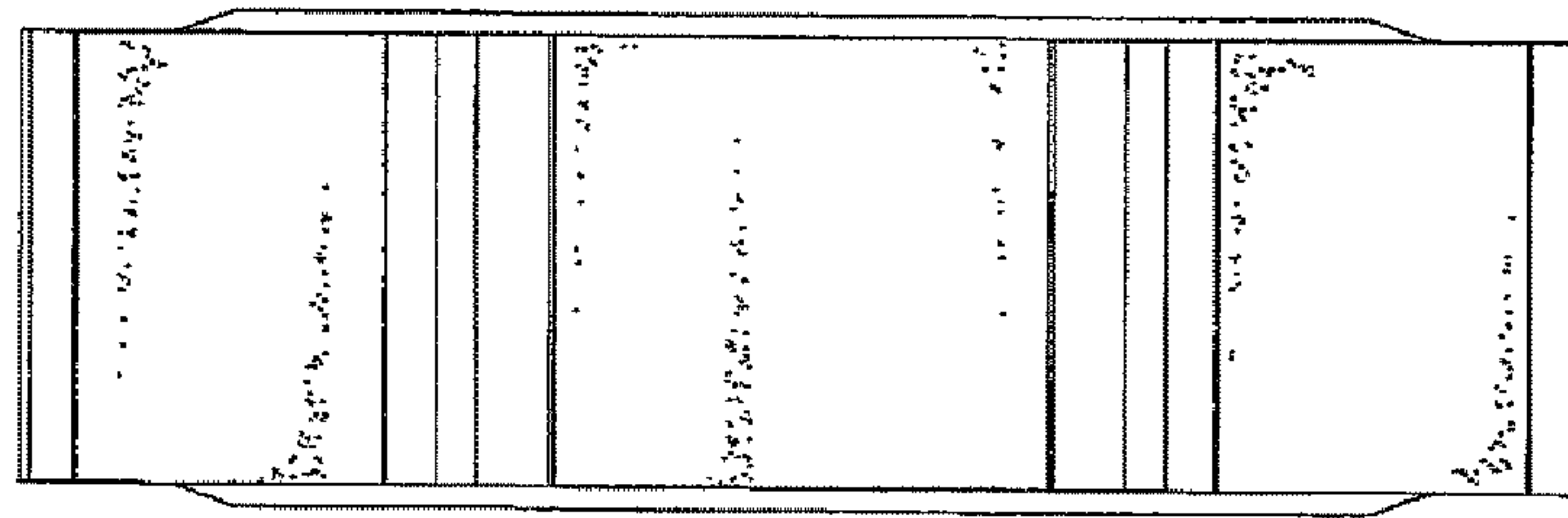


FIG. 18

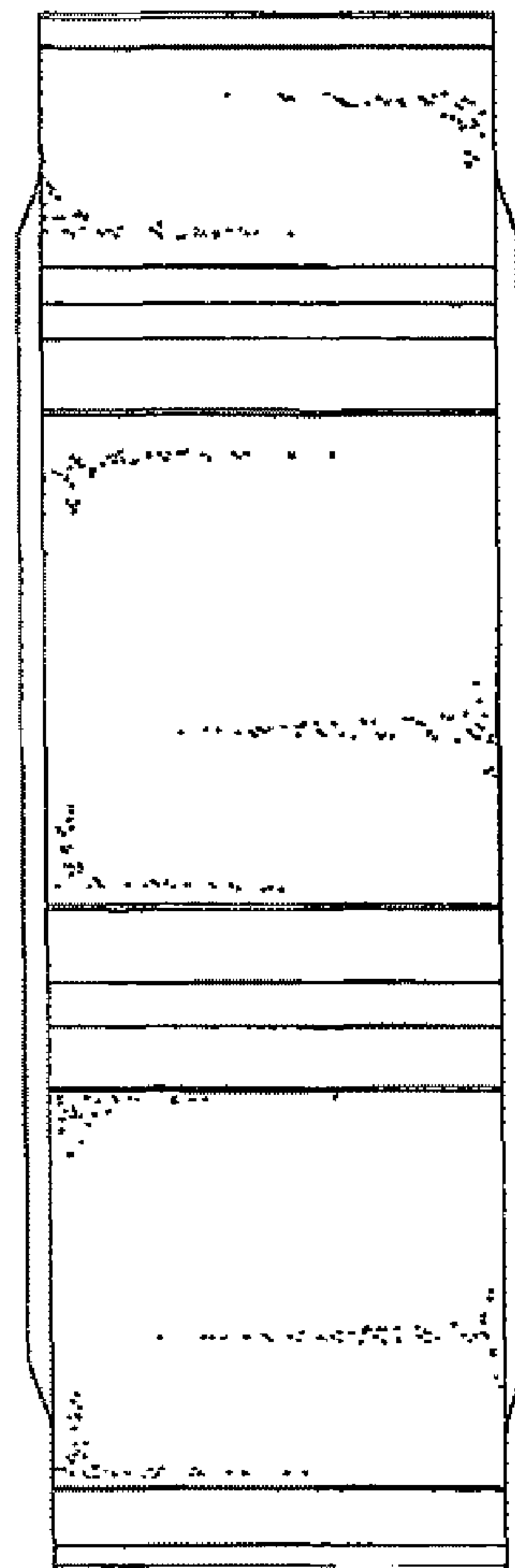


FIG. 19

