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

(10) **Patent No.:** **US D559,064 S**
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(54) **POLISHING PAD**

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(73) Assignee: **JSR Corporation**, Tokyo (JP)

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

(21) Appl. No.: **29/213,407**

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(30) **Foreign Application Priority Data**

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Mar. 17, 2004 (JP) 2004-008162

(51) **LOC (8) Cl.** **08-05**

(52) **U.S. Cl.** **D8/70**

(58) **Field of Classification Search** D8/61,
D8/62, 63, 70; D15/124, 126, 138, 139,
D15/140; 15/230; 83/835; 451/6, 60, 287,
451/288, 359, 526, 527, 533, 541, 548, 446,
451/550

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

88,649 A * 4/1869 Machamer 83/835
494,471 A * 3/1893 Gardner 451/528
1,092,588 A * 4/1914 Monkiawicz 451/533
1,569,403 A * 1/1926 Slye 451/548
3,046,708 A * 7/1962 Prunier 451/548
5,007,207 A * 4/1991 Phaal 451/548
5,131,190 A * 7/1992 Gougouyan 451/548
5,507,740 A * 4/1996 O'Donnell, Jr. 33/511
5,733,178 A * 3/1998 Ohishi 451/533
5,778,481 A * 7/1998 Amsden et al. 15/230
5,899,799 A * 5/1999 Tjaden et al. 15/230
5,921,855 A * 7/1999 Osterheld et al. 451/527

5,984,769 A * 11/1999 Bennett et al. 451/527
6,066,266 A * 5/2000 Osugi et al. 216/85
6,217,426 B1 * 4/2001 Tolles et al. 451/288
6,248,000 B1 * 6/2001 Aiyer 451/41
6,267,643 B1 * 7/2001 Teng et al. 451/287

(Continued)

FOREIGN PATENT DOCUMENTS

JP 1155897 8/2002

(Continued)

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(57) **CLAIM**

The ornamental design for a polishing pad, as shown and described.

DESCRIPTION

FIG. 1 is a top plan view of the polishing pad;

FIG. 2 is a front elevational view thereof, the left side elevational view, right side elevational view, and rear elevational view each being a mirror image of the front view shown;

FIG. 3 is a bottom plan view thereof;

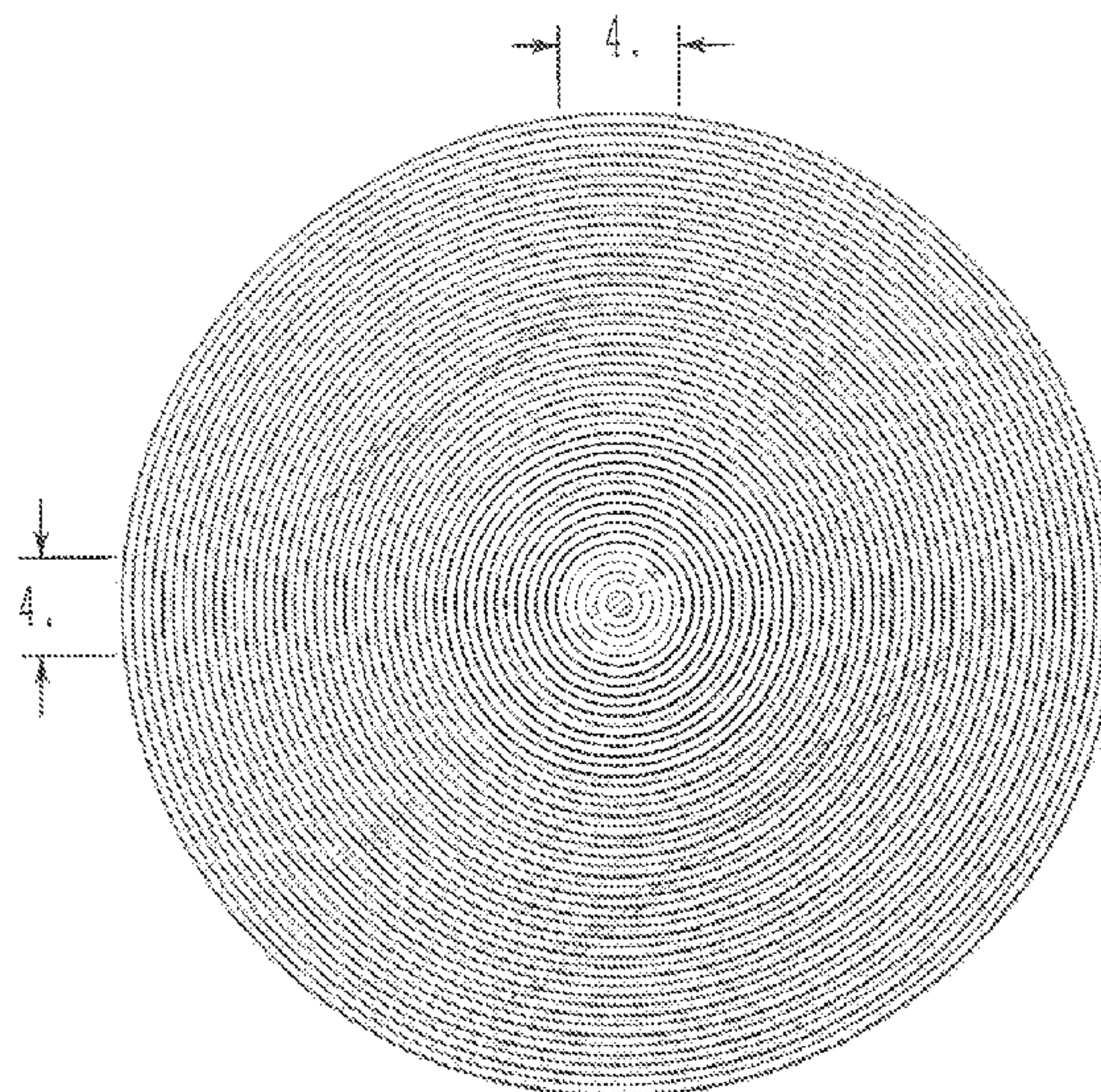
FIG. 4 is an enlarged, partial view thereof taken at coordinates 4—4 in FIG. 1;

FIG. 5 is a cross-sectional view thereof taken along line 5—5 in FIG. 4;

FIG. 6 is a further enlargement of the cross-sectional view of part 6 of FIG. 5; and,

FIG. 7 is a further enlargement of the cross-sectional view of part 7 of FIG. 6.

1 Claim, 4 Drawing Sheets



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U.S. PATENT DOCUMENTS

6,273,806 B1 * 8/2001 Bennett et al. 451/527
6,332,830 B1 * 12/2001 Okamura et al. 451/288
6,375,550 B1 * 4/2002 Berman 451/288
6,387,312 B1 5/2002 Roberts et al.
6,402,594 B1 * 6/2002 Kobayashi et al. 451/287
6,443,810 B1 * 9/2002 Shih 451/446
6,517,417 B2 * 2/2003 Budinger et al. 451/6
6,520,847 B2 * 2/2003 Osterheld et al. 451/527
6,544,111 B1 * 4/2003 Kimura et al. 451/288
6,544,373 B2 * 4/2003 Chen et al. 451/533
6,561,890 B2 * 5/2003 Tominaga 451/527
6,645,061 B1 * 11/2003 Bennett et al. 451/527
6,659,850 B2 * 12/2003 Korovin et al. 451/288
6,685,548 B2 * 2/2004 Chen et al. 451/527
6,699,115 B2 * 3/2004 Osterheld et al. 451/527
6,702,651 B2 * 3/2004 Tolles 451/287
6,749,486 B2 * 6/2004 Shibuki 451/533
6,824,447 B2 * 11/2004 Takahashi et al. 451/6
6,824,455 B2 * 11/2004 Osterheld et al. 451/287
6,875,096 B2 * 4/2005 Park et al. 451/527
6,899,607 B2 * 5/2005 Brown 451/288
6,899,611 B2 * 5/2005 Reinhardt et al. 451/527
D510,850 S * 10/2005 Boler, Jr. D8/70
6,951,510 B1 * 10/2005 Rodriguez et al. 451/288
6,960,123 B2 * 11/2005 Mitarai 451/533
7,029,747 B2 * 4/2006 Huh et al. 451/533
7,059,937 B2 * 6/2006 Brown 451/288

7,070,480 B2 * 7/2006 Moon et al. 451/527
7,112,119 B1 * 9/2006 Swedek et al. 451/6
2001/0031610 A1 * 10/2001 Budinger et al. 451/41
2002/0137450 A1 * 9/2002 Osterheld et al. 451/527
2002/0173231 A1 11/2002 Hasegawa
2003/0068964 A1 * 4/2003 Akagami et al. 451/287
2003/0092371 A1 * 5/2003 Osterheld et al. 451/527
2003/0194962 A1 * 10/2003 Weber 451/526
2003/0199234 A1 * 10/2003 Chen et al. 451/527
2003/0207651 A1 * 11/2003 Kim et al. 451/6
2004/0014413 A1 * 1/2004 Kawahashi et al. 451/527
2004/0053570 A1 * 3/2004 Naujok 451/527
2004/0058630 A1 * 3/2004 Park et al. 451/288
2004/0072516 A1 * 4/2004 Osterheld et al. 451/287
2004/0082271 A1 * 4/2004 Wiswesser et al. 451/6
2004/0102144 A1 * 5/2004 Brown 451/288
2004/0127145 A1 * 7/2004 Takahashi et al. 451/6
2004/0259476 A1 * 12/2004 Korovin et al. 451/6
2005/0113011 A1 * 5/2005 Miyauchi et al. 451/527
2005/0245171 A1 * 11/2005 Hosaka et al. 451/6
2006/0063471 A1 * 3/2006 Muldowney 451/6
2006/0194530 A1 * 8/2006 Thomson et al. 451/527
2006/0199473 A1 * 9/2006 Suzuki et al. 451/527

FOREIGN PATENT DOCUMENTS

JP 1155898 8/2002

* cited by examiner

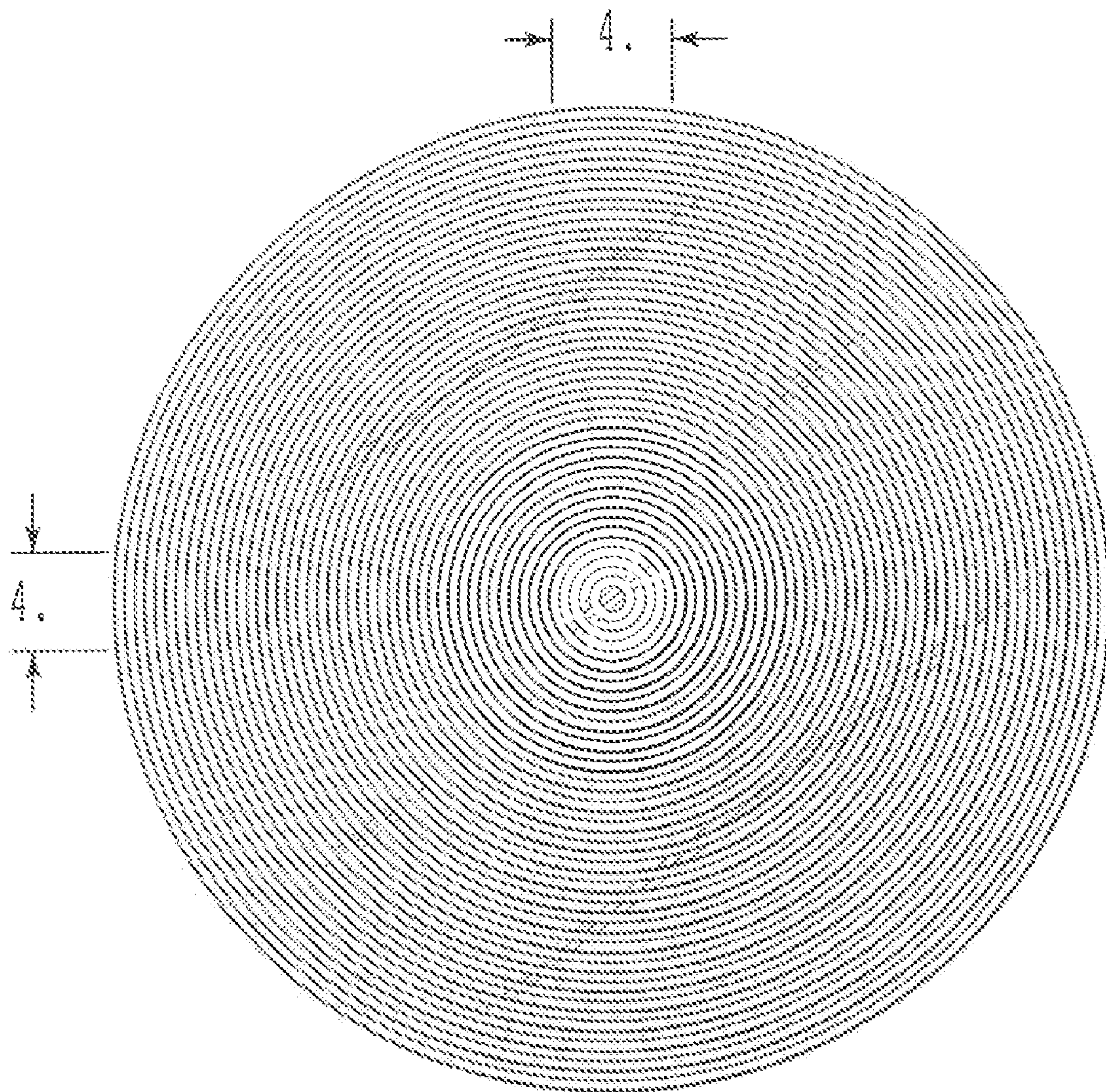


FIG. 1



FIG. 2

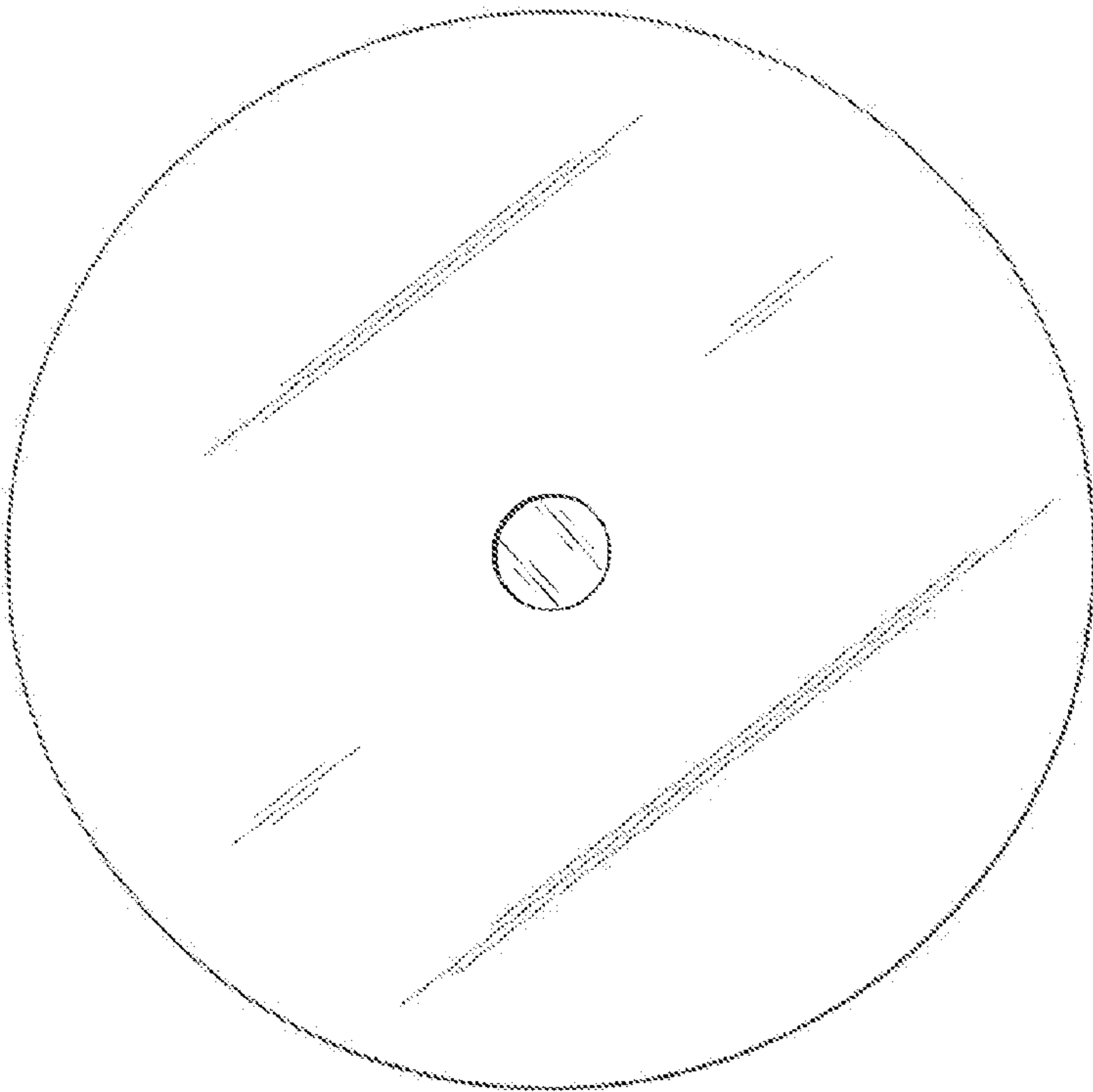


FIG. 3

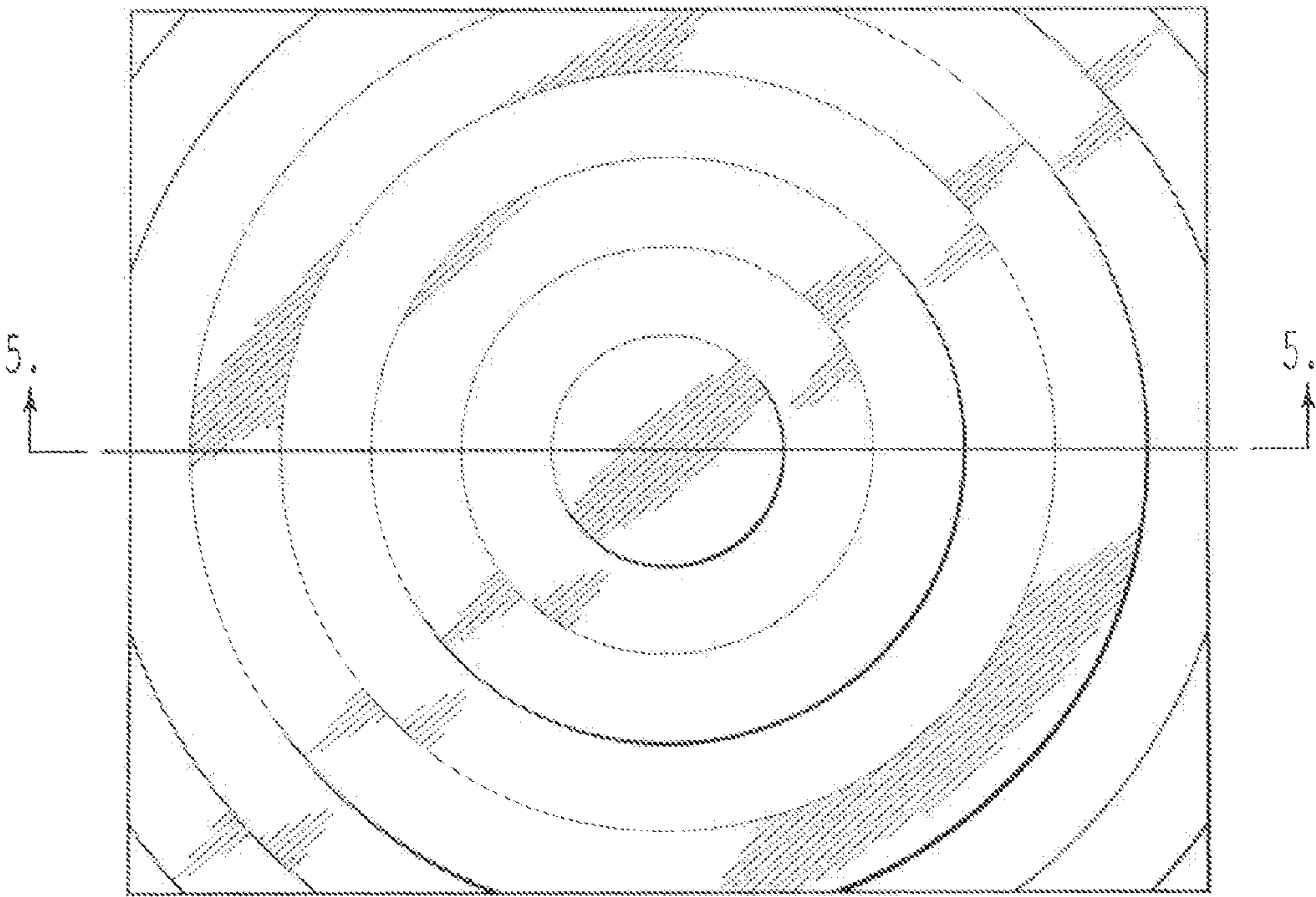


FIG. 4

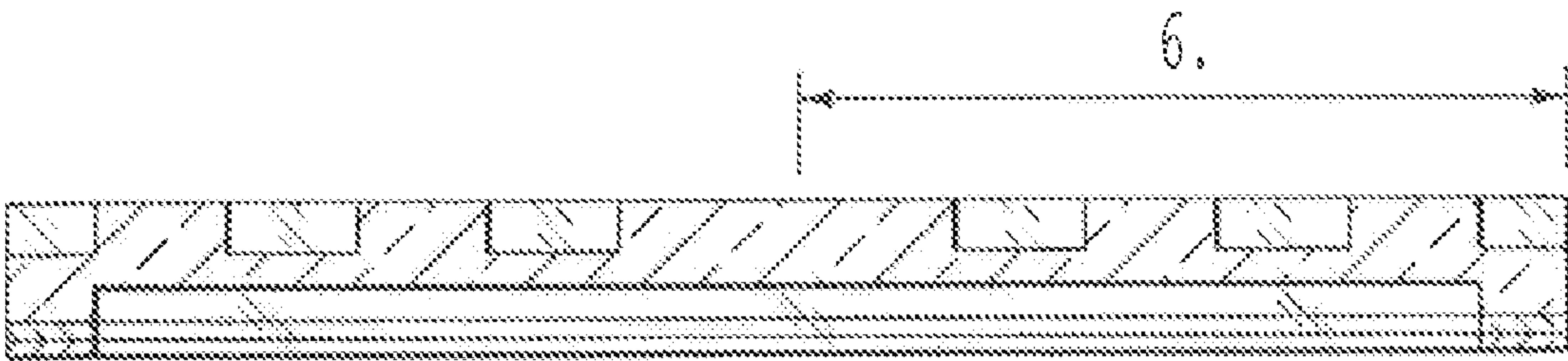


FIG. 5

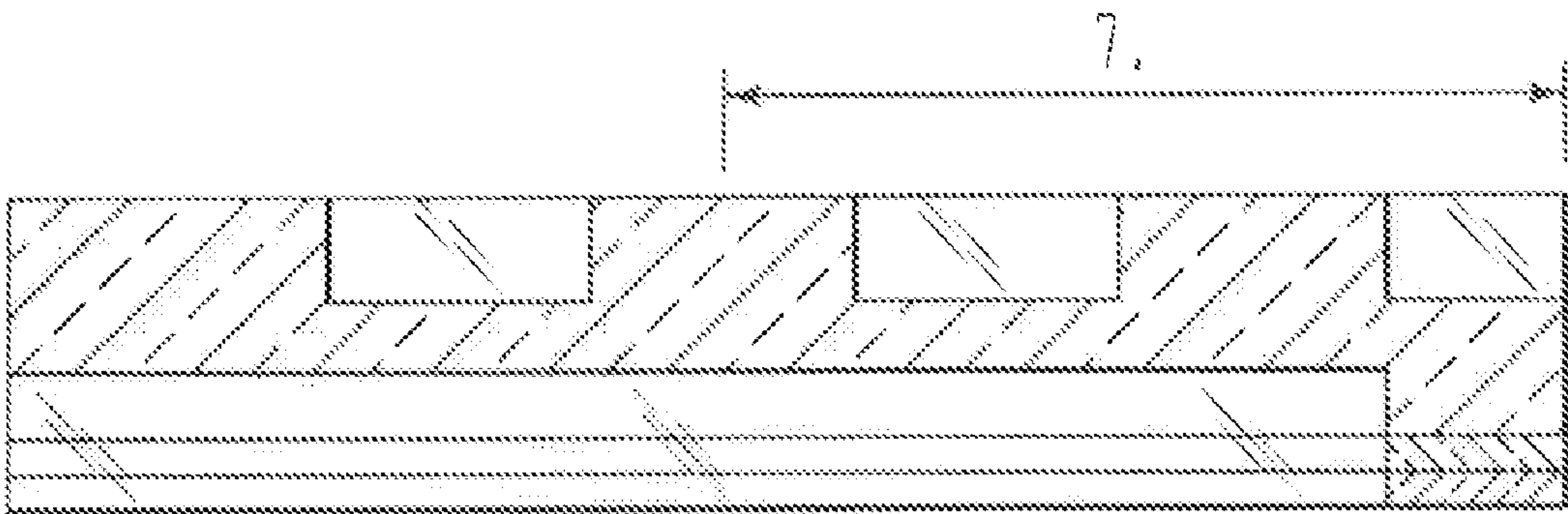


FIG. 6

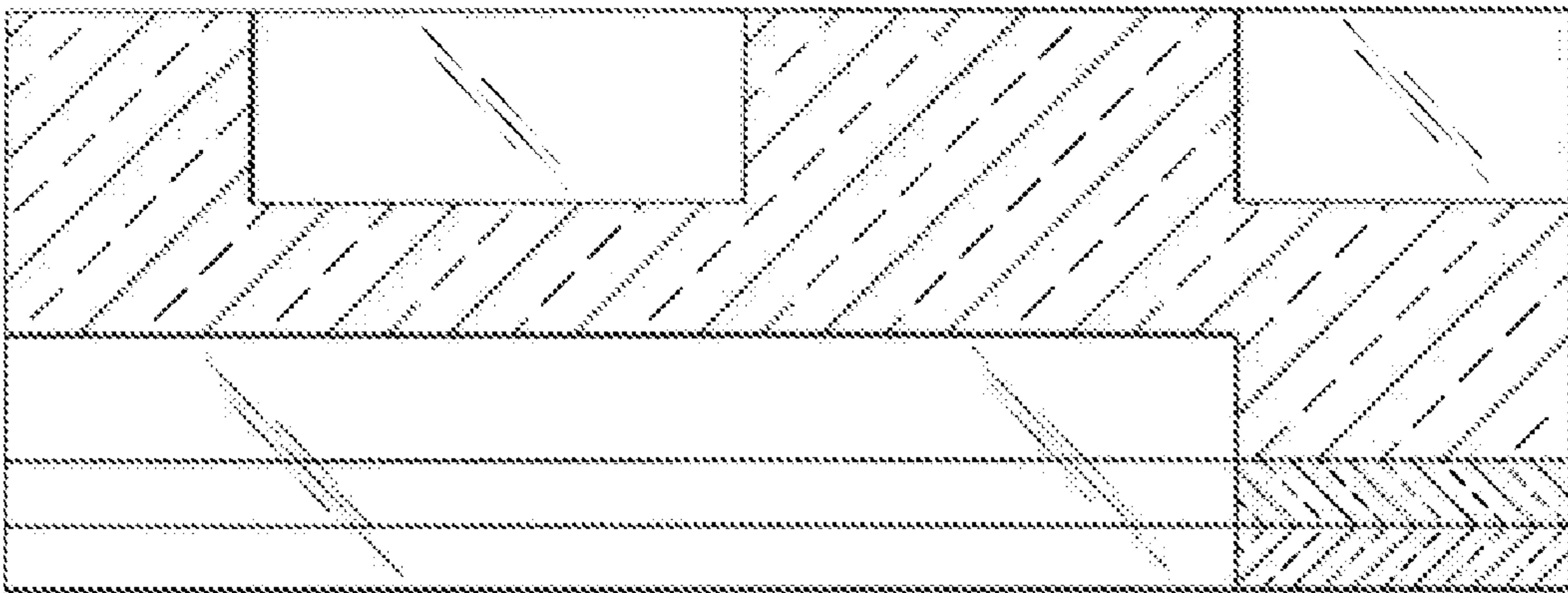


FIG. 7