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

(10) **Patent No.:** **US D679,444 S**
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(54) **OPTICAL LENS ARRAY LIGHTGUIDE PLATE**

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

(21) Appl. No.: **29/399,899**

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(51) **LOC (9) Cl.** **26-99**

(52) **U.S. Cl.** **D26/120**

(58) **Field of Classification Search** D26/88,
D26/91, 85, 86, 72, 74, 76, 118, 90, 134,
D26/73, 75, 119, 120, 121, 122, 113, 71,
D26/84, 128, 129, 2, 125, 78, 77, 138, 26,
D26/89, 124, 130, 9, 10, 11, 24, 25, 63, 64,
D26/65, 69, 127; 362/311.13, 249.01-249.12,
362/373, 362, 326, 247, 342, 220, 147, 148,
362/282, 339, 620, 223, 376, 219; D23/412,
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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D27,341 S * 7/1897 Pennycuick D25/106
D217,924 S * 6/1970 Clostermann et al. D26/122
D223,386 S 4/1972 Stahlhut et al.

(Continued)

Primary Examiner — Kevin Rudzinski

(57) **CLAIM**

The ornamental design for an optical lens array lightguide plate, as shown and described.

DESCRIPTION

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FIG. 1 is a perspective fragmentary view of an optical lens array lightguide plate showing my new design, wherein bounds for three sides of the fragmentary view are shown in broken lines which are for illustrative purposes to indicate indeterminate length and width only and form no part of the claimed design, it being understood that the lens array pattern is uniformly continuous over the top surface of the plate and the prismatic groove pattern is uniformly continuous over the bottom surface of the plate;

FIG. 2 is a front elevational view thereof, the rear elevational view being identical;

FIG. 3 is a left side elevational view thereof, the right side elevational view being identical;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view thereof;

FIG. 6 is a perspective fragmentary view of an alternative embodiment of my design, wherein bounds for three sides of the fragmentary view are shown in broken lines which are for illustrative purposes to indicate indeterminate length and width only and form no part of the claimed design;

FIG. 7 is a front elevational view of the alternative embodiment of FIG. 6;

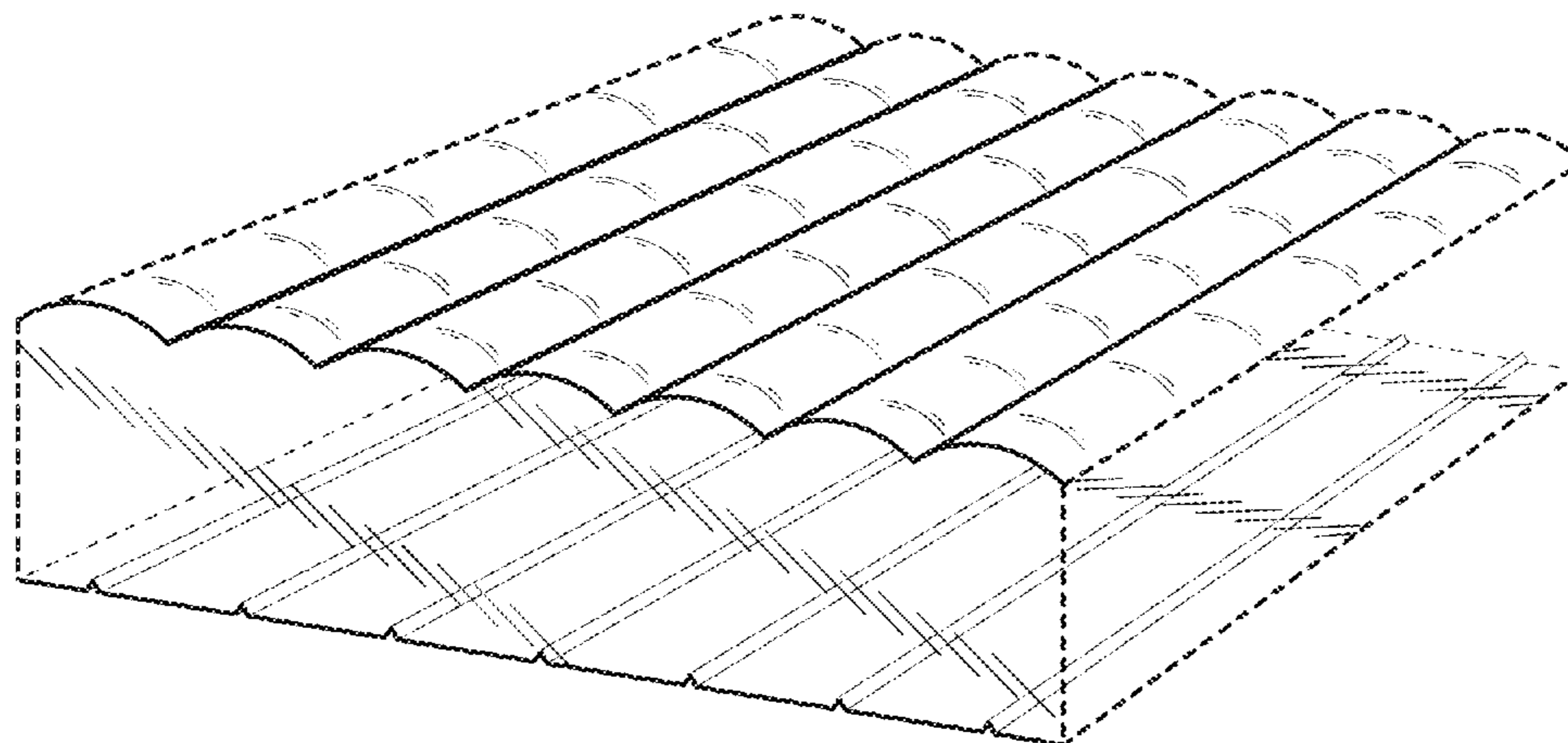
FIG. 8 is a rear elevational view of the alternative embodiment of FIG. 6;

FIG. 9 is a left side elevational view of the alternative embodiment of FIG. 6, the right side elevational view being identical;

FIG. 10 is a top plan view of the alternative embodiment of FIG. 6; and,

FIG. 11 is a bottom plan view of the alternative embodiment of FIG. 6.

1 Claim, 8 Drawing Sheets



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U.S. PATENT DOCUMENTS

| | | | | | | | | | | | |
|-----------|------|---------|------------------|-------|----------|--------------|------|---------|------------------|-------|----------|
| 4,691,268 | A * | 9/1987 | Benson | | 362/223 | 8,068,283 | B2 * | 11/2011 | Tomczyk | | 359/619 |
| D315,422 | S | 3/1991 | Claytor et al. | | | 8,111,353 | B2 * | 2/2012 | Ogasawara et al. | ..... | 349/64 |
| 5,526,190 | A * | 6/1996 | Hubble et al. | ..... | 359/719 | 8,142,041 | B2 * | 3/2012 | Liao et al. | ..... | 362/97.1 |
| 5,724,758 | A * | 3/1998 | Gulick, Jr. | ..... | 40/454 | 8,177,408 | B1 * | 5/2012 | Coleman | ..... | 362/615 |
| 5,870,224 | A * | 2/1999 | Saitoh et al. | ..... | 359/456 | 8,182,131 | B2 * | 5/2012 | Shim et al. | ..... | 362/625 |
| D429,895 | S | 8/2000 | Bravenec et al. | | | 8,220,978 | B2 * | 7/2012 | Shiau et al. | ..... | 362/607 |
| 6,177,953 | B1 * | 1/2001 | Vachette et al. | ..... | 348/59 | 2003/0090804 | A1 * | 5/2003 | Kotchick | ..... | 359/619 |
| 6,574,047 | B2 * | 6/2003 | Hawver | ..... | 359/626 | 2003/0184993 | A1 * | 10/2003 | Yamada | ..... | 362/31 |
| D499,835 | S | 12/2004 | Yu et al. | | | 2005/0001537 | A1 * | 1/2005 | West et al. | ..... | 313/500 |
| 6,876,408 | B2 * | 4/2005 | Yamaguchi | ..... | 349/57 | 2005/0046321 | A1 * | 3/2005 | Suga et al. | ..... | 313/112 |
| D517,725 | S | 3/2006 | Egawa et al. | | | 2005/0099815 | A1 * | 5/2005 | Kim et al. | ..... | 362/339 |
| 7,121,709 | B2 * | 10/2006 | Shinohara et al. | ..... | 362/606 | 2005/0105282 | A1 * | 5/2005 | Yu et al. | ..... | 362/31 |
| 7,239,444 | B2 * | 7/2007 | Mizuno et al. | ..... | 359/443 | 2006/0198144 | A1 * | 9/2006 | Miyairi et al. | ..... | 362/257 |
| D569,543 | S | 5/2008 | Toda | | | 2007/0002452 | A1 * | 1/2007 | Munro | ..... | 359/627 |
| 7,407,317 | B2 * | 8/2008 | Lee et al. | ..... | 362/620 | 2007/0002583 | A1 * | 1/2007 | Lee et al. | ..... | 362/606 |
| 7,465,074 | B2 * | 12/2008 | Blumel | ..... | 362/335 | 2007/0076406 | A1 * | 4/2007 | Kodama et al. | ..... | 362/97 |
| 7,556,393 | B2 * | 7/2009 | Onishi et al. | ..... | 362/97.1 | 2008/0123352 | A1 * | 5/2008 | Maeda et al. | ..... | 362/341 |
| 7,635,200 | B2 * | 12/2009 | Atsushi | ..... | 362/244 | 2008/0225526 | A1 * | 9/2008 | Yoshizawa et al. | ..... | 362/294 |
| D608,806 | S | 1/2010 | Chern et al. | | | 2008/0232132 | A1 * | 9/2008 | Graf et al. | ..... | 362/608 |
| D608,807 | S | 1/2010 | Chern et al. | | | 2008/0239204 | A1 * | 10/2008 | Lee et al. | ..... | 349/65 |
| D609,260 | S | 2/2010 | Chern et al. | | | 2008/0316603 | A1 * | 12/2008 | Jang et al. | ..... | 359/599 |
| D611,077 | S * | 3/2010 | Chern et al. | ..... | D16/101 | 2009/0059124 | A1 * | 3/2009 | Kim | ..... | 349/64 |
| D616,478 | S | 5/2010 | Wei et al. | | | 2009/0059128 | A1 * | 3/2009 | Han et al. | ..... | 349/65 |
| 7,744,235 | B2 * | 6/2010 | Horikoshi et al. | ..... | 362/97.4 | 2009/0067177 | A1 * | 3/2009 | Kung | ..... | 362/309 |
| D623,674 | S | 9/2010 | Wei et al. | | | 2009/0128914 | A1 * | 5/2009 | Lee et al. | ..... | 359/599 |
| 7,887,221 | B2 * | 2/2011 | Lor et al. | ..... | 362/339 | 2009/0161385 | A1 * | 6/2009 | Parker et al. | ..... | 362/618 |
| 7,990,490 | B2 * | 8/2011 | Lee et al. | ..... | 349/62 | 2009/0231859 | A1 * | 9/2009 | Yeh et al. | ..... | 362/339 |
| 7,997,748 | B2 * | 8/2011 | Lai et al. | ..... | 362/97.3 | 2010/0007821 | A1 * | 1/2010 | Choi et al. | ..... | 349/64 |
| D644,779 | S * | 9/2011 | Jabra et al. | ..... | D26/120 | 2011/0069249 | A1 * | 3/2011 | Shiau et al. | ..... | 349/62 |

* cited by examiner

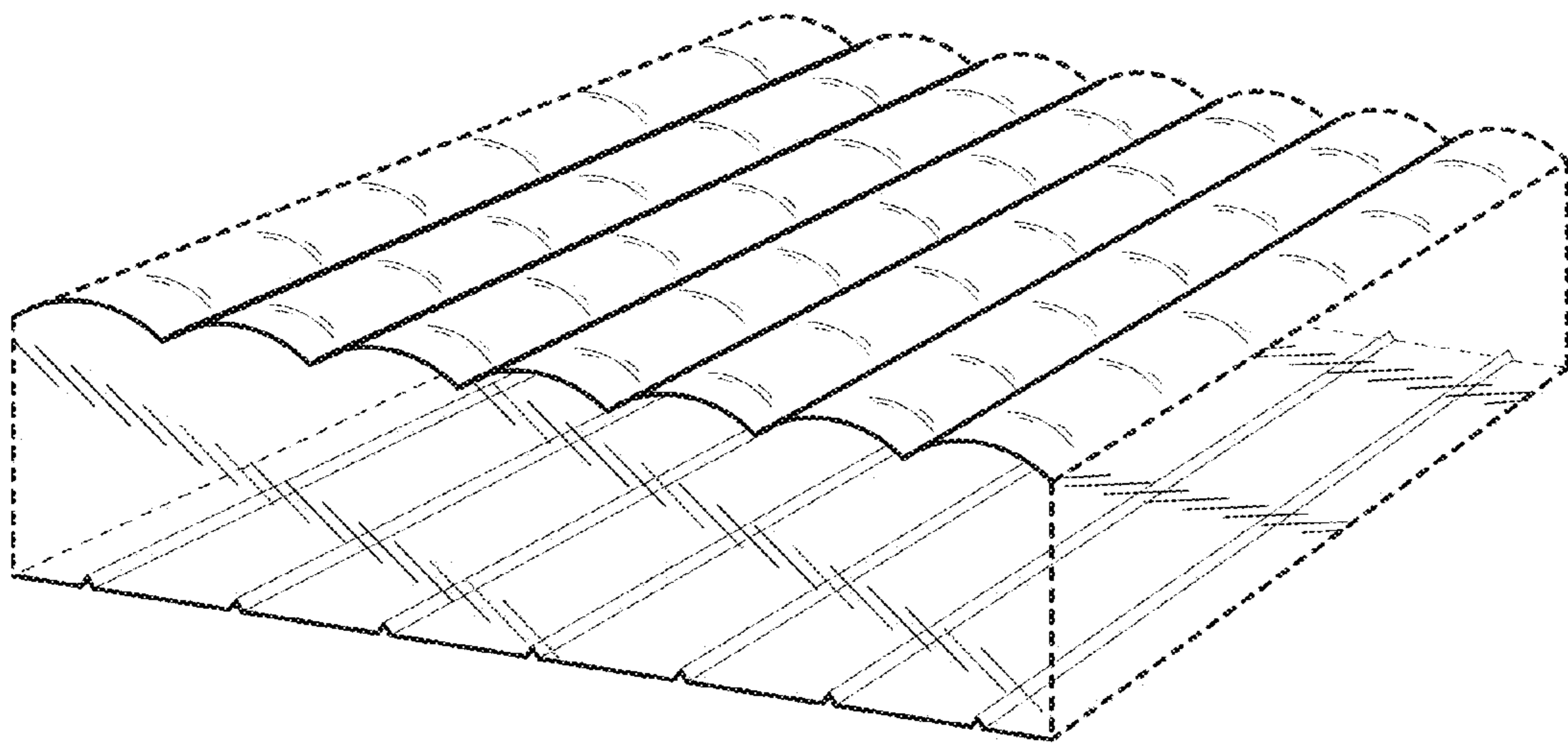


FIG. 1

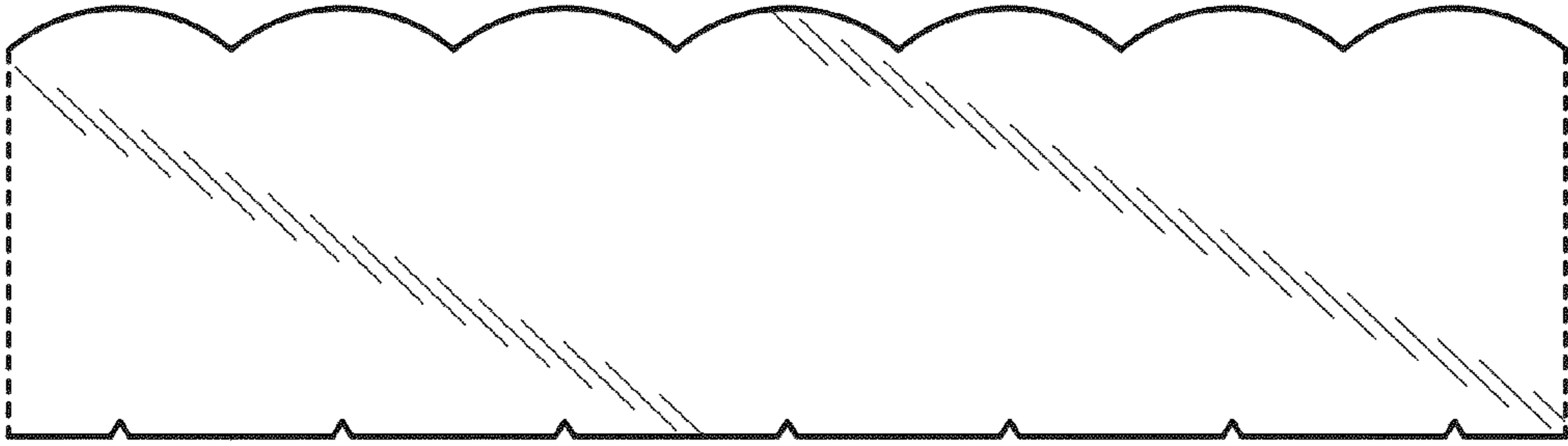


FIG. 2

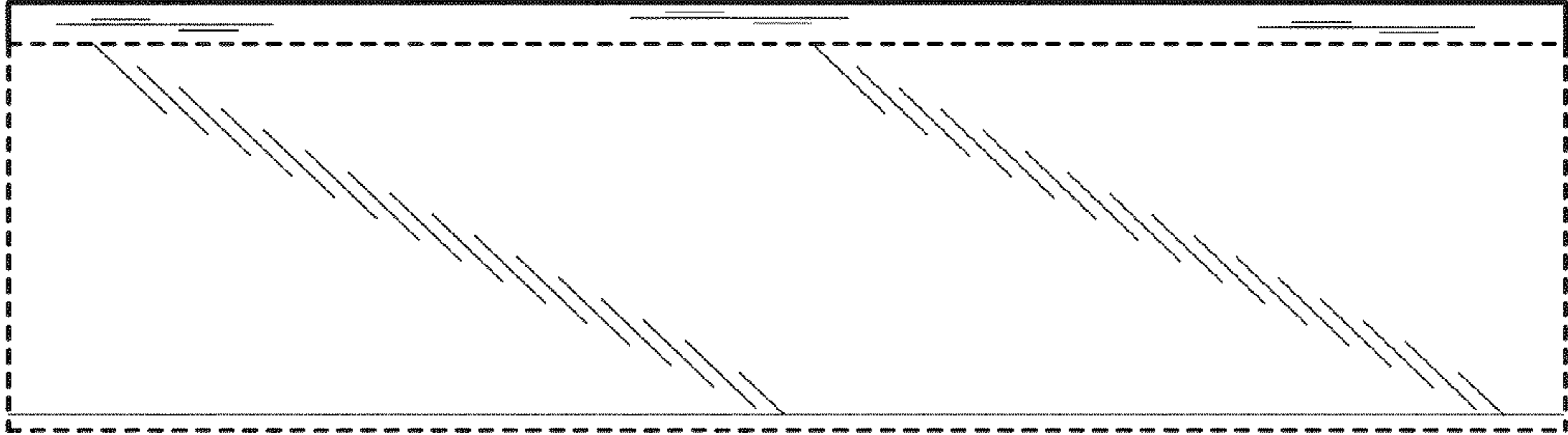


FIG. 3

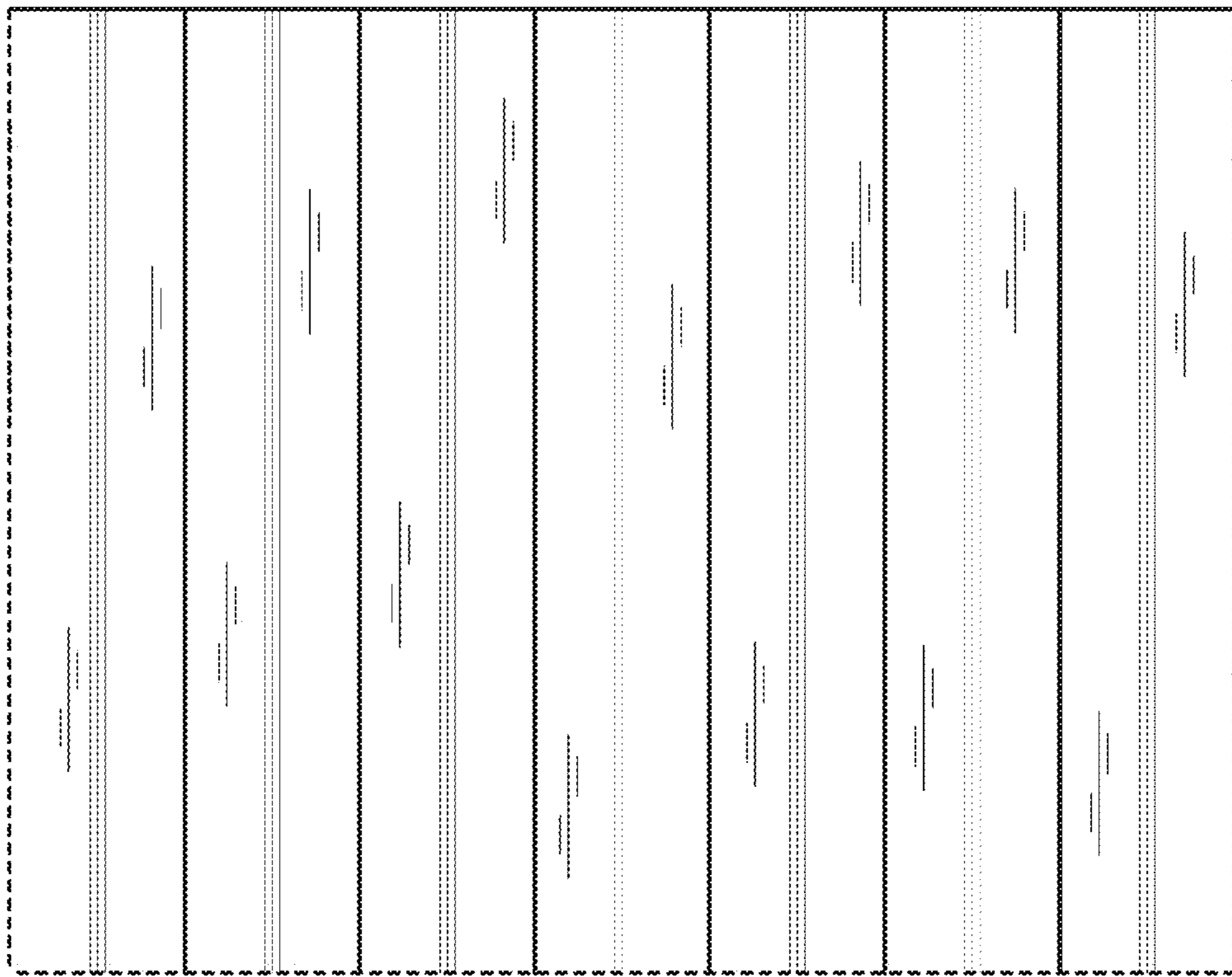


FIG. 4

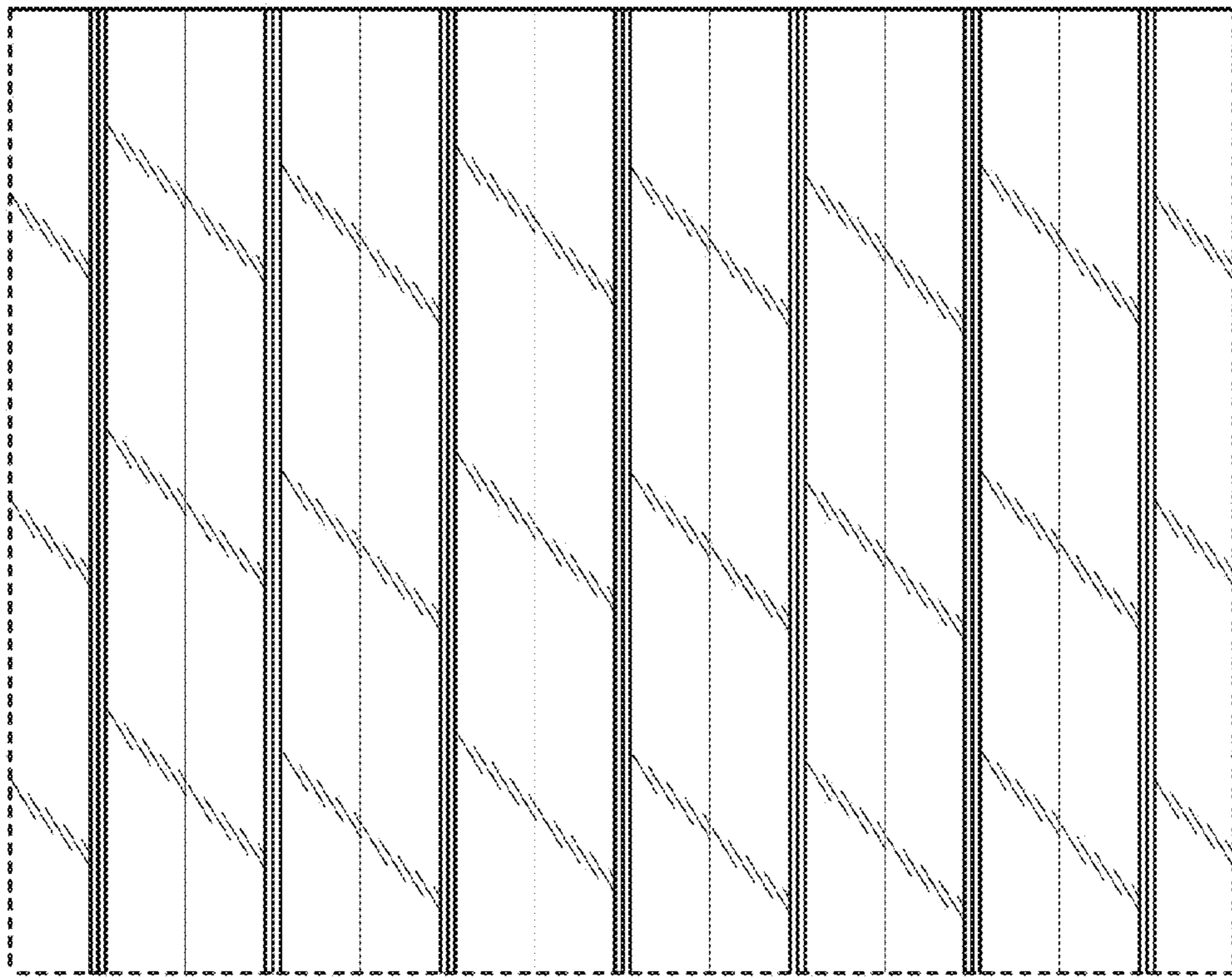


FIG. 5

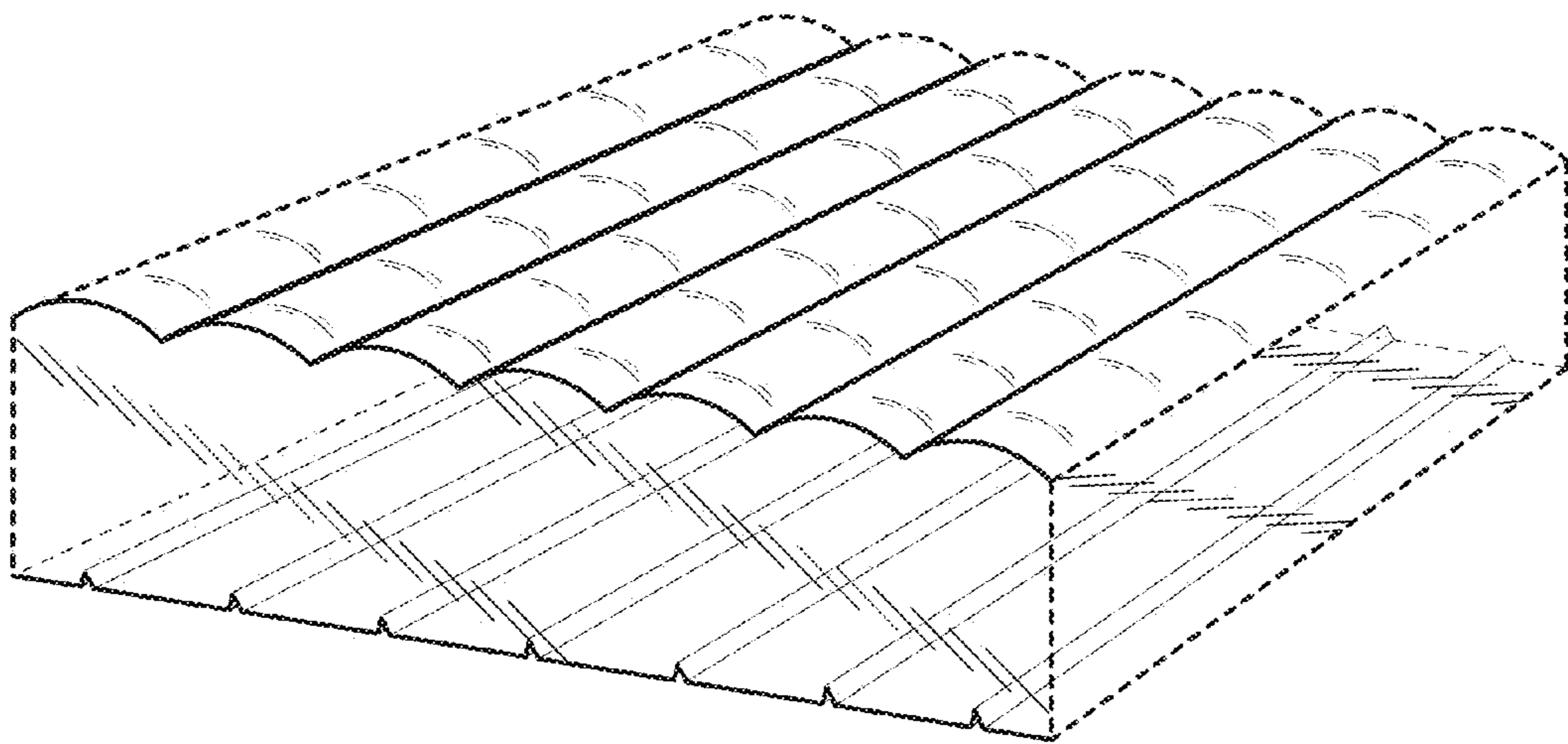


FIG. 6

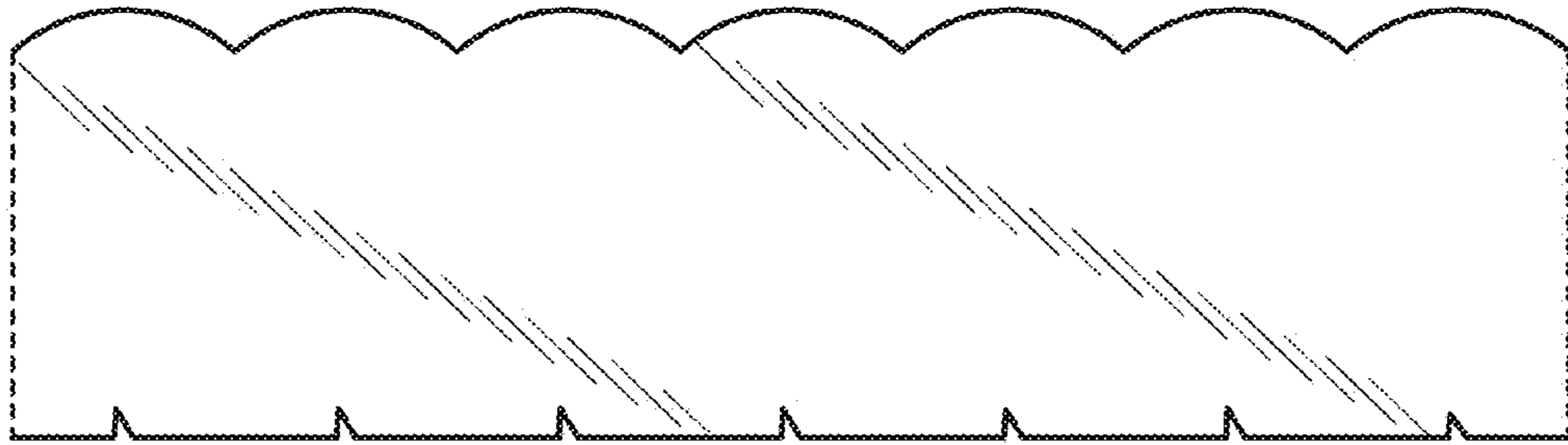


FIG. 7

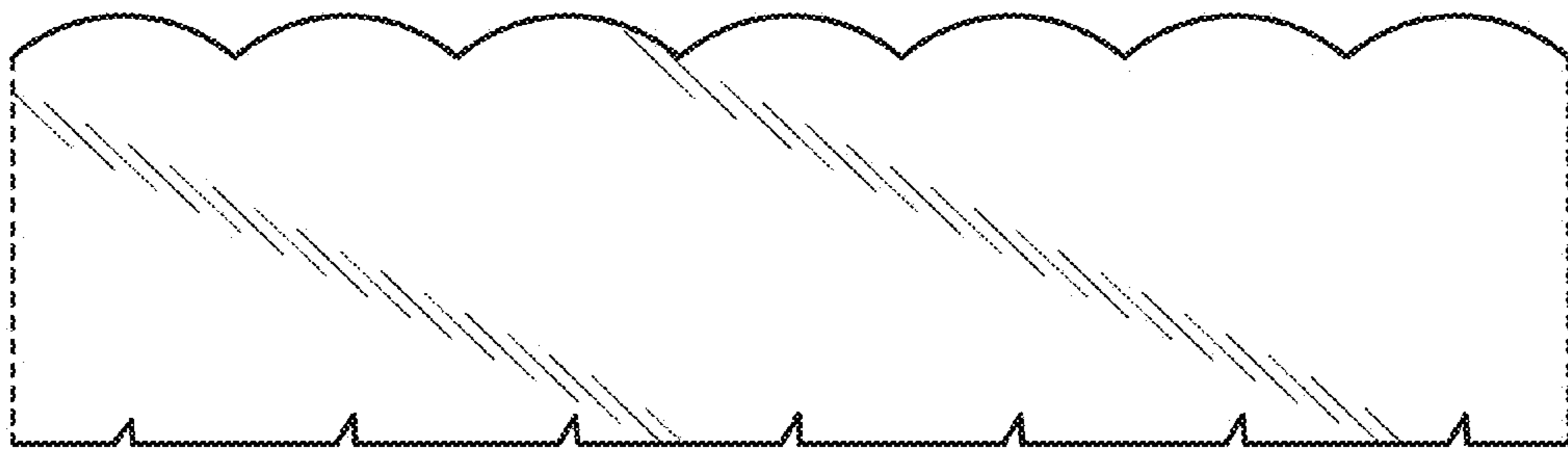


FIG. 8

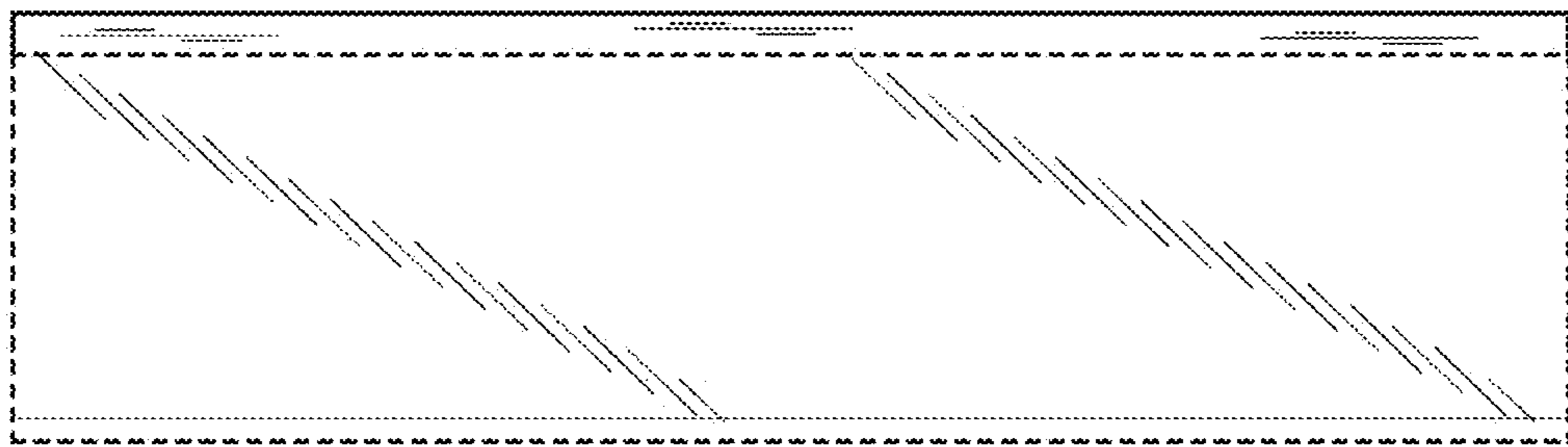


FIG. 9

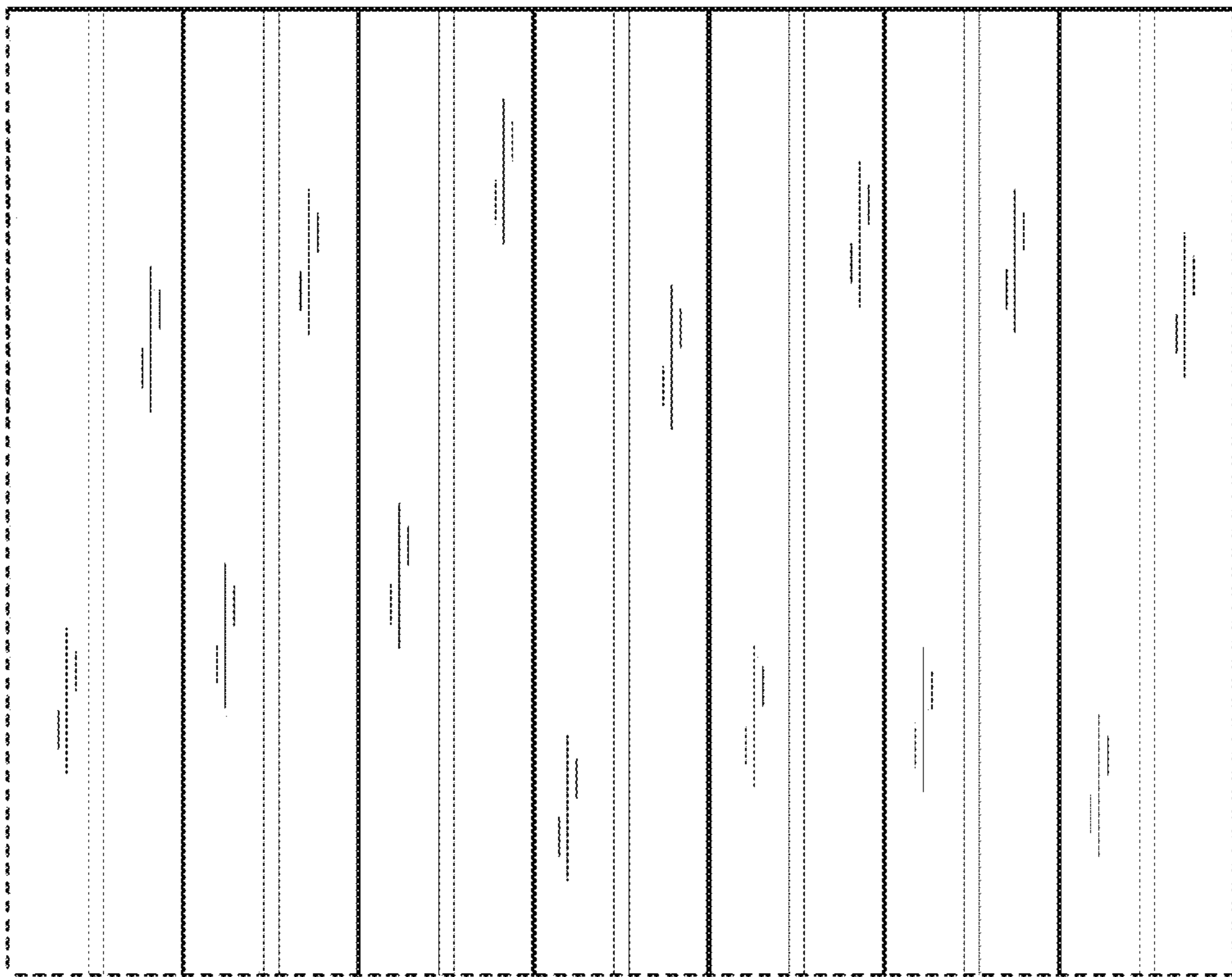


FIG. 10

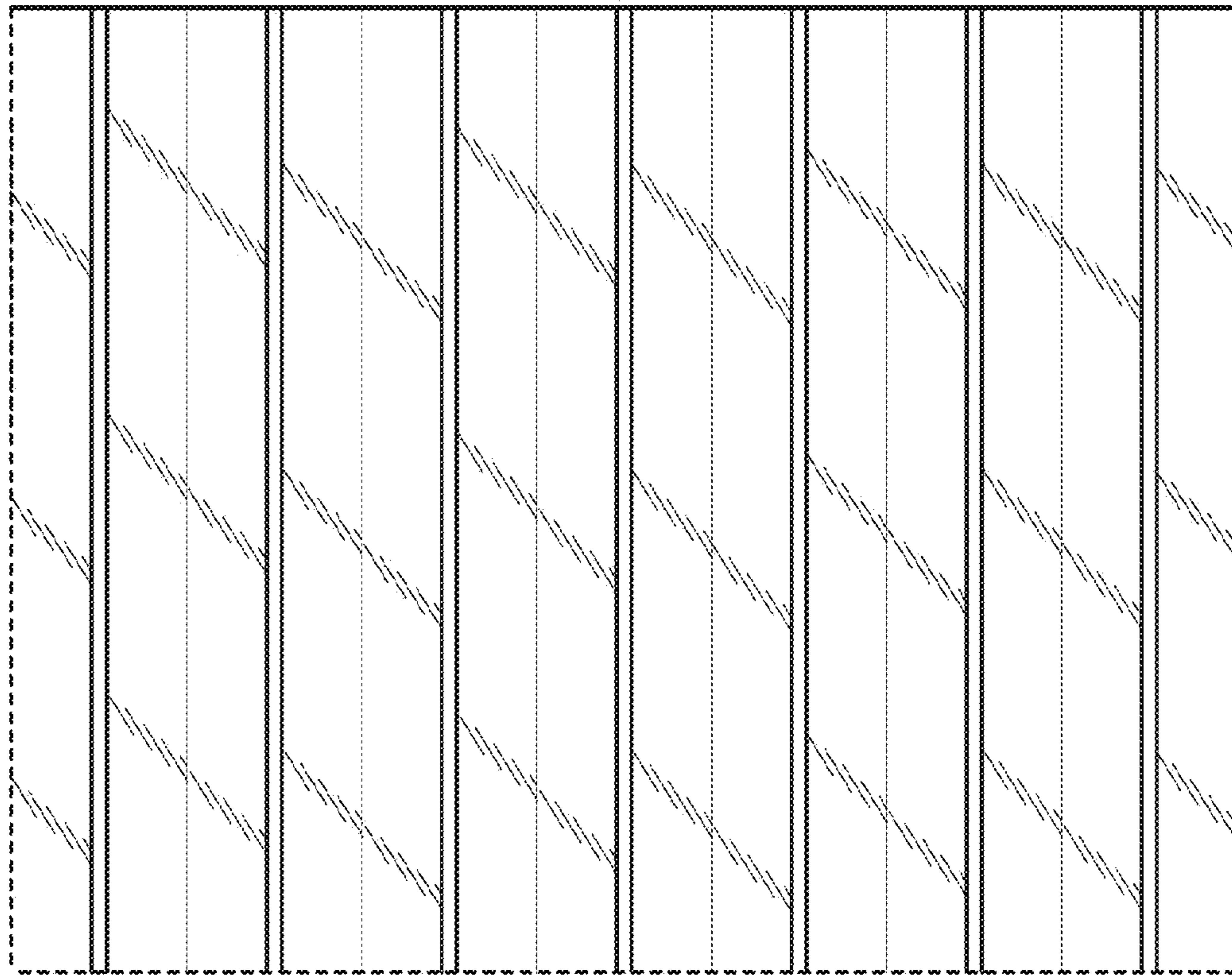


FIG. 11