



US00D833405S

(12) **United States Design Patent** (10) **Patent No.:** **US D833,405 S**
Rock et al. (45) **Date of Patent:** **** Nov. 13, 2018**

(54) **SERRATED LIGHT ENGINE AND CIRCUIT BOARD**

(71) Applicants: **Ty Rock**, Beverly, MA (US); **Chaim Becerra**, Danvers, MA (US); **Biju Antony**, Lynnfield, MA (US)

(72) Inventors: **Ty Rock**, Beverly, MA (US); **Chaim Becerra**, Danvers, MA (US); **Biju Antony**, Lynnfield, MA (US)

(73) Assignee: **OSRAM SYLVANIA Inc.**, Wilmington, MA (US)

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

(21) Appl. No.: **29/606,533**

(22) Filed: **Jun. 5, 2017**

Related U.S. Application Data

(62) Division of application No. 29/519,316, filed on Mar. 4, 2015, now Pat. No. Des. 788,723.

(51) **LOC (11) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/182**

(58) **Field of Classification Search**

USPC D13/182
CPC .. H05K 3/30; H05K 3/34; H05K 3/36; H05K 3/361; H05K 3/363; H05K 3/40; H05K 3/4007; H05K 3/403; H05K 3/4092; H05K 3/42; H05K 3/4046; H05K 3/429; H05K 1/00; H05K 1/0213; H05K 1/0215; H05K 1/11; H05K 1/0393; H05K 1/118; H05K 1/111; H05K 1/112; H05K 1/0206; H05K 1/182

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,072,734	A *	1/1963	Fox	H02B 1/043 174/254
D254,687	S *	4/1980	Fadler	D13/182
D255,351	S *	6/1980	Pettijohn	D13/182
D319,045	S *	8/1991	Hasegawa	D13/182
D319,629	S *	9/1991	Hasegawa	D13/182
D319,814	S *	9/1991	Hasegawa	D13/182
6,163,042	A *	12/2000	Mizushima	H01L 27/0207 257/202
D457,146	S *	5/2002	Yamamoto	D13/182
D485,536	S *	1/2004	Dang	D13/182
D543,160	S *	5/2007	Mitsui	D13/182
D566,060	S *	4/2008	Ohsawa	D13/182

(Continued)

Primary Examiner — Elizabeth J Oswecki

(74) *Attorney, Agent, or Firm* — Shaun P. Montana

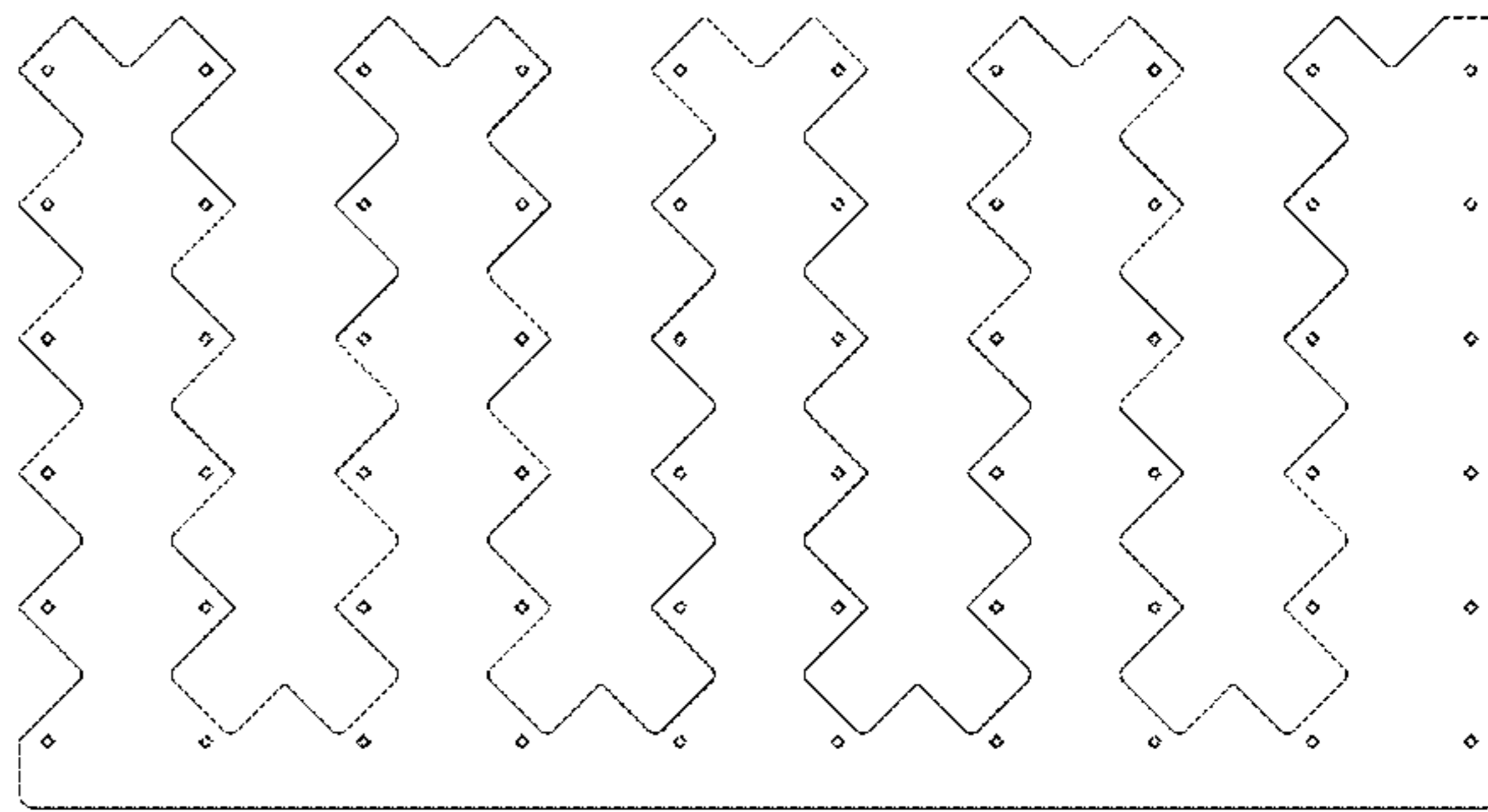
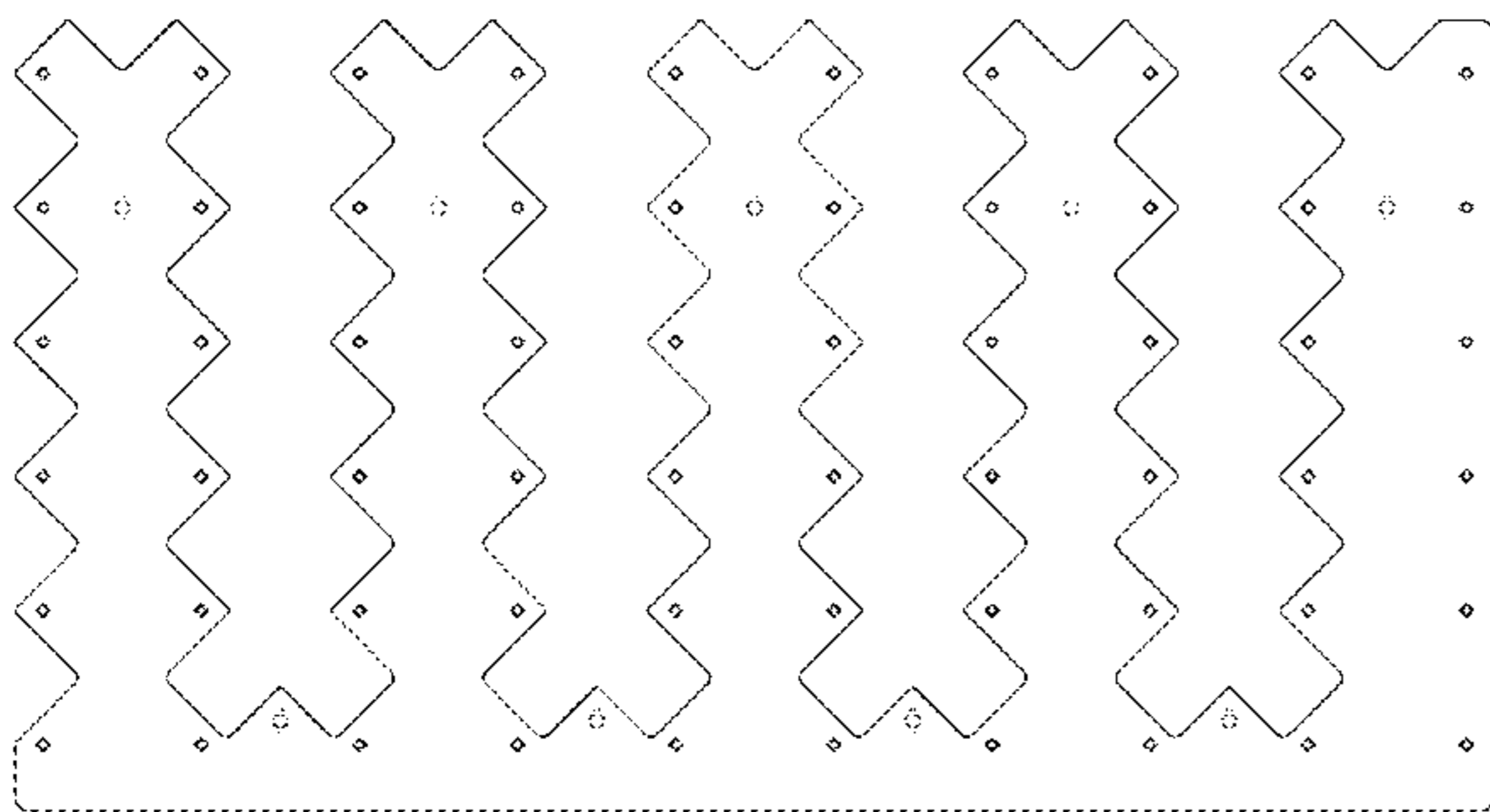
(57) **CLAIM**

The ornamental design for a serrated light engine and circuit board, as shown and described.

DESCRIPTION

FIG. 1 is a top plan view of a first embodiment of a serrated light engine and circuit board, showing our new design; FIG. 2 is a bottom plan view thereof; FIG. 3 is a left side perspective view thereof; FIG. 4 is a right side perspective view thereof; FIG. 5 is a left side view thereof; FIG. 6 is a front view thereof. FIG. 7 is a top plan view of a second embodiment of a serrated light engine and circuit board, showing our new design; FIG. 8 is a bottom plan view thereof; FIG. 9 is a left side perspective view thereof; and, FIG. 10 is a right side perspective view thereof. The broken-line disclosure in the views is understood to represent portions of the article in which the claimed design is embodied, but which form no part of the claimed design.

1 Claim, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D577,691	S	*	9/2008	Ohsawa	.....	D13/182
D605,613	S	*	12/2009	Carter	.....	D13/182
D613,690	S	*	4/2010	Kuriki	.....	D13/133
D615,927	S	*	5/2010	Kuriki	.....	D13/133
D639,756	S	*	6/2011	Greene, Jr.	.....	D13/182
D642,546	S	*	8/2011	Greene, Jr.	.....	D13/182
D701,182	S	*	3/2014	Plant	.....	D13/182
D716,743	S	*	11/2014	Hu	.....	D13/182
D757,666	S	*	5/2016	Yokoo	.....	D13/182
D764,423	S	*	8/2016	Dempster	.....	D13/182
D788,723	S	*	6/2017	Rock	.....	D13/182
2004/0192082	A1	*	9/2004	Wagner	.....	H05K 1/0283 439/67

* cited by examiner

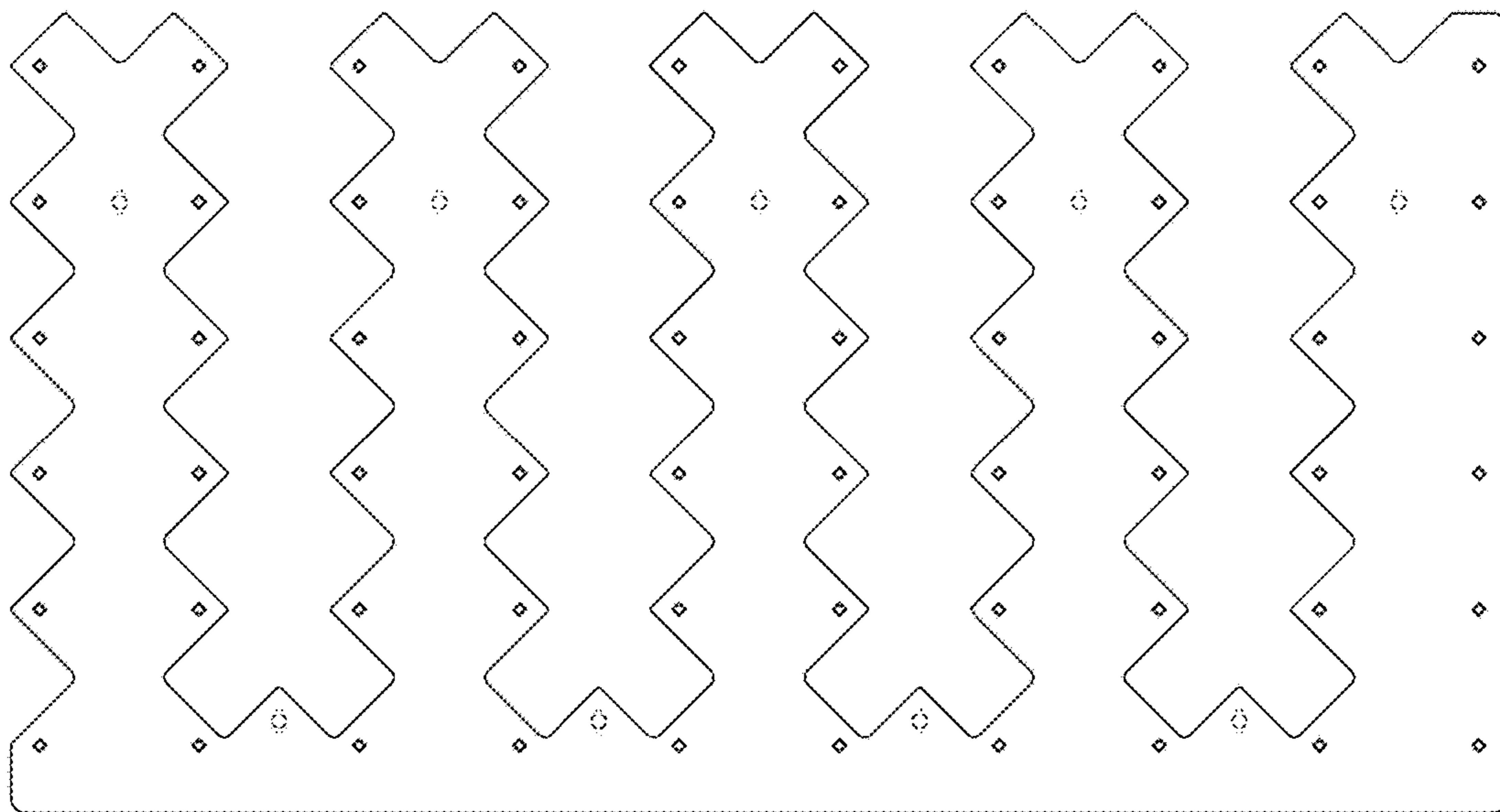


FIG. 1

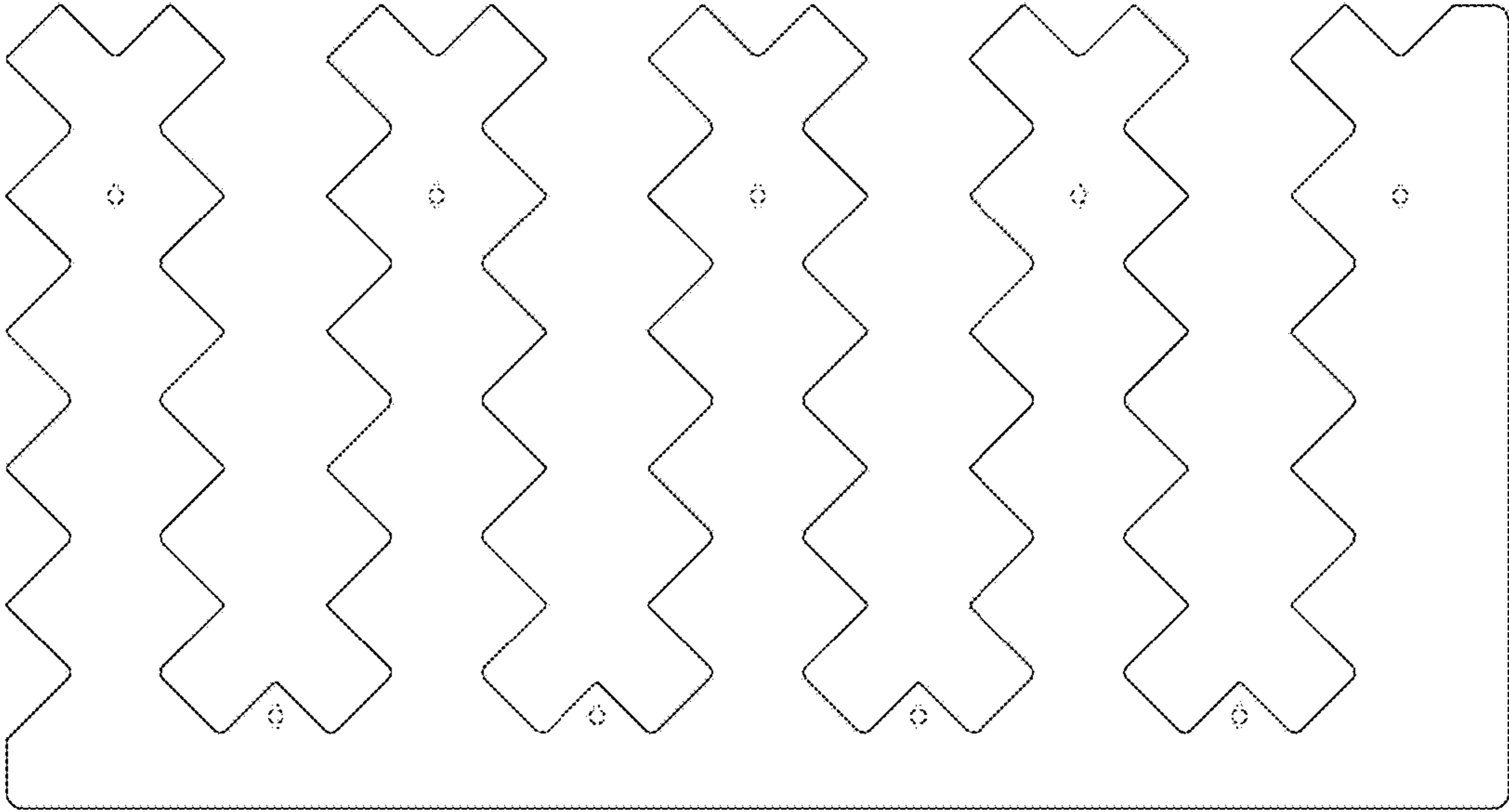


FIG. 2

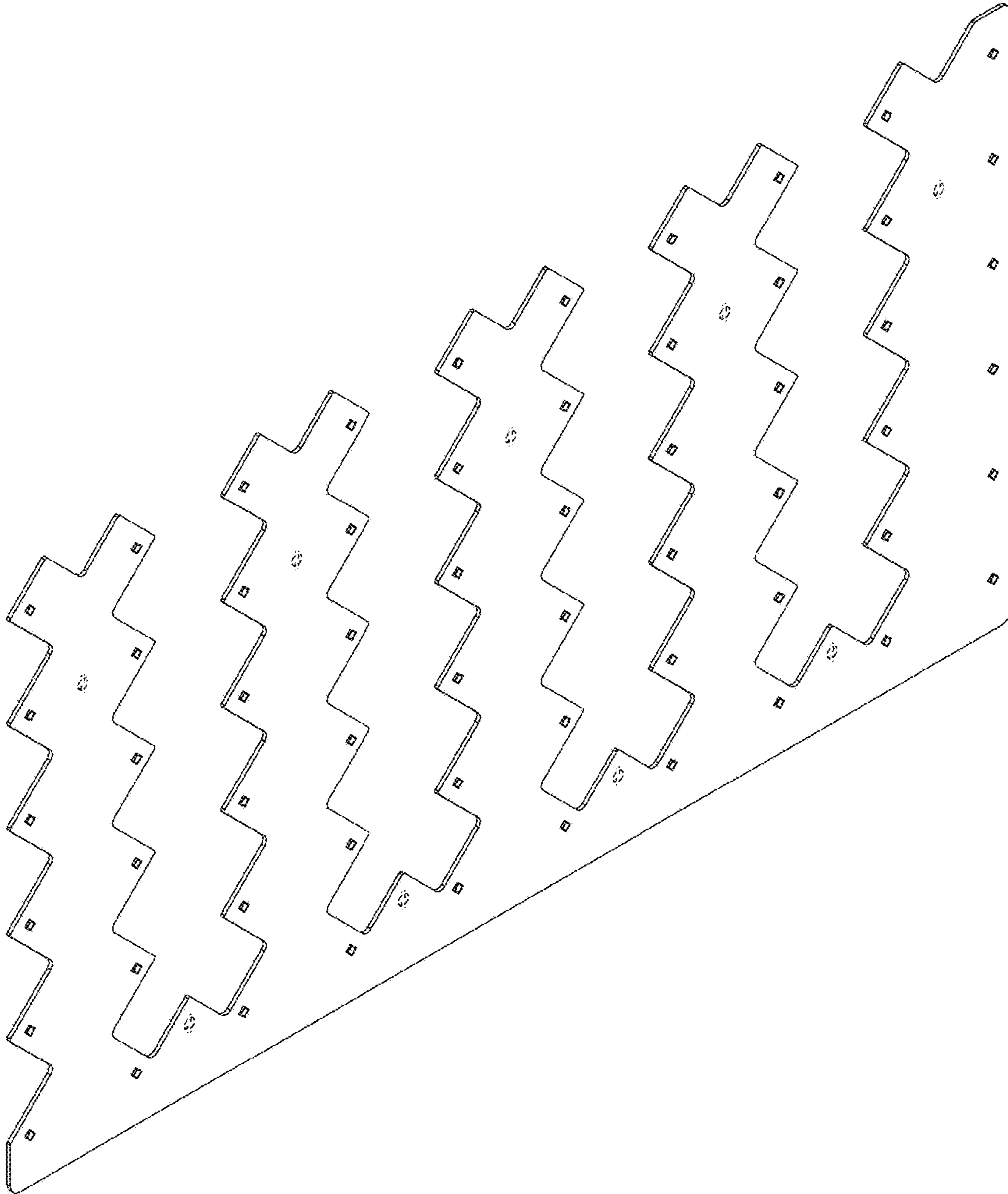


FIG. 3

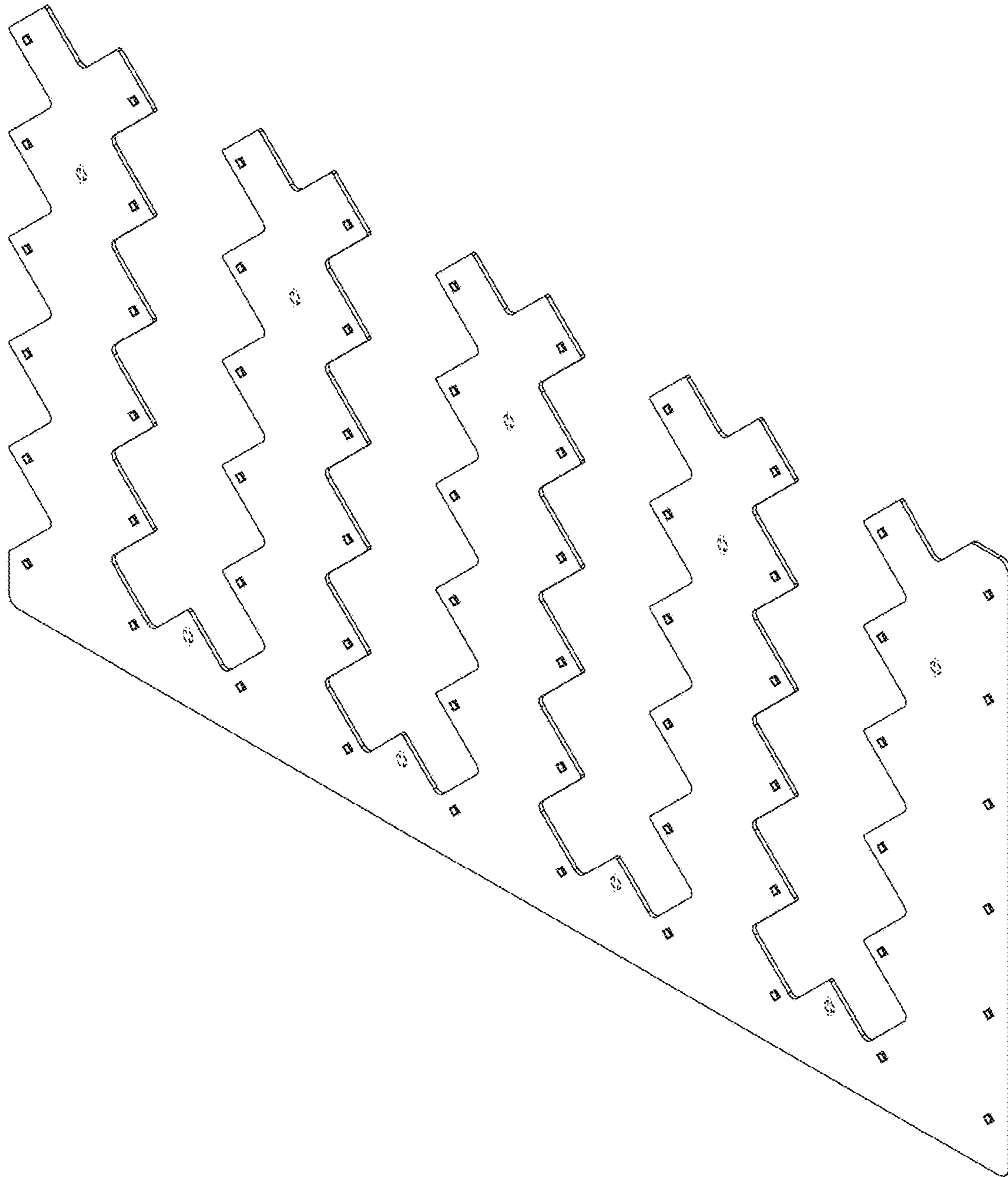


FIG. 4



FIG. 5

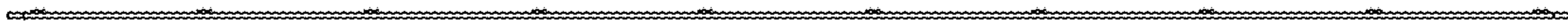


FIG. 6

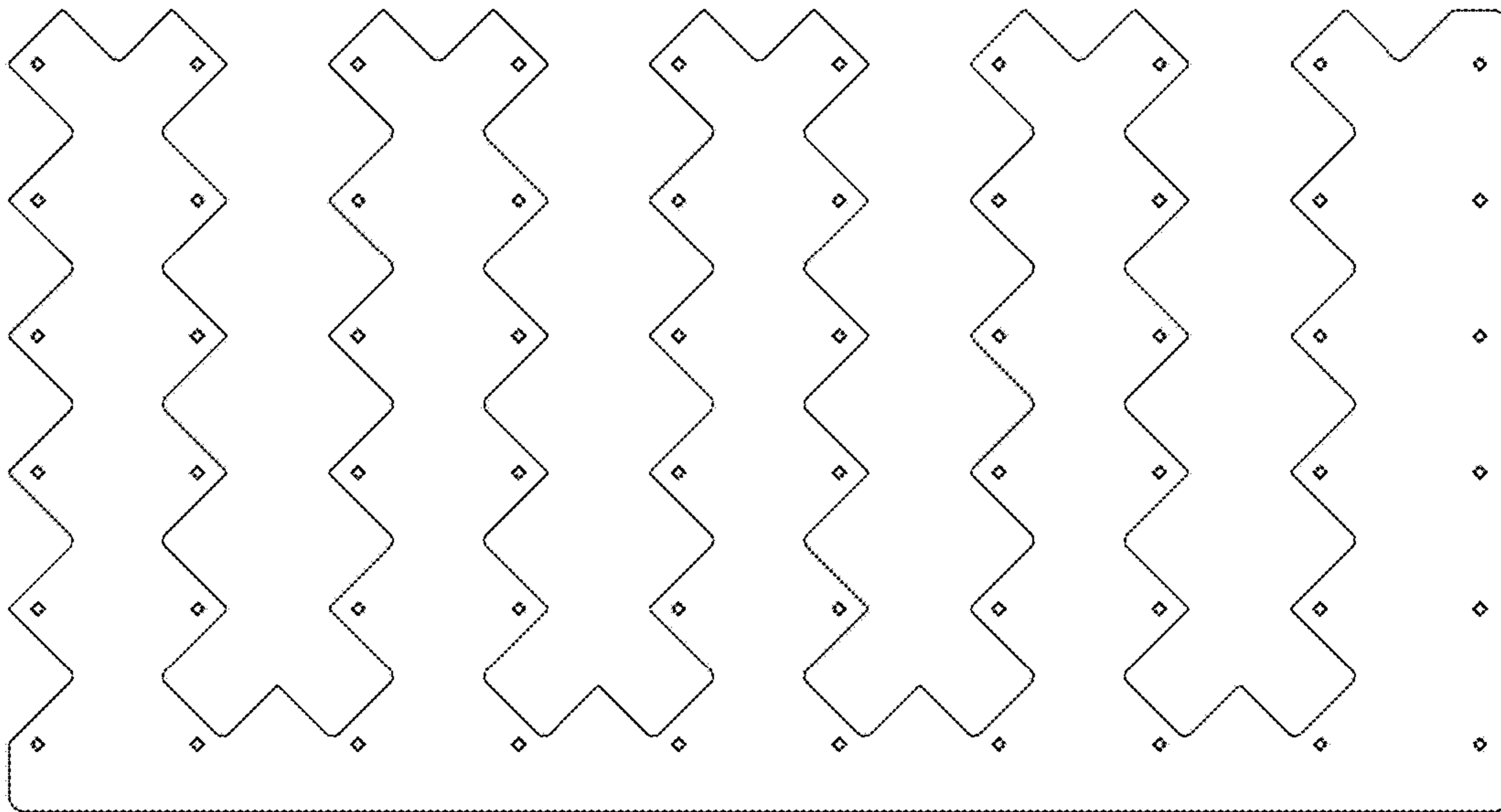


FIG. 7

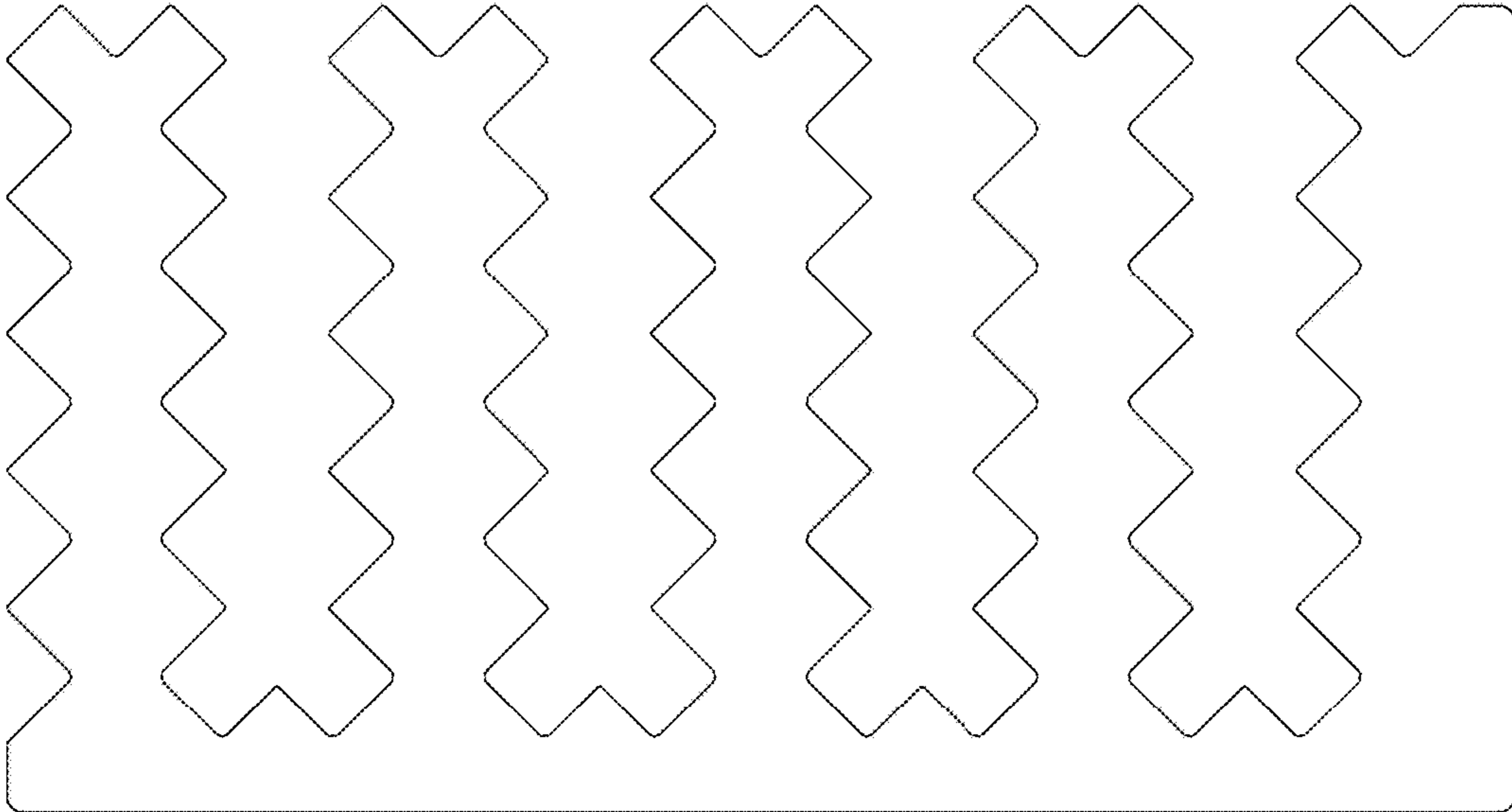


FIG. 8

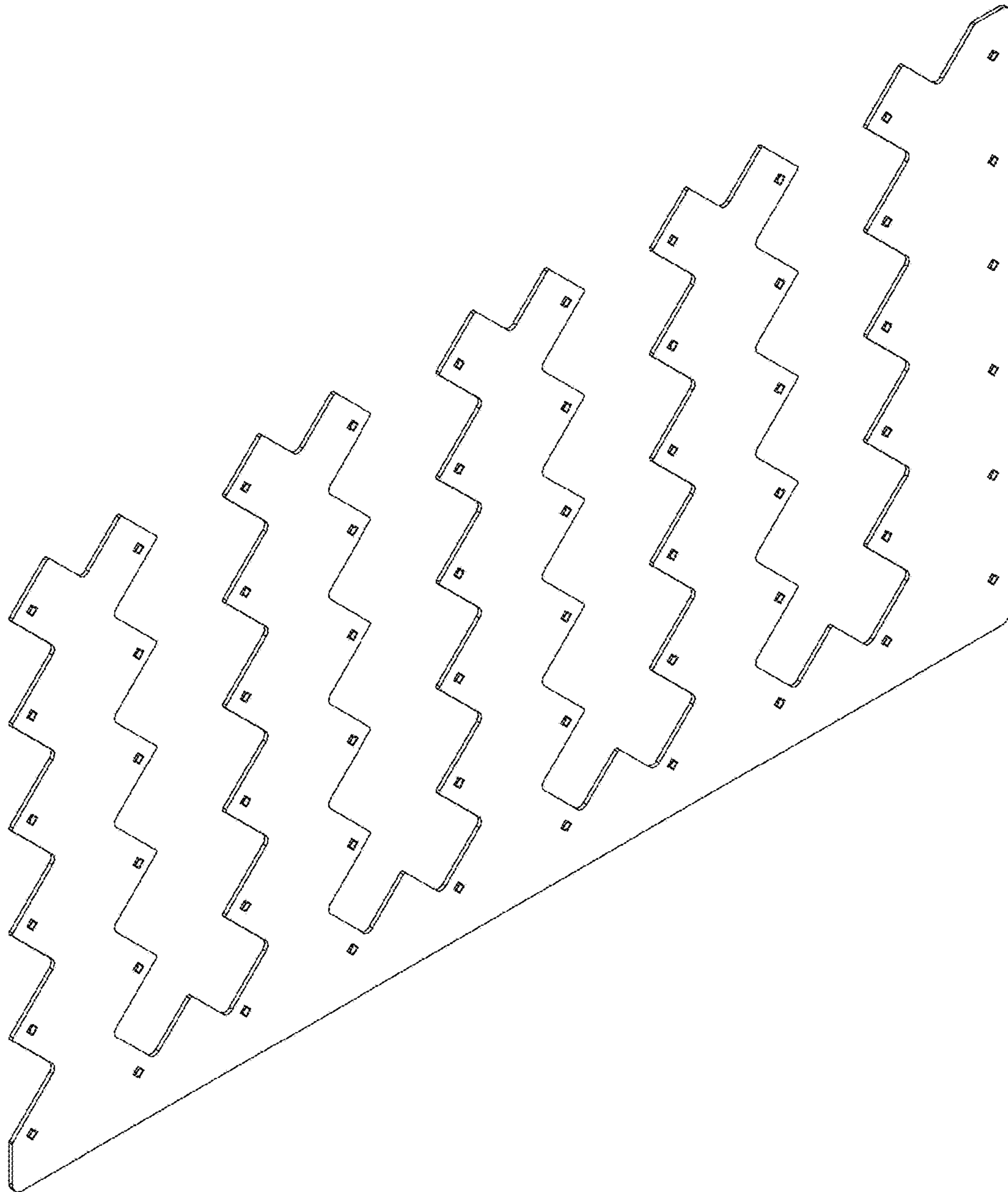


FIG. 9

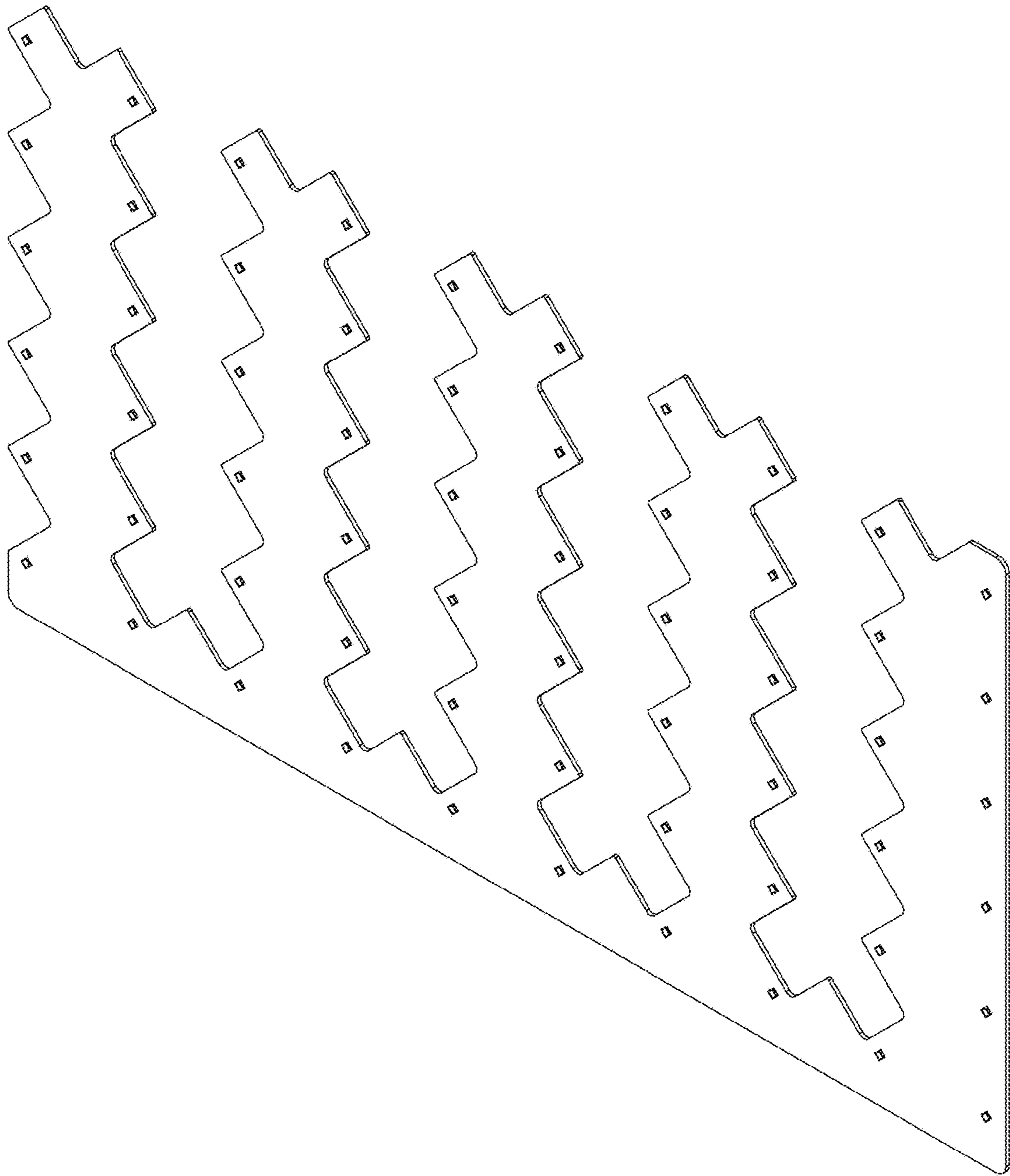


FIG. 10