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

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- (54) **RATCHET PAWL**
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Calabasas, CA (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/730,106**
- (22) Filed: **Apr. 1, 2020**

- 5,913,954 A 6/1999 Arnold et al.
- 5,921,158 A 7/1999 Slusar et al.
- 6,044,731 A 4/2000 Hsieh
- 6,125,722 A 10/2000 Hopper, Jr. et al.
- 6,164,167 A * 12/2000 Chen B25B 13/463
81/63
- 6,230,591 B1 5/2001 Ling et al.
- 6,253,647 B1 7/2001 Eggert et al.
- 6,282,992 B1 9/2001 Hu
- 6,382,052 B1 * 5/2002 Chen B25B 13/463
81/63
- 6,415,691 B1 * 7/2002 Chen B25B 13/463
81/63
- 6,435,063 B1 * 8/2002 Chen B25B 13/463
81/63.2
- 6,450,066 B1 9/2002 Hu
- 6,457,387 B1 10/2002 Hu

(Continued)

Related U.S. Application Data

- (63) Continuation of application No. 16/588,490, filed on
Sep. 30, 2019.
- (51) **LOC (13) Cl.** **08-05**
- (52) **U.S. Cl.**
USPC **D8/25**
- (58) **Field of Classification Search**
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D15/29, 139
CPC ... B25B 23/0007; B25B 13/463; B25B 13/04;
B25B 13/467
See application file for complete search history.

FOREIGN PATENT DOCUMENTS

TW 1551403 10/2016

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(57) **CLAIM**

The ornamental design for a ratchet pawl, as shown and described.

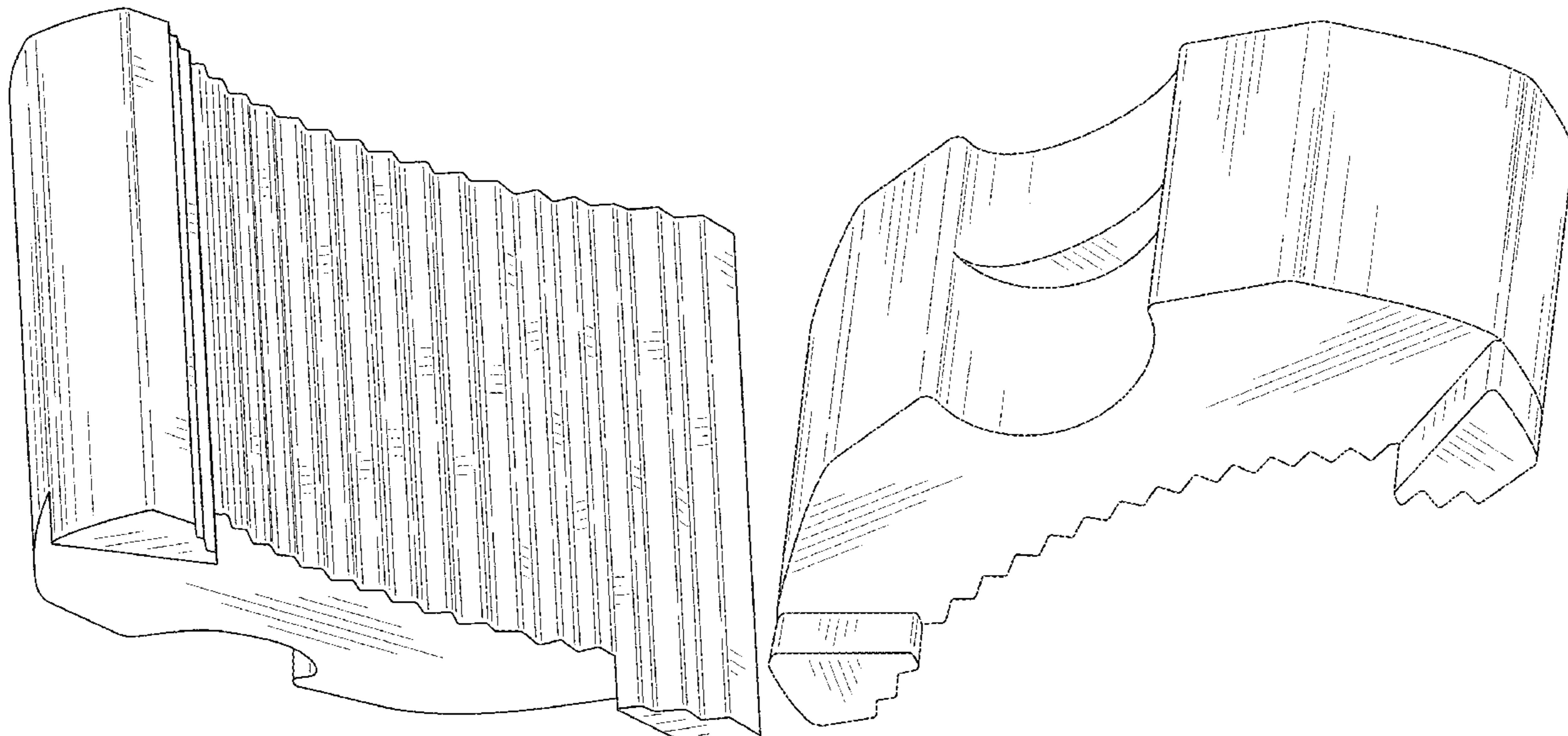
DESCRIPTION

FIG. 1 is a front perspective view of a ratchet pawl showing my new design;
 FIG. 2 is a front elevation view thereof;
 FIG. 3 is a rear elevation view thereof;
 FIG. 4 is a left side elevation view thereof, wherein the right side elevation view is a mirror image thereof;
 FIG. 5 is a top plan view thereof; and
 FIG. 6 is a bottom plan view thereof; and,
 FIG. 7 is a rear perspective view thereof.

1 Claim, 4 Drawing Sheets

(56) **References Cited**
U.S. PATENT DOCUMENTS

- 2,957,377 A 10/1960 Hare
- 3,265,171 A 8/1966 Kilness
- 3,436,992 A 4/1969 Over et al.
- 3,866,492 A 2/1975 Knoll
- 4,497,227 A 2/1985 Stasiak
- 4,903,554 A 2/1990 Colvin
- 4,934,220 A 6/1990 Slusar et al.
- 5,495,783 A 3/1996 Slusar et al.
- 5,533,427 A 7/1996 Chow
- 5,857,390 A 1/1999 Whiteford



(56)

References Cited

U.S. PATENT DOCUMENTS

6,457,388 B1 10/2002 Chen
6,601,477 B2 8/2003 Huang
6,629,477 B2* 10/2003 Ling B25B 13/463
81/63
6,748,824 B2* 6/2004 Chen B25B 13/463
81/177.85
6,901,824 B1* 6/2005 Chen B25B 13/463
81/121.1
6,904,832 B1* 6/2005 Chen B25B 13/463
81/63
6,918,323 B2 7/2005 Arnold et al.
7,185,566 B2 3/2007 Arnold et al.
7,444,904 B2* 11/2008 Huang B25B 13/463
192/43.2
7,987,747 B2 8/2011 Ross et al.
D680,397 S* 4/2013 Chang D8/21
8,720,308 B2 5/2014 Hopper et al.
D708,920 S* 7/2014 Lee D8/21
9,114,510 B2* 8/2015 Lee B25B 23/0007

9,545,705 B2* 1/2017 Hu B25B 13/463
9,782,873 B2* 10/2017 Chi B25B 13/463
2002/0166416 A1 11/2002 Hu
2004/0221687 A1* 11/2004 Hsien B25B 13/463
81/63.2
2005/0257649 A1* 11/2005 Chen B25B 13/463
81/60
2010/0132517 A1* 6/2010 Crawford B25B 13/461
81/63
2013/0291688 A1* 11/2013 Hu B25B 13/463
81/63.1
2014/0157959 A1* 6/2014 Yang B25B 13/461
81/63
2015/0298300 A1* 10/2015 Liu F16D 41/18
81/63
2017/0200870 A1* 7/2017 Chen H01L 33/58
2017/0282336 A1* 10/2017 Lai B25B 13/04
2017/0344206 A1* 11/2017 Noguchi G06F 3/0321
2018/0297177 A1* 10/2018 Li B25B 13/463
2018/0318986 A1* 11/2018 Weng B25B 13/463
2019/0314959 A1* 10/2019 Chen B25B 13/463

* cited by examiner

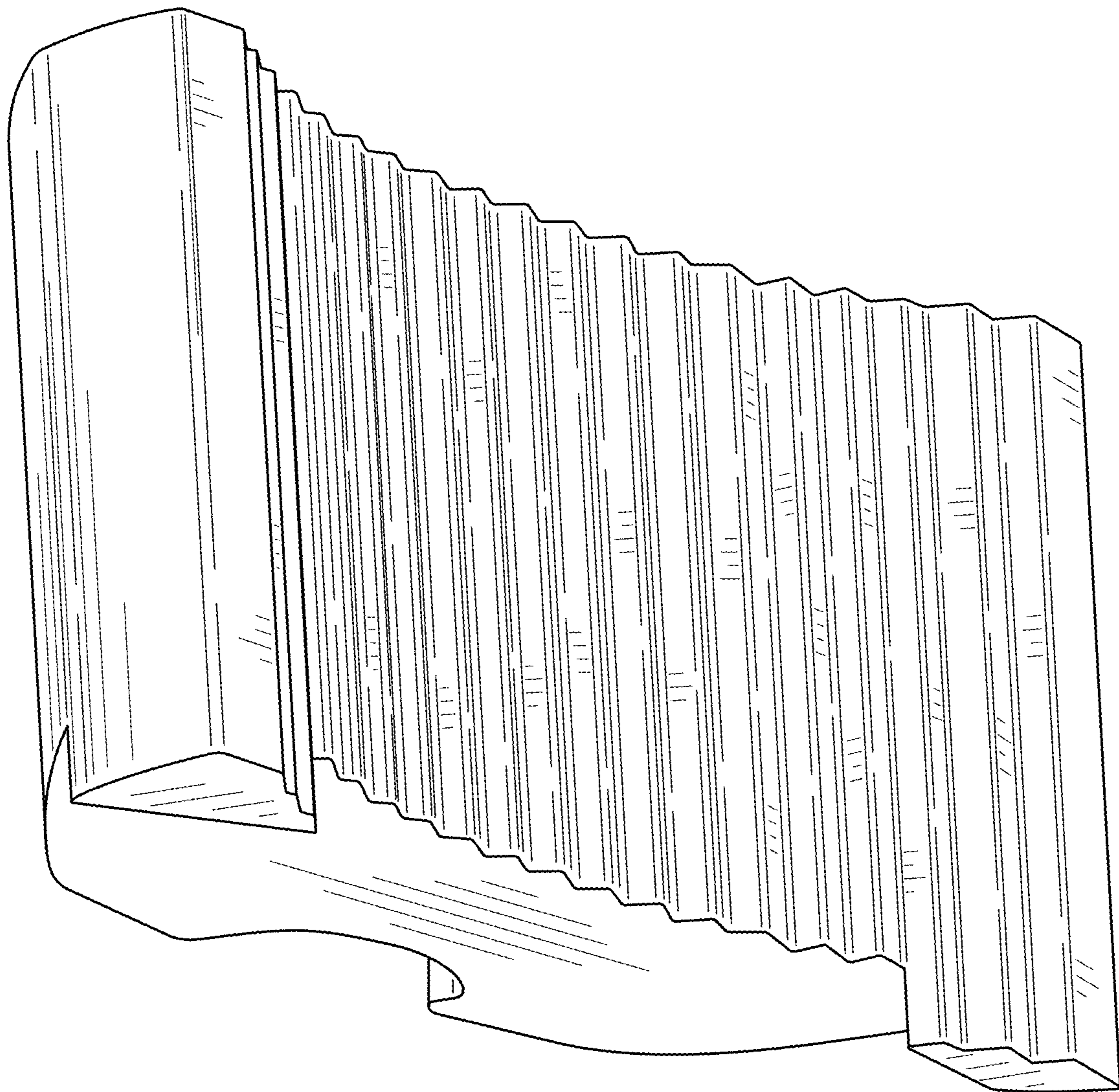


FIG. 1

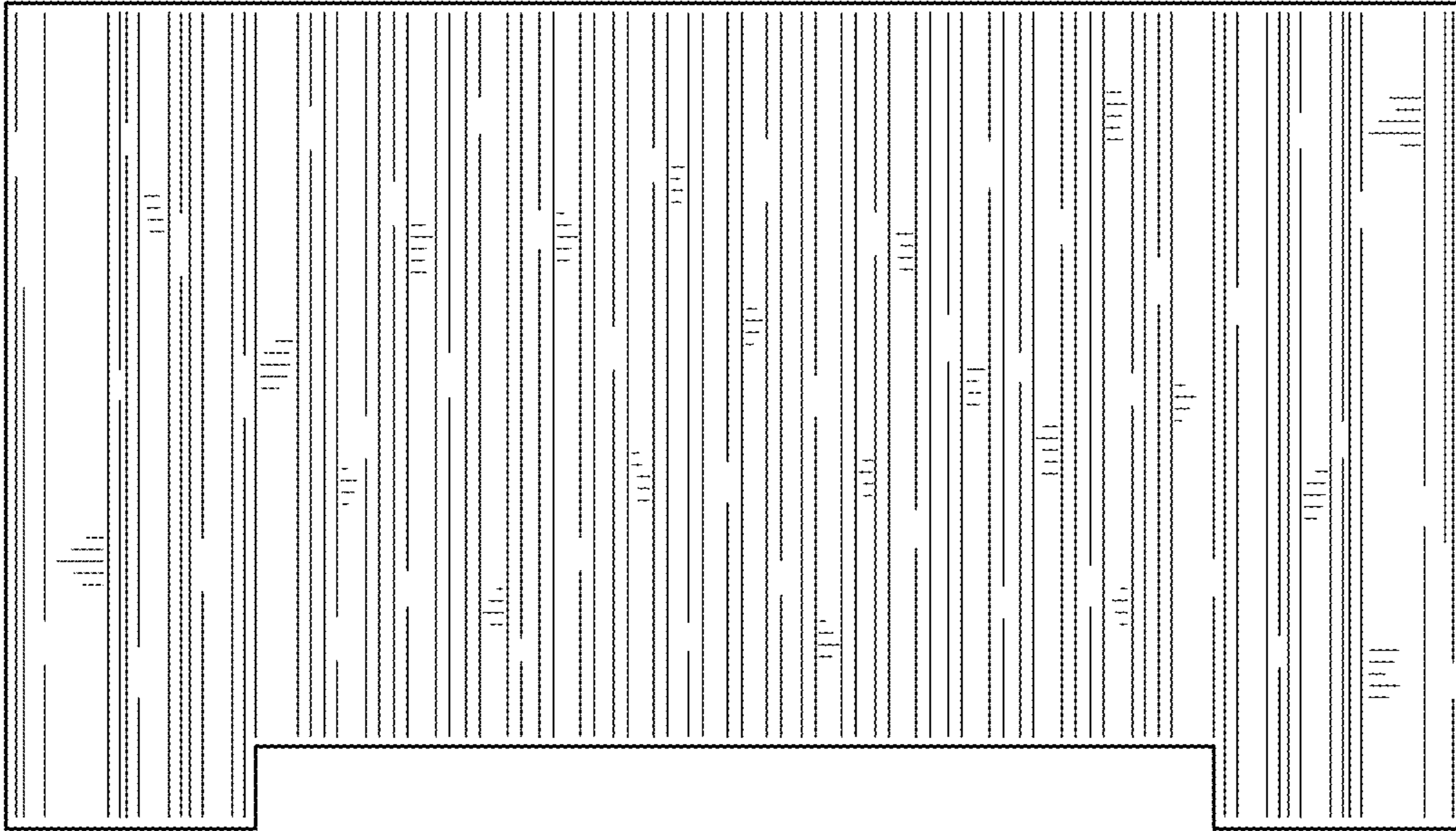


FIG. 2

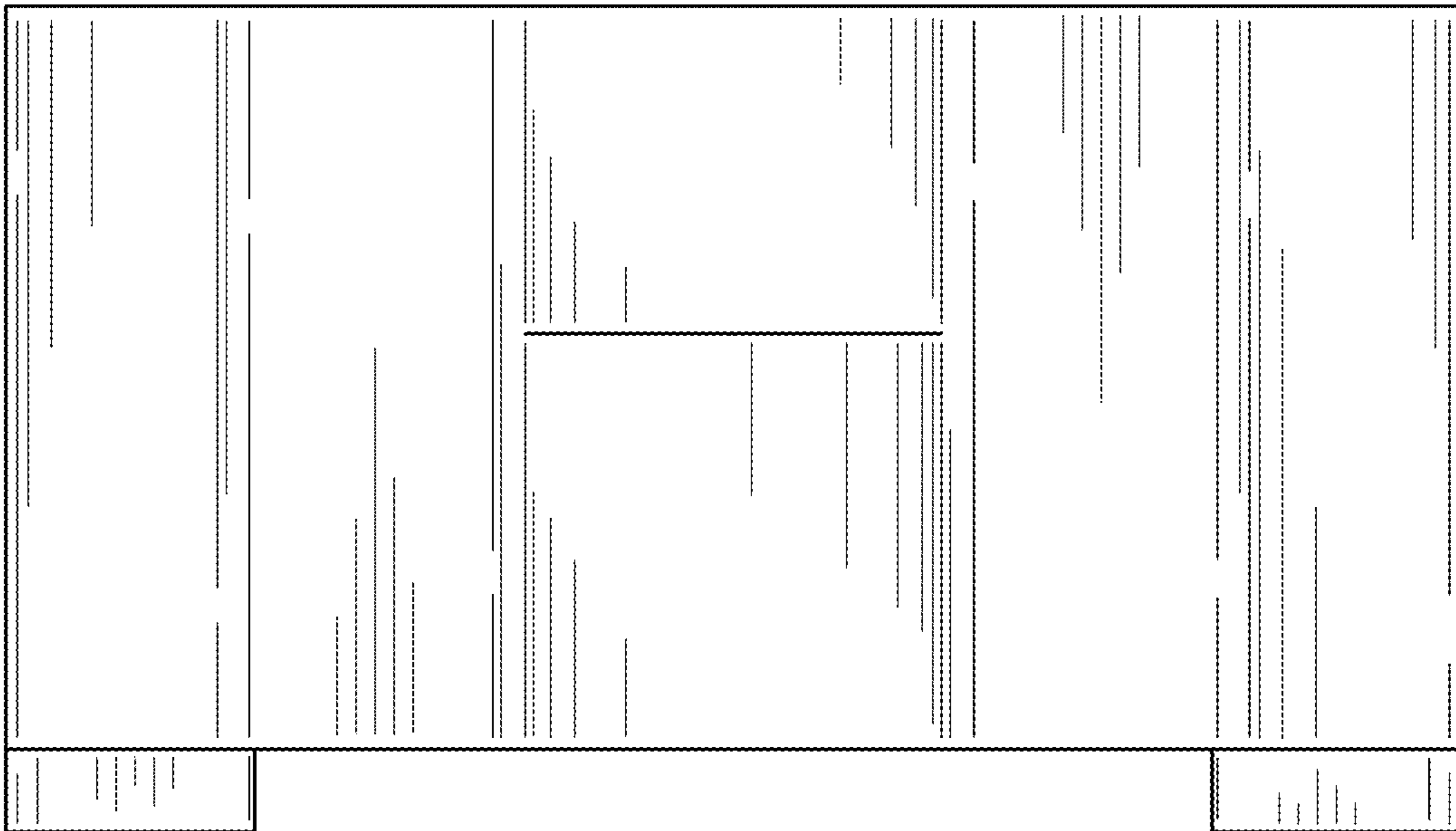


FIG. 3

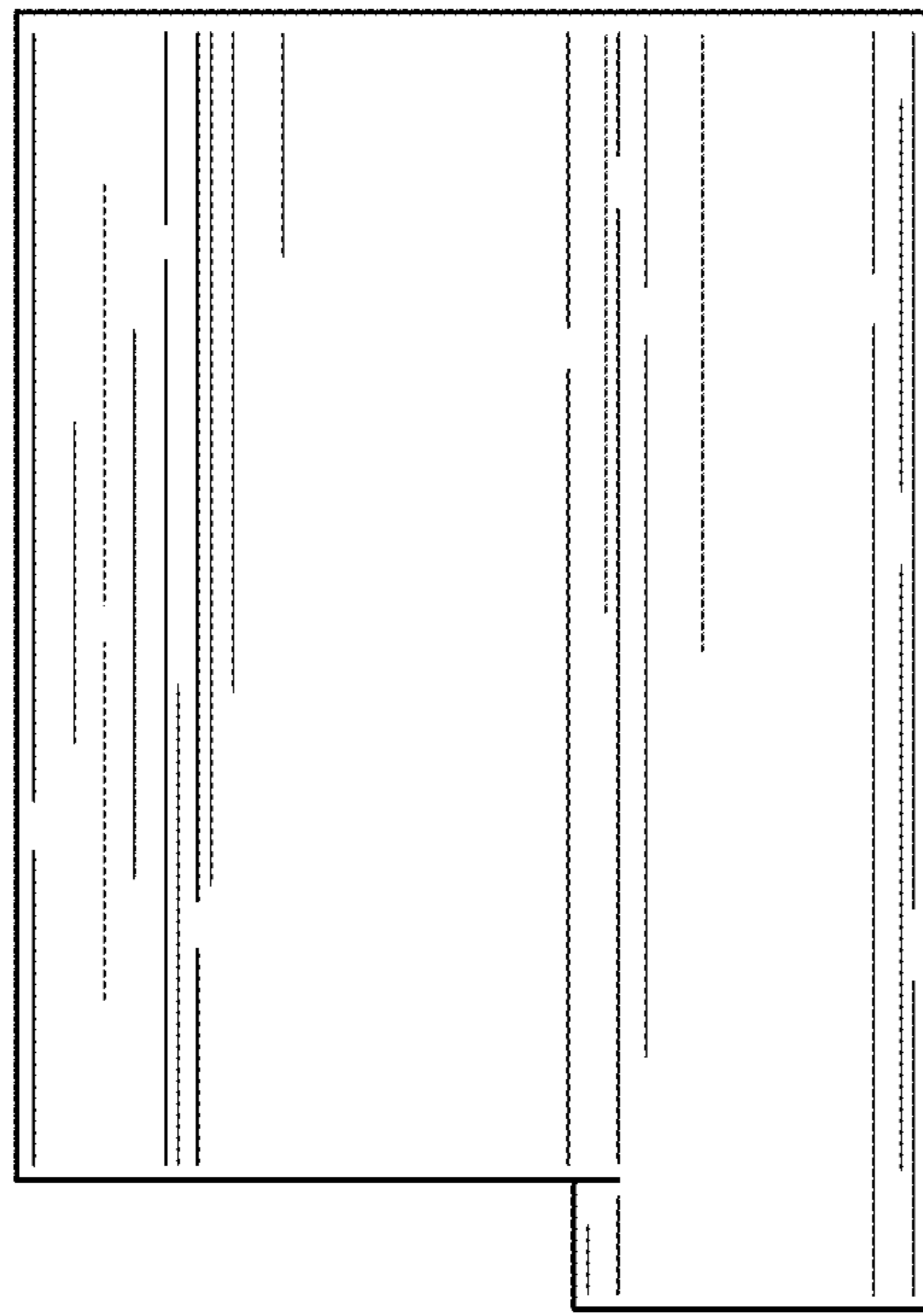


FIG. 4

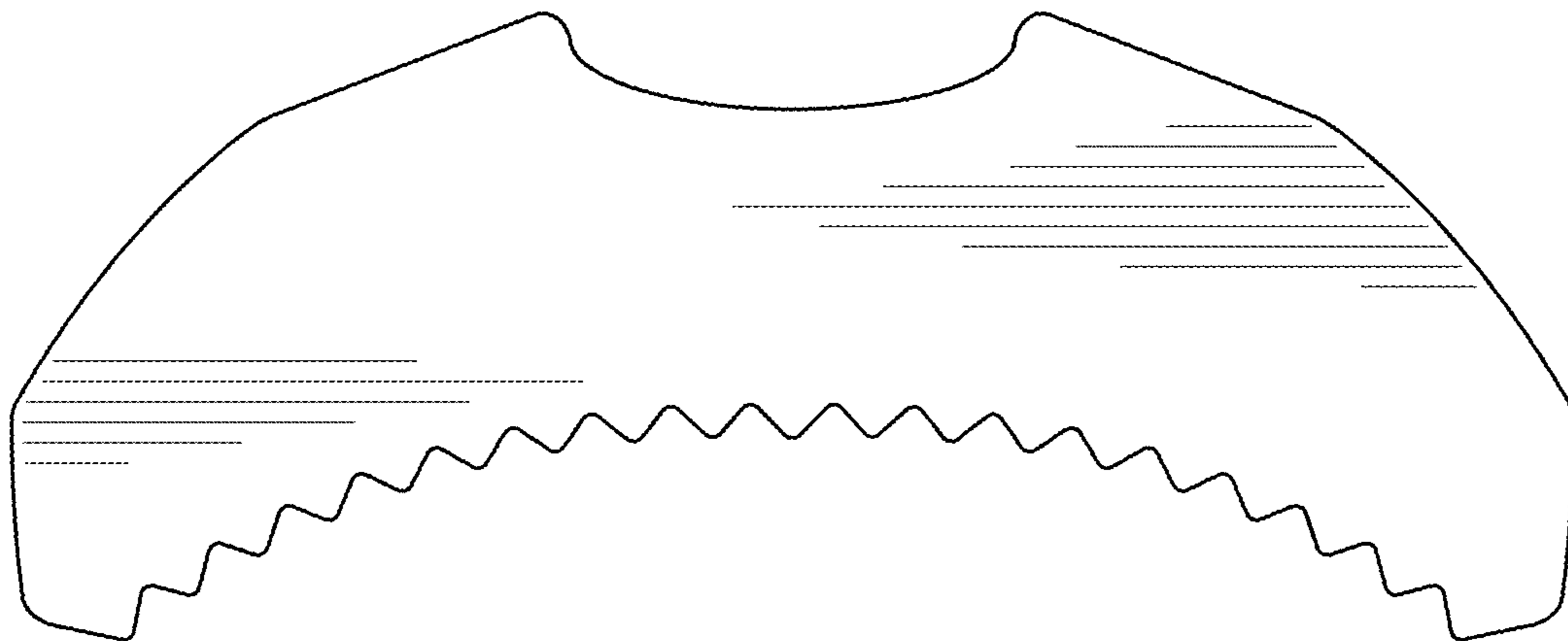


FIG. 5

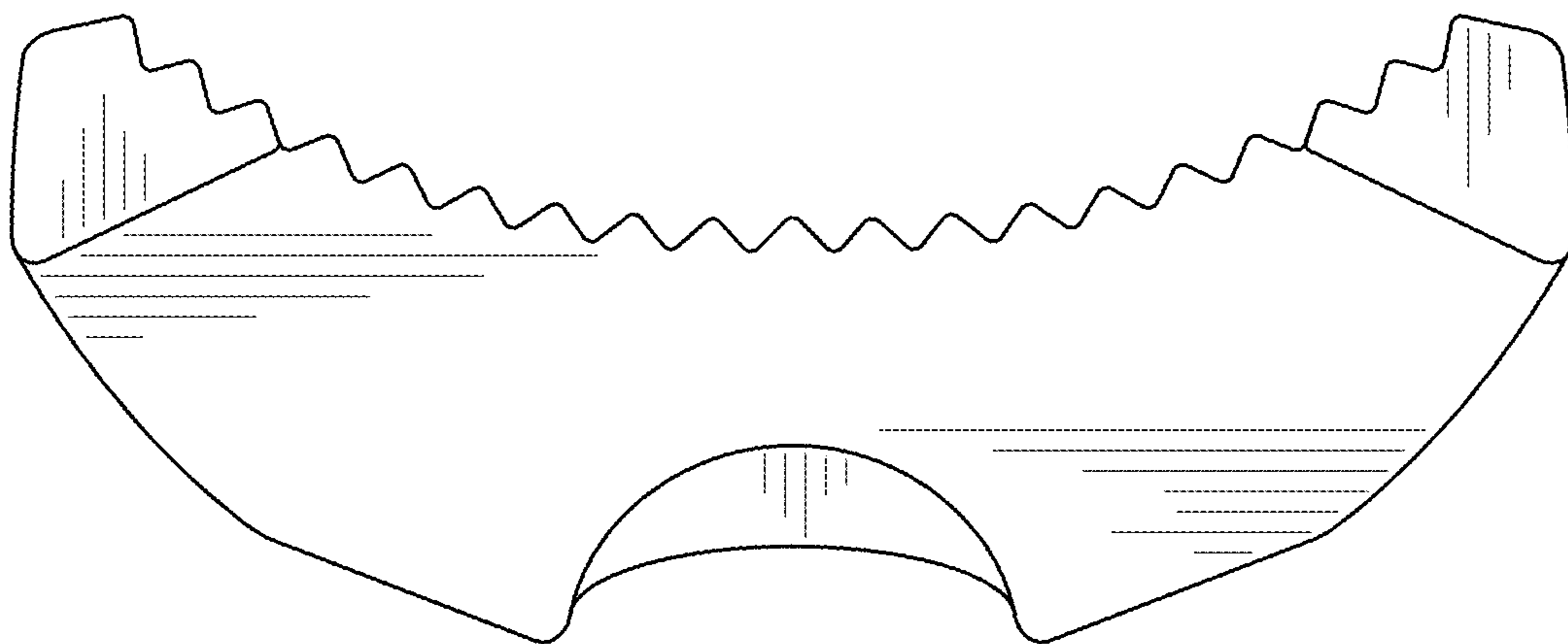


FIG. 6

