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(12) **United States Design Patent** (10) **Patent No.:** **US D881,133 S**
Buck et al. (45) **Date of Patent:** **** Apr. 14, 2020**

(54) **CONTACT WAFER**
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(73) Assignee: **SAMTEC, INC.**, New Albany, IN (US)
(**) Term: **15 Years**
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(51) **LOC (12) Cl.** **13-03**
(52) **U.S. Cl.**
USPC **D13/154**
(58) **Field of Classification Search**
USPC D13/154, 147, 123, 133, 146, 184, 199
CPC .. H01R 13/6477; H01R 12/724; H01R 13/41;
H01R 13/514; H01R 13/6315; H01R
13/646; H03H 7/38
See application file for complete search history.

D816,044 S * 4/2018 Zerebilov D13/154
D823,814 S * 7/2018 Buck D13/154
10,439,330 B2 * 10/2019 Mongold H01R 13/6315
2003/0143886 A1 7/2003 Nemoto
2005/0101176 A1 5/2005 Kachlic
2008/0166090 A1 7/2008 Kiani et al.
2009/0201658 A1 8/2009 Lemke et al.
(Continued)

FOREIGN PATENT DOCUMENTS

JP 2009-218119 A 9/2009
TW D130799 S1 9/2009
(Continued)

OTHER PUBLICATIONS

Faith, et al.; "Electrical Connector Having Latch"; International Application No. PCT/US2018/043025; filed Jul. 20, 2018.
(Continued)

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(57) **CLAIM**

The ornamental design for contact wafer, as shown and described.

DESCRIPTION

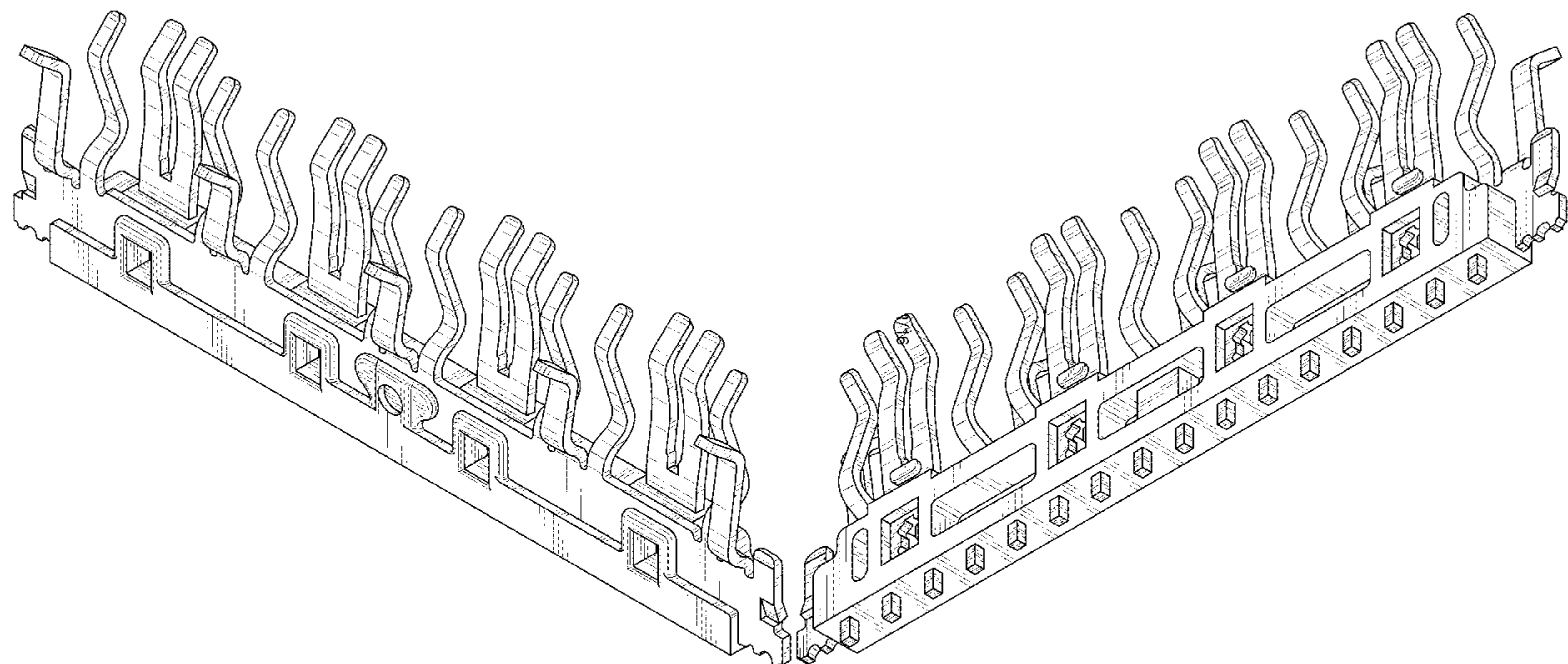
FIG. 1 is a top, front, and right side perspective view of a contact wafer showing our new design;
FIG. 2 is a bottom, back, and left side perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a back view thereof;
FIG. 5 is a left thereof;
FIG. 6 is a right view thereof;
FIG. 7 is a top view thereof; and,
FIG. 8 is a bottom view thereof.

1 Claim, 8 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,462,957 B1 10/2002 Kwong et al.
6,652,318 B1 11/2003 Winings et al.
7,083,459 B1 8/2006 Wu et al.
8,398,429 B2 3/2013 Costello
8,506,323 B2 8/2013 Costello
D714,227 S * 9/2014 Buck D13/154
D727,268 S * 4/2015 Buck D13/154
8,998,645 B2 4/2015 Vanaleck et al.
D748,063 S * 1/2016 Buck D13/154
D750,030 S * 2/2016 Zerebilov D13/154
9,257,778 B2 2/2016 Buck et al.
D768,089 S * 10/2016 Liu D13/154
9,608,348 B2 3/2017 Wanha et al.
D796,452 S * 9/2017 Masaki D13/154
D796,453 S * 9/2017 Masaki D13/154



(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0233492 A1 9/2009 Mizukami et al.
 2010/0178779 A1 7/2010 Davis et al.
 2012/0058665 A1 3/2012 Zerebilov et al.
 2014/0220795 A1 8/2014 Bai et al.
 2016/0006150 A1 1/2016 Bachmutsky
 2016/0233598 A1 8/2016 Wittig
 2019/0097357 A1* 3/2019 Mongold H01R 12/724

FOREIGN PATENT DOCUMENTS

TW D132453 S1 12/2009
 TW D163315 S 10/2014
 TW D168325 S 6/2015
 TW D172197 S 12/2015
 WO 2015/116407 A1 8/2015

OTHER PUBLICATIONS

Buck, et al.; "Right-Angle Electrical Connector and Electrical Contacts for a Right Angle Connector"; International Patent Application No. PCT/US2018/057266; filed on Oct. 24, 2018.
 Official Communication issued in Taiwanese Patent Application No. 107304335, dated Oct. 31, 2018.
 Official Communication issued in Taiwanese Patent Application No. 107304336, dated Oct. 31, 2018.
 Official Communication issued in Taiwanese Patent Application No. 107304337, dated Oct. 31, 2018.

Official Communication issued in Taiwanese Patent Application No. 107304338, dated Oct. 31, 2018.
 Official Communication issued in Taiwanese Patent Application No. 107304339, dated Oct. 31, 2018.
 Official Communication issued in Taiwanese Patent Application No. 107304340, dated Oct. 31, 2018.
 Official Communication issued in Taiwanese Patent Application No. 107304341, dated Oct. 31, 2018.
 Official Communication issued in Taiwanese Patent Application No. 107304342, dated Oct. 31, 2018.
 Buck et al., "Electrical Connector", U.S. Appl. No. 29/611,028, filed Jul. 18, 2017.
 Buck et al., "Contact Wafer", U.S. Appl. No. 29/611,655, filed Jul. 24, 2017.
 Buck et al., "Contact Wafer", U.S. Appl. No. 29/647,260, filed May 11, 2018.
 Mongold et al., "Overmolded Lead Frame Providing Contact Support and Impedance Matching Properties", U.S. Appl. No. 15/566,504, filed Oct. 13, 2017.
 Buck et al., "Electrical Connector System", International Application No. PCT/US2018/037198, filed Jun. 13, 2018.
 Musser, et al., "Electrical Cable Connector," U.S. Appl. No. 29/632,520, filed Jan. 8, 2018.
 Buck et al., "Electrical Connector", U.S. Appl. No. 29/610,936, filed Jul. 17, 2017.
 Faith, Chadrick P., "Electrical Connector," U.S. Appl. No. 29/611,521, filed Jul. 21, 2017.

* cited by examiner

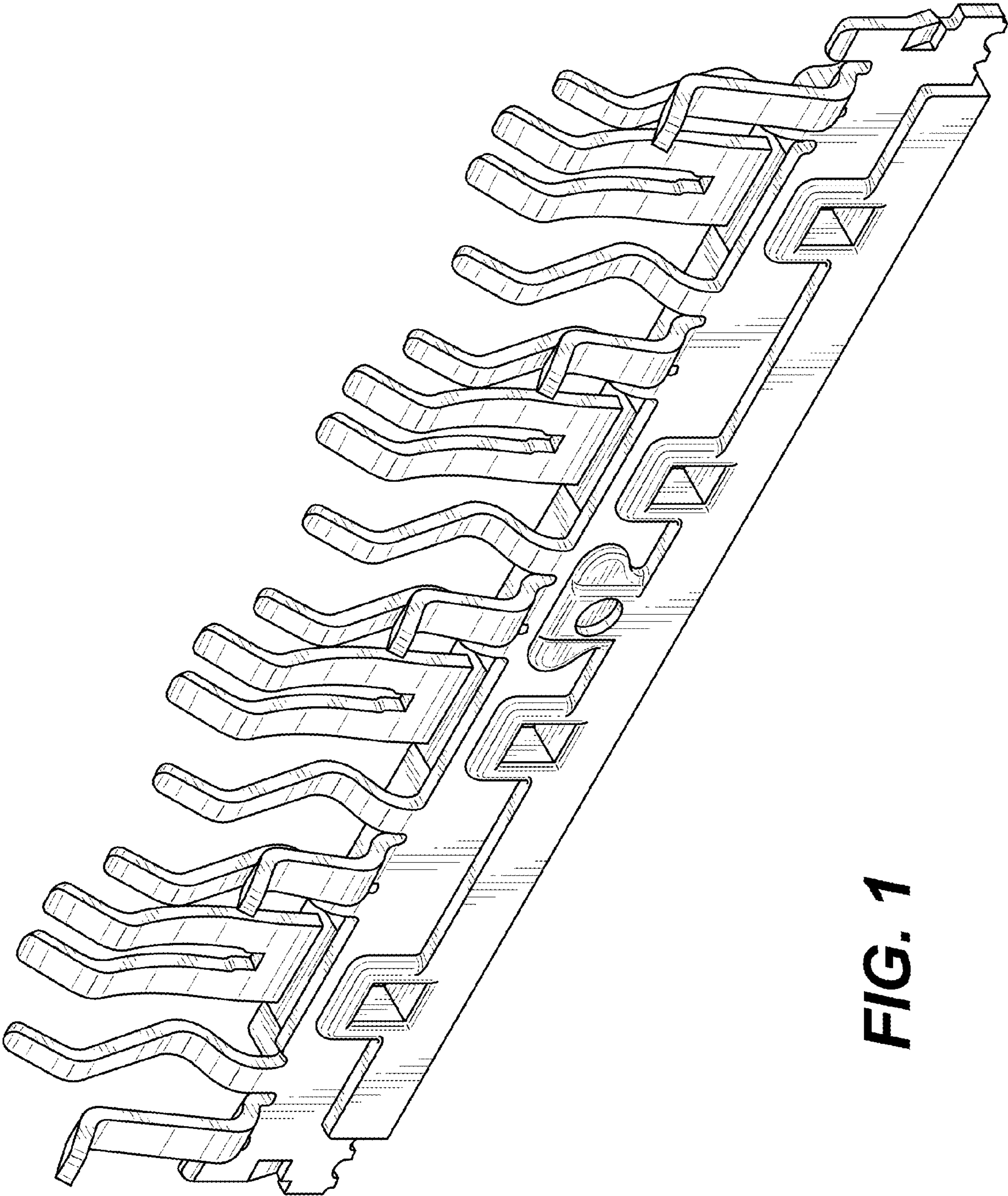


FIG. 1

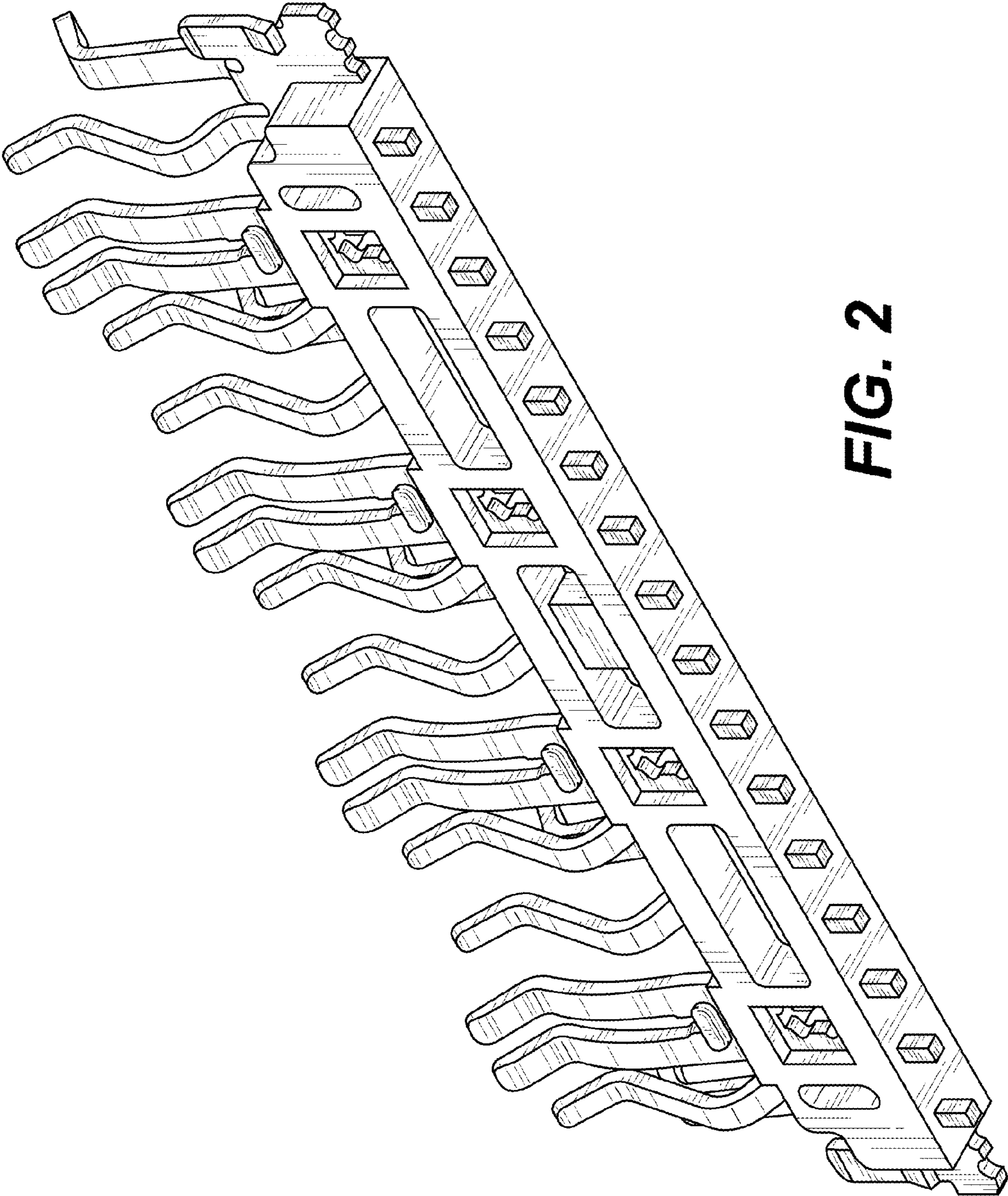


FIG. 2

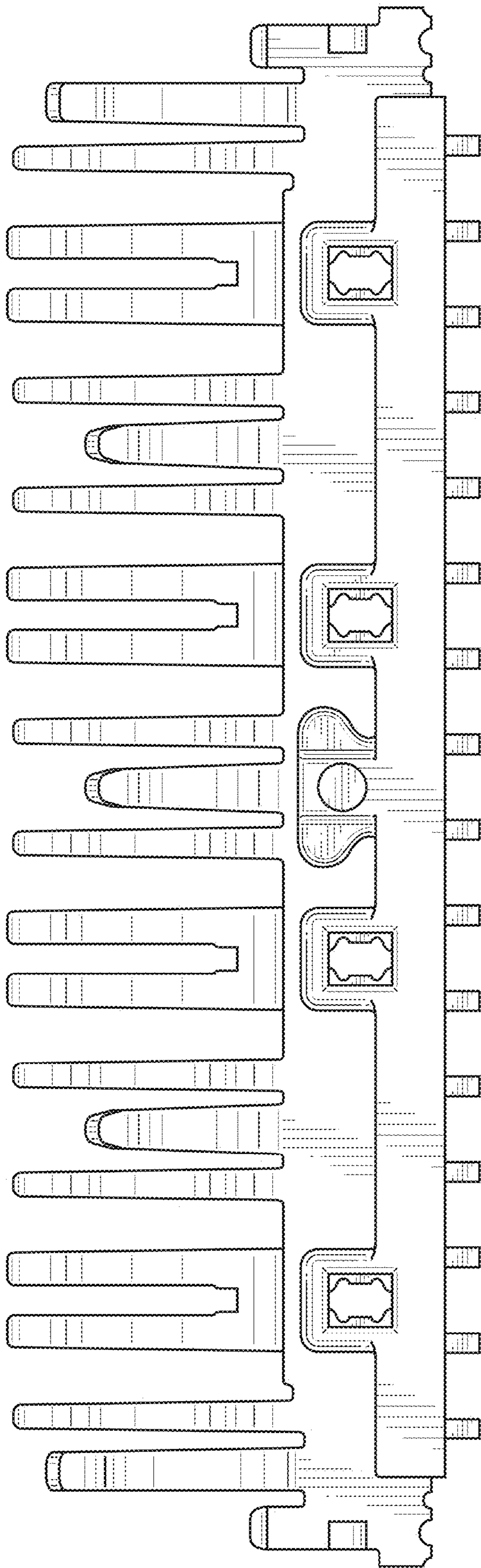


FIG. 3

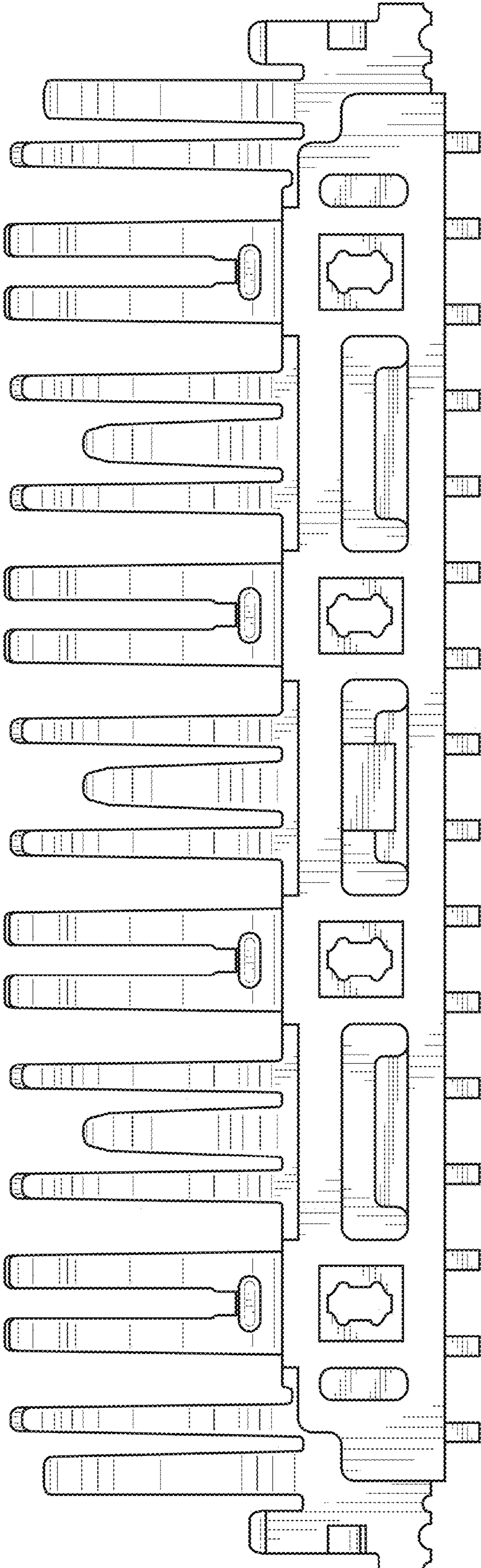


FIG. 4

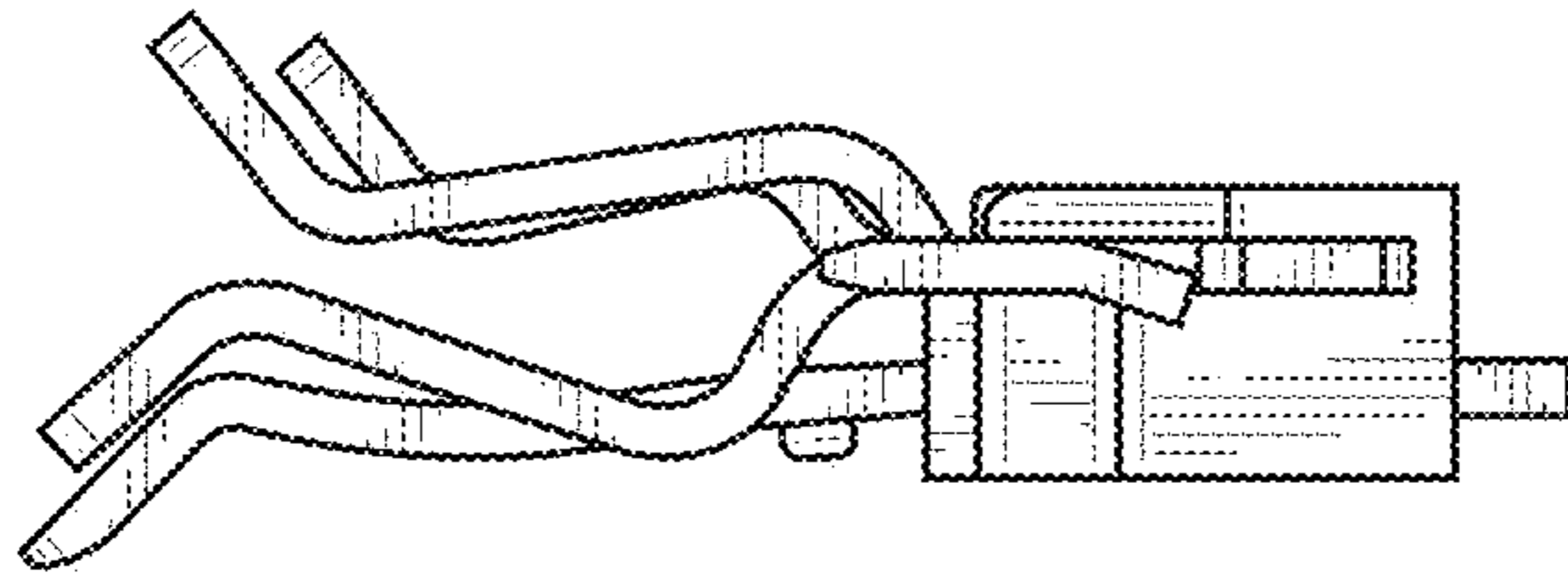


FIG. 5

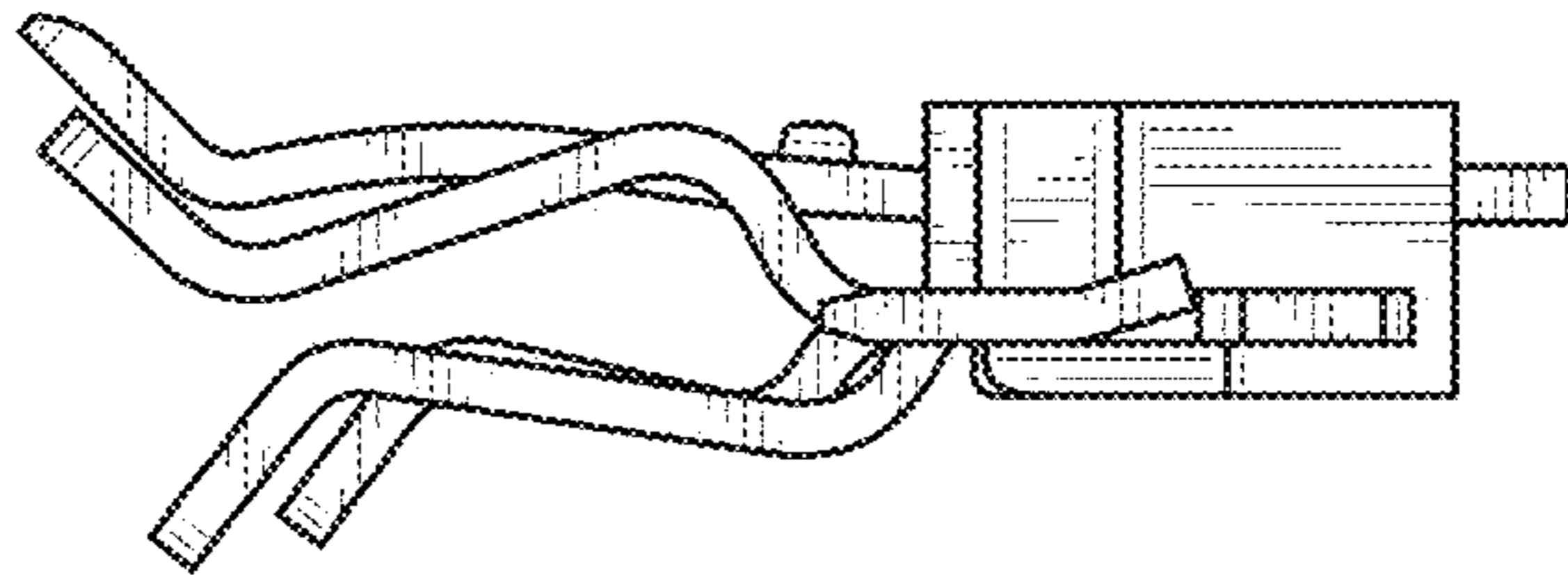


FIG. 6

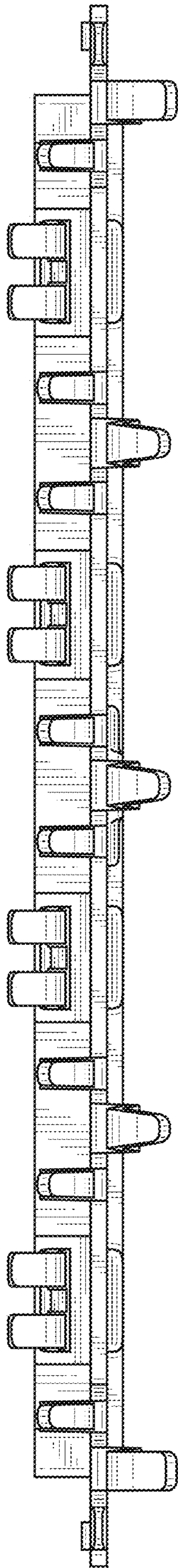


FIG. 7

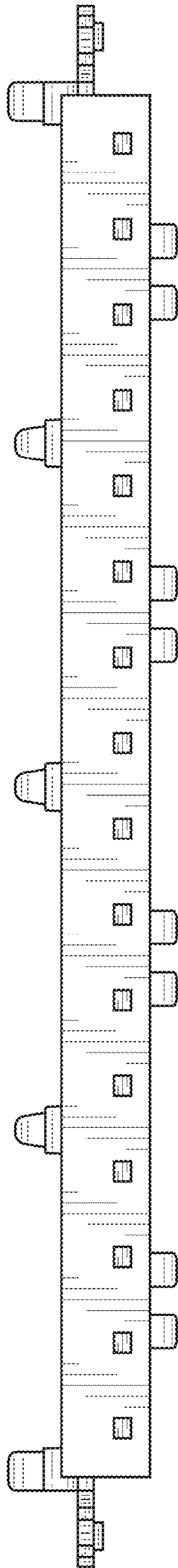


FIG. 8