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(12) **United States Design Patent** (10) **Patent No.:** **US D938,919 S**
Ito et al. (45) **Date of Patent:** **** Dec. 21, 2021**

(54) **ELECTRICAL CONNECTOR**

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(73) Assignee: **Molex, LLC**, Lisle, IL (US)

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

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(30) **Foreign Application Priority Data**

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

(52) **U.S. Cl.**
USPC **D13/147**

(58) **Field of Classification Search**

USPC D13/118, 120, 173, 103, 107, 108, 110,
D13/112, 123, 133, 137.1, 145-147,
D13/149-156, 158, 177, 184, 199, 242;
D14/240, 242, 256, 432, 434, 435.1, 438,
D14/480.1-480.7, 484

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,667,403 A * 9/1997 Fukuda H01R 13/641
439/188
6,827,596 B2 * 12/2004 Hori H01R 13/6275
439/188
D524,751 S 7/2006 Lee et al.
D538,230 S * 3/2007 Kudo D13/147
D538,231 S * 3/2007 Kudo D13/147
D583,324 S * 12/2008 Iijima D13/147
D585,382 S * 1/2009 Kudo D13/147
8,944,844 B2 * 2/2015 Myer H01R 13/641
439/489

D748,588 S 2/2016 Endo et al.
9,620,879 B2 * 4/2017 Li H01R 4/185
9,761,977 B2 * 9/2017 Yang H01R 43/16
10,263,350 B2 * 4/2019 Huo H01R 12/716
D847,756 S 5/2019 Endo et al.
(Continued)

FOREIGN PATENT DOCUMENTS

JP S828543 S 2/1992
JP S888816 S 1/1994
(Continued)

OTHER PUBLICATIONS

Non-Final rejection received for U.S. Appl. No. 29/717,495, dated Dec. 23, 2020, 9 pages.

(Continued)

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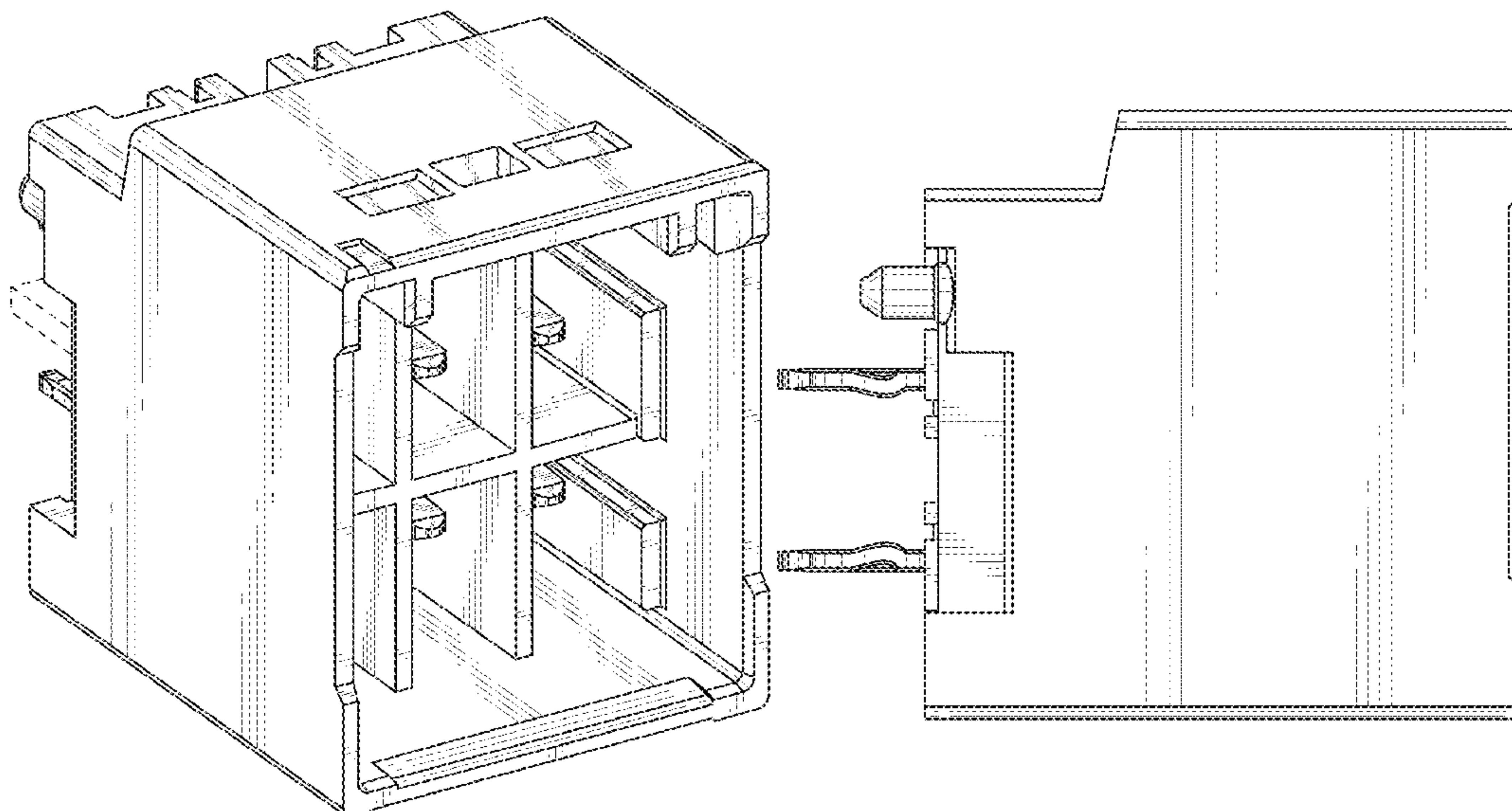
(57) **CLAIM**

The ornamental design for an electrical connector, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view thereof;
FIG. 2 is a perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a top view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a right-side view thereof; and,
FIG. 8 is a left-side view thereof.
The equal length broken lines in the drawings depict portions of the electrical connector that form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2008/0020639	A1	1/2008	Ichio	
2013/0008712	A1	1/2013	Kobayashi et al.	
2014/0370757	A1	12/2014	Endo et al.	
2015/0147901	A1	5/2015	Wu et al.	
2015/0200492	A1	7/2015	Endo et al.	
2015/0222043	A1	8/2015	Yagi et al.	
2015/0333427	A1	11/2015	Taguchi et al.	
2018/0277990	A1 *	9/2018	Ho	H01R 13/6272
2018/0316131	A1	11/2018	Holub et al.	
2018/0316132	A1	11/2018	Holub et al.	
2019/0280430	A1	9/2019	Azad et al.	
2019/0363476	A1 *	11/2019	Zheng	H01R 13/6272
2020/0136303	A1 *	4/2020	Ito	H01R 13/521

FOREIGN PATENT DOCUMENTS

JP	S899080	S	5/1994
JP	S899099	S	5/1994
JP	S944748	S	1/1996
JP	S997228	S	12/1997
JP	S1074717	S	6/2000
JP	S1259617	S	1/2006
JP	S1260794	S	1/2006
JP	S1260796	S	1/2006
JP	S1354379	S	3/2009

OTHER PUBLICATIONS

Non-Final rejection received for U.S. Appl. No. 29/717,496, dated Dec. 16, 2020, 9 pages.

* cited by examiner

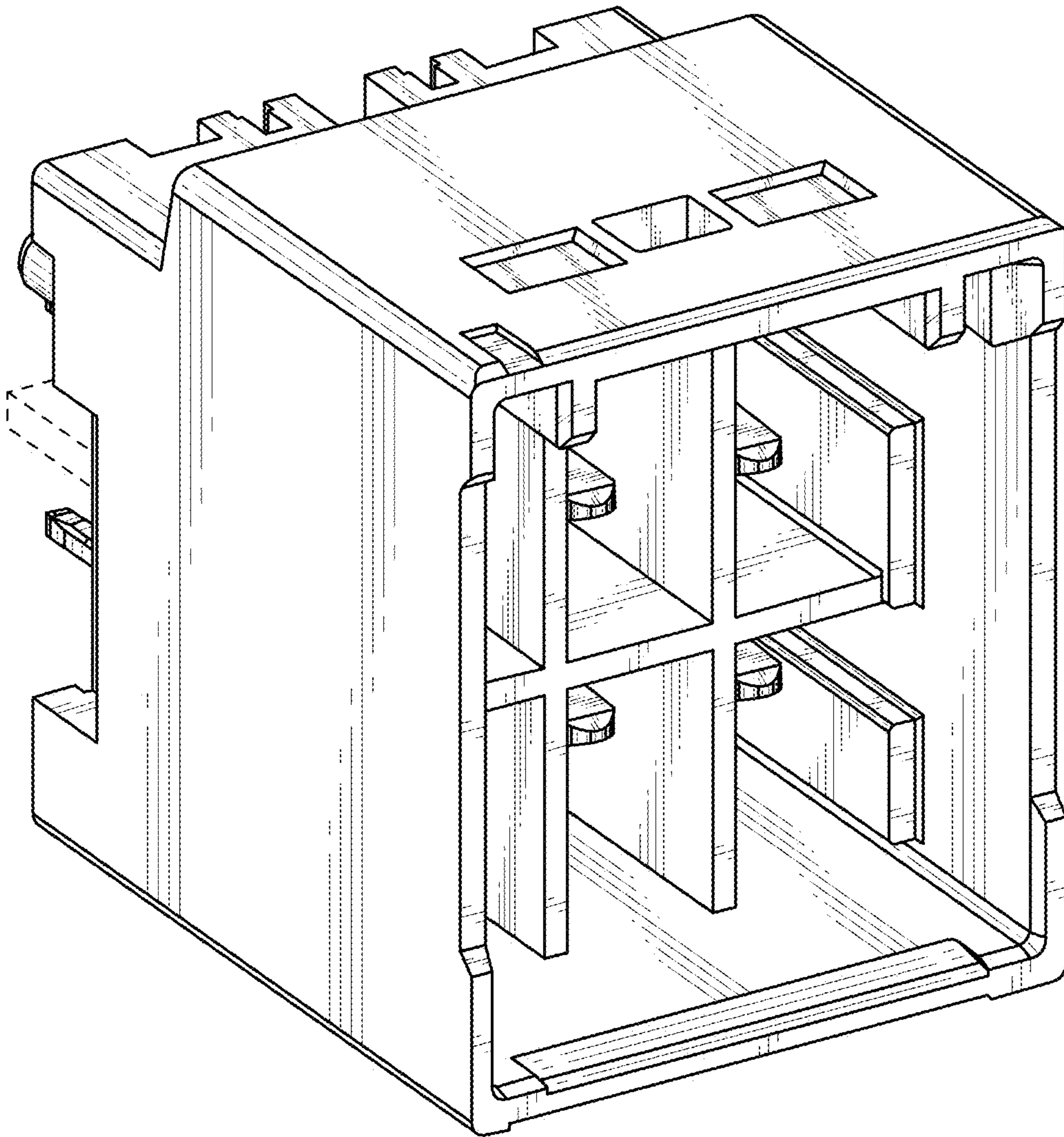


FIG. 1

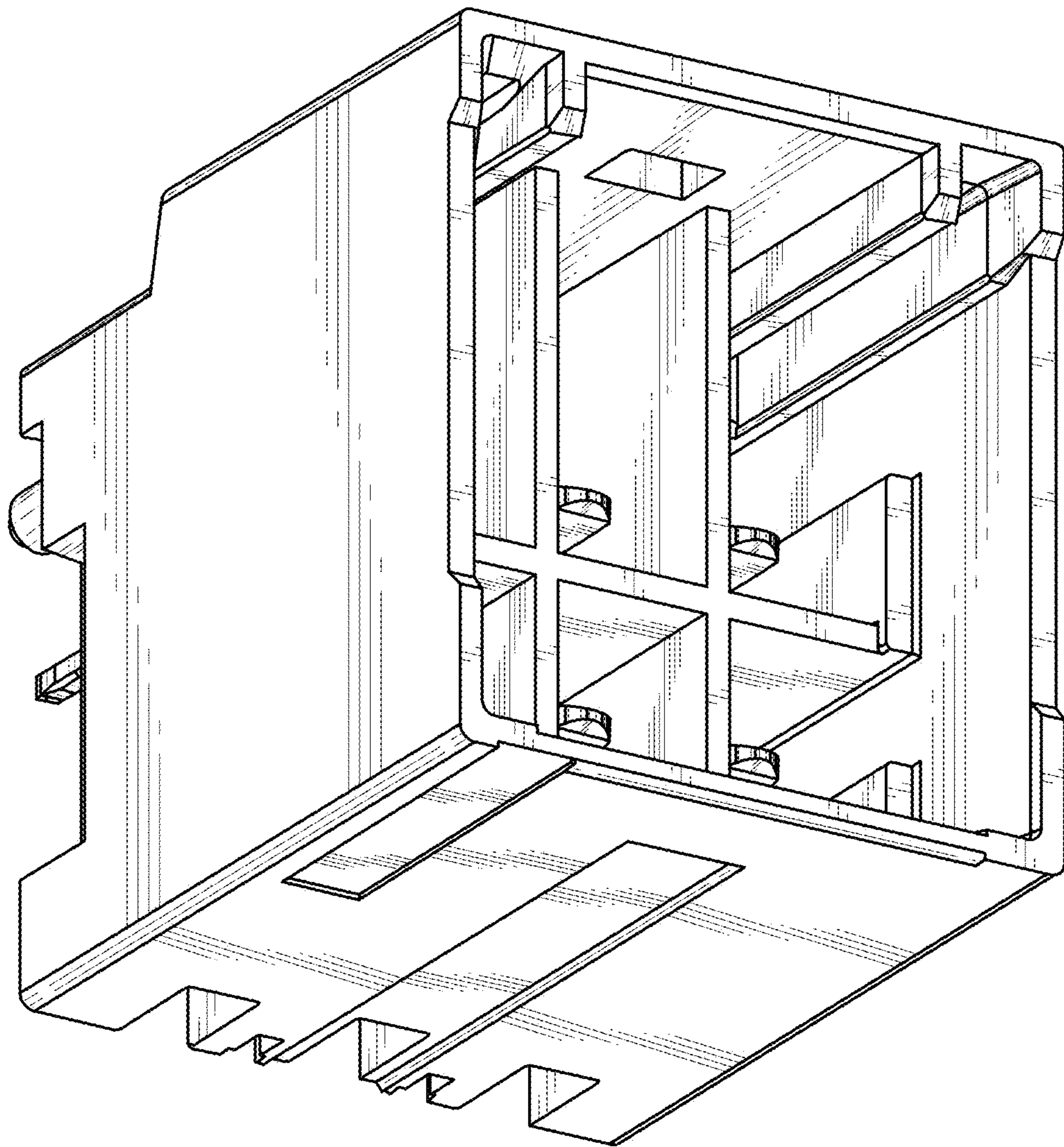


FIG. 2

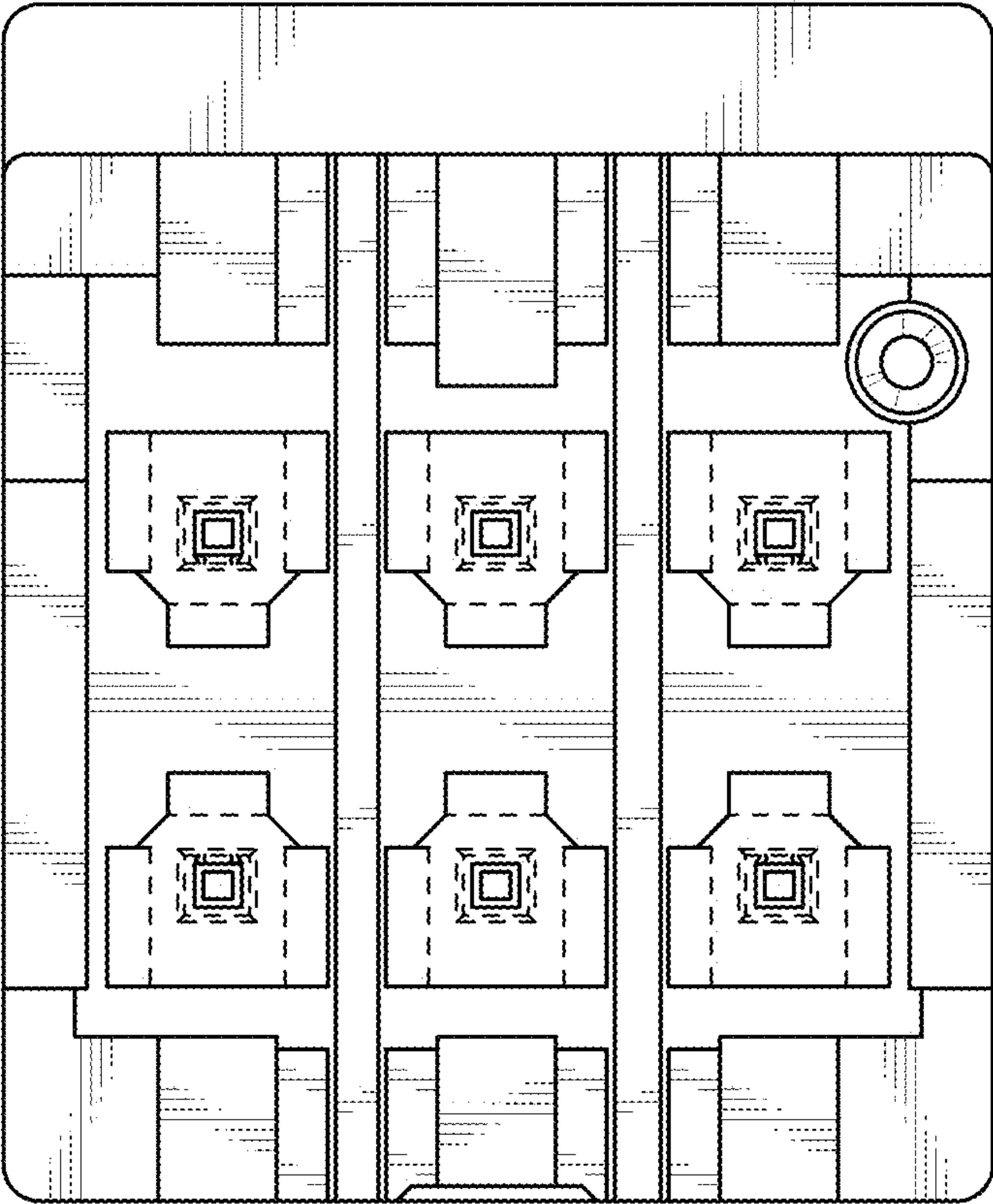


FIG. 3

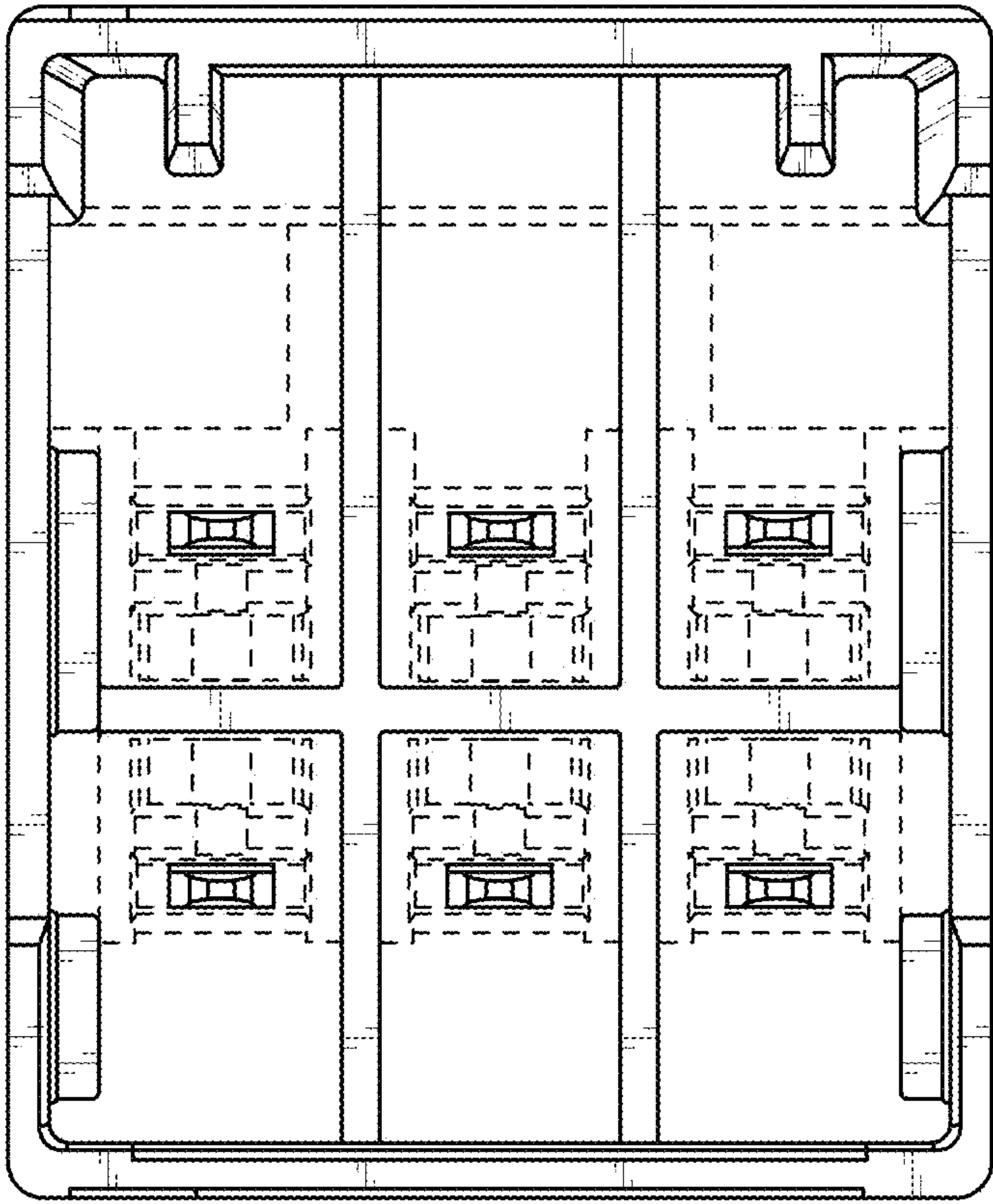


FIG. 4

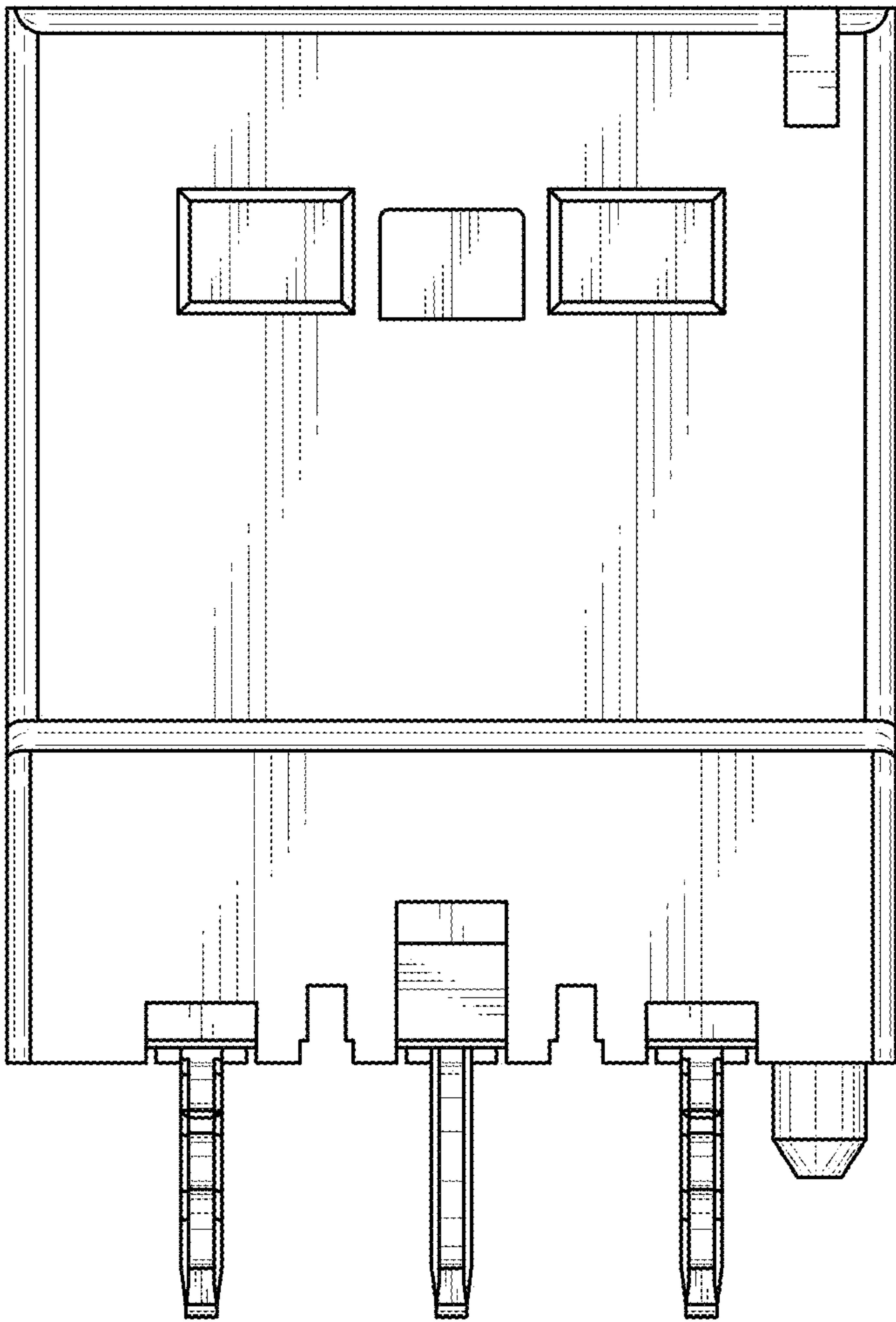


FIG. 5

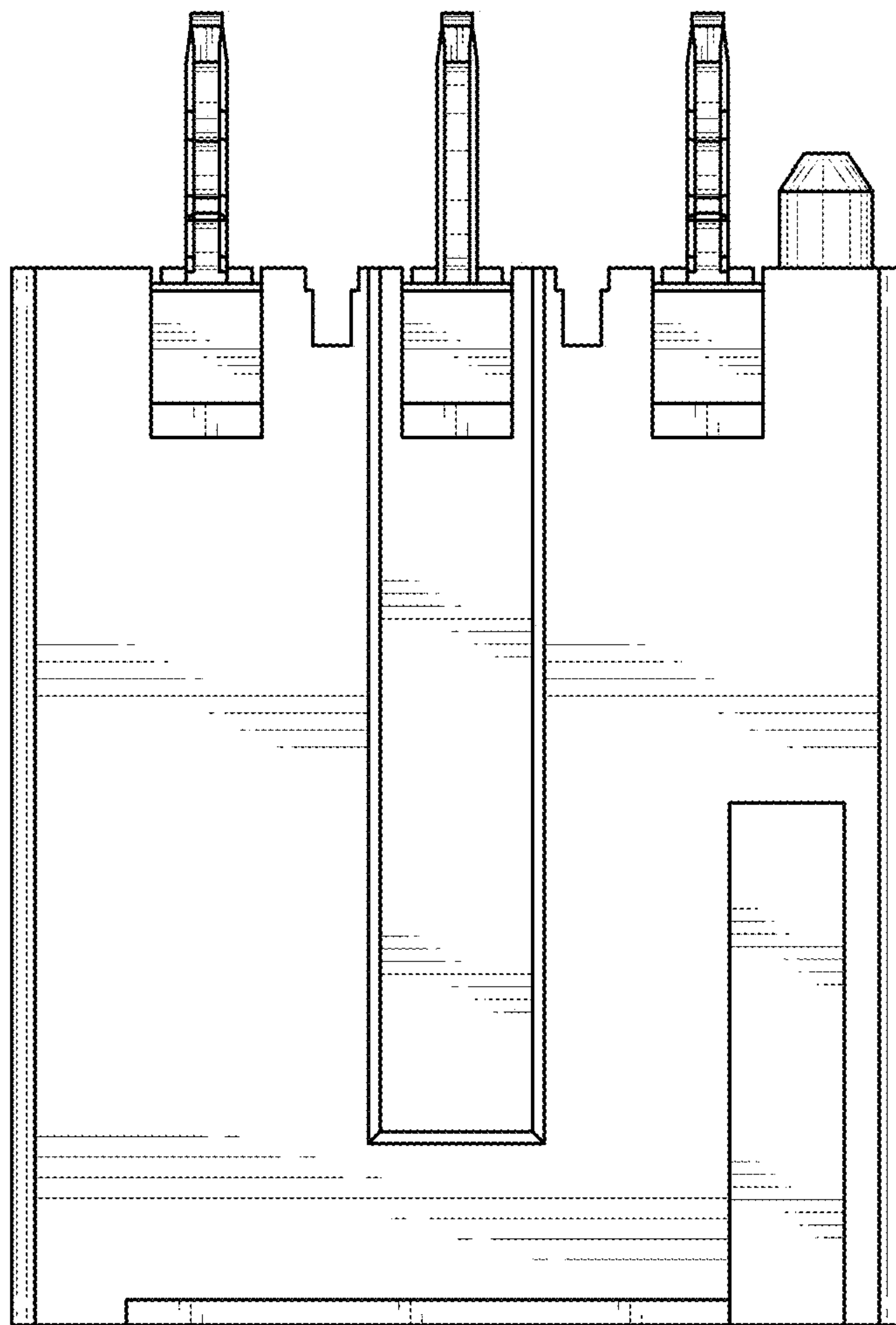


FIG. 6

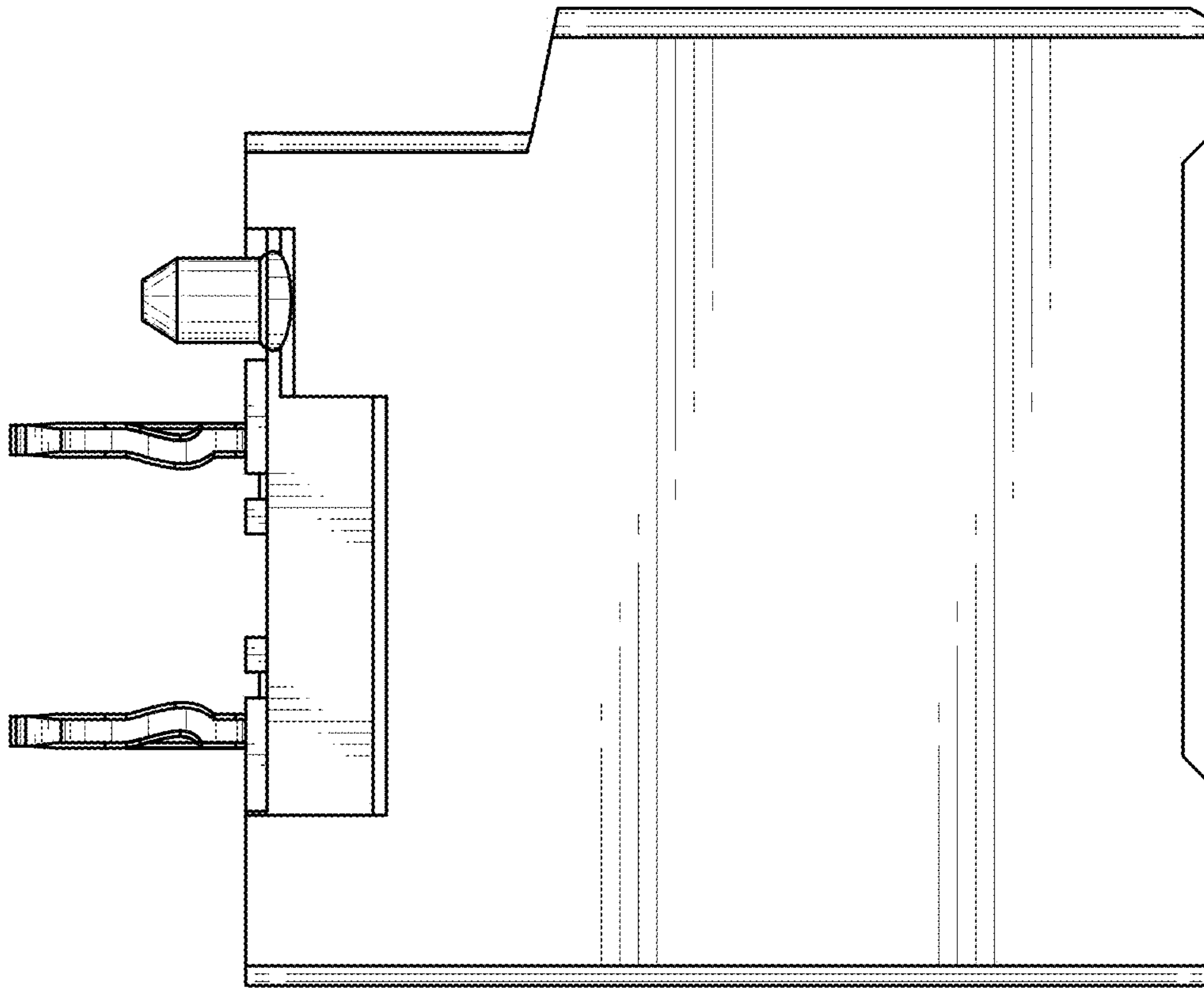


FIG. 7

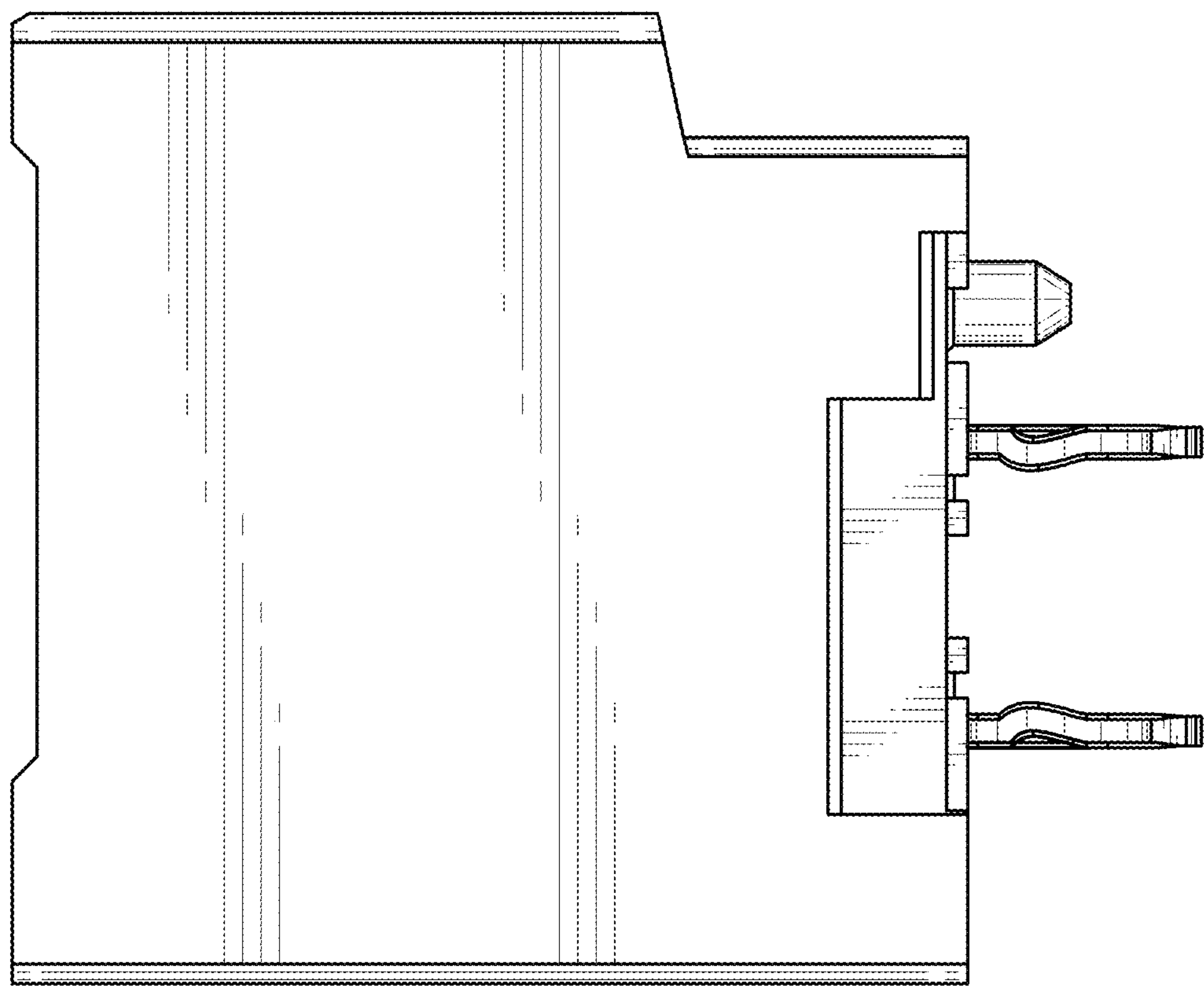


FIG. 8