US00D936604S

(12) **United States Design Patent**
Zabjanovski et al.

(10) **Patent No.: US D936,604 S**
(45) **Date of Patent: ** Nov. 23, 2021**

(54) **CONNECTOR**

(71) Applicant: **Molex, LLC**, Lisle, IL (US)

(72) Inventors: **Lupco Zabjanovski**, Countryside, IL (US); **Robert Piszczor**, La Grange, IL (US); **Jeffrey J. Shrigley**, Wheaton, IL (US); **Michael A. Bandura**, Naperville, IL (US)

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

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

(21) Appl. No.: **29/778,880**

(22) Filed: **Apr. 15, 2021**

Related U.S. Application Data

(63) Continuation of application No. 29/713,410, filed on Nov. 15, 2019.

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

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

(58) **Field of Classification Search**
USPC D13/103, 110, 118–120, 123, 133, 146, D13/147, 154, 173, 174, 178, 184, 199
CPC H01R 4/48; H01R 12/00; H01R 12/72; H01R 12/724; H01R 13/00; H01R 13/42; H01R 13/428; H01R 13/44; H01R 13/514;

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,761,144 A	8/1988	Hunt, III et al.
D308,512 S	6/1990	Endo et al.

(Continued)

FOREIGN PATENT DOCUMENTS

JP	D1501976	7/2014
JP	D1623565	2/2019
TW	D192202	8/2018

OTHER PUBLICATIONS

Molex Secures Samtec as Second-Source Supplier for Interconnect Portfolio Trifecta, dated Jul. 26, 2011, [online], [site visited Feb. 24, 2021]. Available from Internet, URL: https://www.molex.com/molex/news/display_news.jsp?channel=New&channelId=0&oid=948 (Year: 2011).*

(Continued)

Primary Examiner — Shawn T Gingrich
(74) *Attorney, Agent, or Firm* — Banner & Witcoff, Ltd.

(57) **CLAIM**

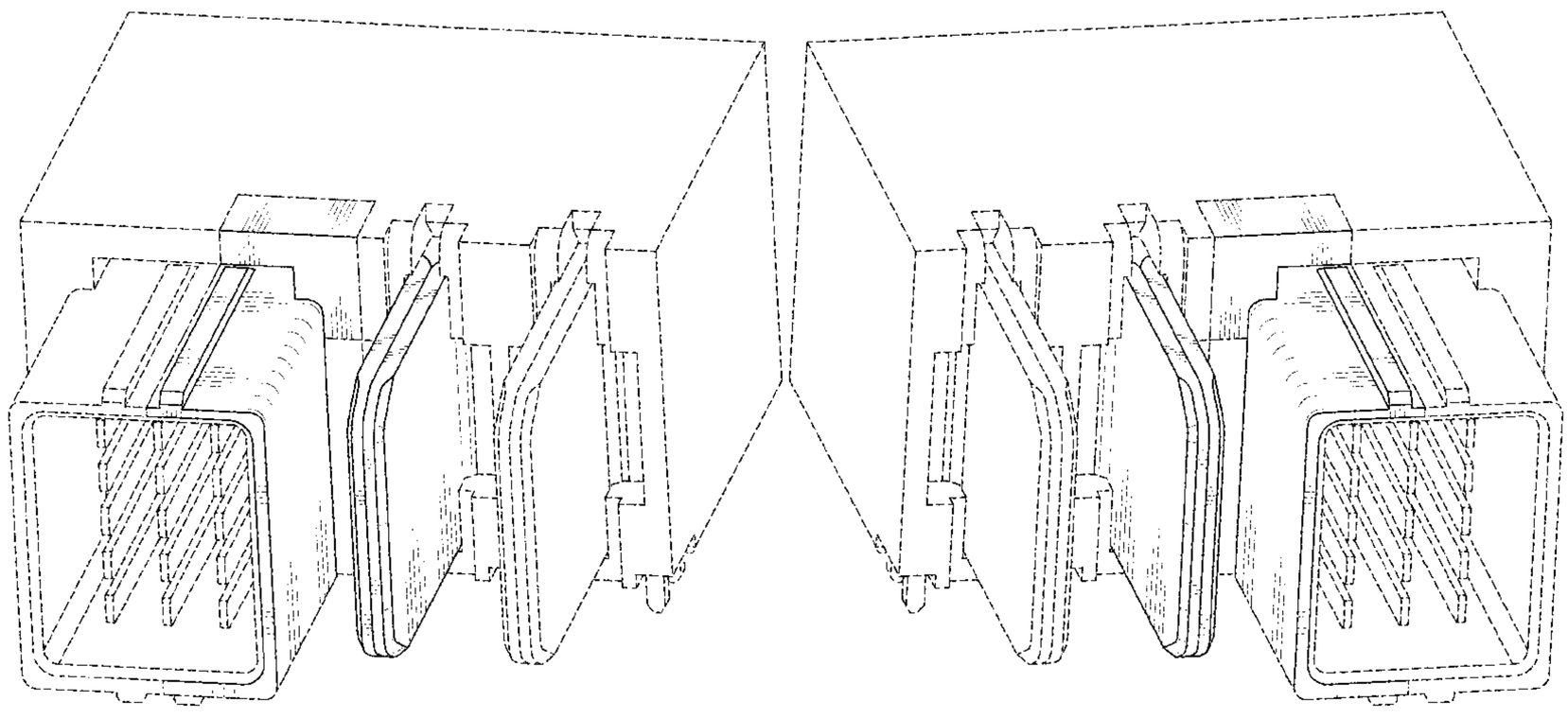
The ornamental design for a connector, as shown and described.

DESCRIPTION

FIG. **1** is a front top perspective view of a connector showing our new design;
FIG. **2** is a front view thereof;
FIG. **3** is a rear view thereof;
FIG. **4** is a right side view thereof;
FIG. **5** is a left side view thereof;
FIG. **6** is a top view thereof;
FIG. **7** is a bottom view thereof;
FIG. **8** is a front top perspective view of the connector of FIGS. **1-7** showing a mirrored embodiment;
FIG. **9** is a front view thereof;
FIG. **10** is a rear view thereof;
FIG. **11** is a left side view thereof;
FIG. **12** is a right side view thereof;
FIG. **13** is a top view thereof; and,
FIG. **14** is a bottom view thereof.

The uneven-length broken lines immediately adjacent to the shaded area represent the bounds of the claimed design and form no part thereof. The even-length broken lines depicting the remainder of the connector form no part of the claimed design.

1 Claim, 14 Drawing Sheets



(58) **Field of Classification Search**
CPC H01R 13/62; H01R 13/627; H01R 13/631; H01R 13/658; H01R 13/73; H01R 24/00; H01R 27/00; H01R 27/02; H01R 33/00; H01R 43/04; H01R 43/20; H05K 1/00; H05K 7/20; H05K 7/20127
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D309,289	S	7/1990	Endo et al.	
D331,913	S	12/1992	Sato et al.	
5,184,964	A	2/1993	Douty et al.	
5,362,261	A *	11/1994	Puerner	H01R 13/4364 439/689
D366,454	S *	1/1996	Eaton	D13/147
5,575,690	A *	11/1996	Eaton	H01R 13/187 439/176
D402,630	S	12/1998	Lai et al.	
D434,729	S *	12/2000	Hwang	D13/147
D452,678	S	1/2002	Hiramoto et al.	
D458,226	S *	6/2002	Chin	D13/145
D459,699	S	7/2002	Ko	
D460,418	S *	7/2002	Han	D13/147
D471,873	S	3/2003	Kawase	
6,881,102	B2	4/2005	Correll et al.	
D518,788	S	4/2006	Fan	
D585,830	S	2/2009	Shen et al.	
D592,135	S	5/2009	Hung	
D618,172	S	6/2010	Yang	
D637,956	S	5/2011	Yuan et al.	
8,419,476	B1 *	4/2013	Yu	H01R 25/162 439/626
8,662,913	B2	3/2014	Tai et al.	
8,684,772	B2 *	4/2014	Yu	H01R 12/724 439/717
D718,243	S *	11/2014	Scholeno	D13/147
9,059,546	B2 *	6/2015	Yu	H01R 31/085
9,401,558	B1 *	7/2016	Yu	H01R 4/02
9,680,248	B1 *	6/2017	Chen	H01R 12/7088
D792,849	S	7/2017	Mugan et al.	
D813,167	S	3/2018	Gieski et al.	
10,855,038	B1 *	12/2020	Horning	H01R 13/514
D924,165	S *	7/2021	Zabjanovski	D13/147
D924,166	S *	7/2021	Zabjanovski	D13/147
D924,167	S *	7/2021	Zabjanovski	D13/147
D924,168	S *	7/2021	Zabjanovski	D13/147
2004/0147169	A1 *	7/2004	Allison	H01R 13/44 439/677
2006/0281354	A1	12/2006	Ngo et al.	
2008/0207029	A1 *	8/2008	Defibaugh	H01R 13/46 439/206
2009/0088028	A1	4/2009	Ngo et al.	
2010/0041266	A1 *	2/2010	Data	H01R 13/629 439/358
2010/0167593	A1	7/2010	Yu	
2012/0164892	A1	6/2012	Ke et al.	
2013/0252468	A1	9/2013	Yu et al.	
2014/0127945	A1 *	5/2014	Yu	H01R 12/724 439/626
2016/0043493	A1 *	2/2016	Miyazaki	H01R 13/514 439/660
2016/0079704	A1 *	3/2016	Chen	H01R 13/631 439/374
2017/0006733	A1 *	1/2017	Gregori	H01R 13/514
2020/0280142	A1	9/2020	Hung	

OTHER PUBLICATIONS

Molex—EXTreme Ten60Power™ High-Current Connector—Product Spotlight, dated Oct. 31, 2014, [online], [site visited Feb. 24, 2021]. Available from Internet, URL: https://www.youtube.com/watch?v=ZXDni_CZCKI (Year: 2014).*

Molex—Product Spotlight—EXTreme Ten60Power™ Hybrid Power and Signal Connectors, dated May 15, 2017, [online], [site visited Feb. 24, 2021]. Available from Internet, URL: https://www.youtube.com/watch?v=f7-iDtqzlpE (Year: 2017).*

Molex EXTreme Ten60Power High-current Connector, dated Nov. 10, 2009, [online], [site visited Feb. 24, 2021]. Available from Internet, URL: https://www.youtube.com/watch?v=fYrC75UF94I (Year: 2009).

EXTreme TM Ten60 Power TM High Current Connector , dated Aug. 20, 2012, [online], [site visited Feb. 24, 2021], Available from Internet, URL: http://blog.sina.com.cn/s/blog_725509fd01018imx.html (Year: 2012).

Molex adds EXTreme Ten60Power splitter blade, dated Jul. 10, 2015, [online], [site visited Feb. 24, 2021]. Available from Internet, URL: http://www.connectoralliance.com/news/20.html (Year: 2015).

* cited by examiner

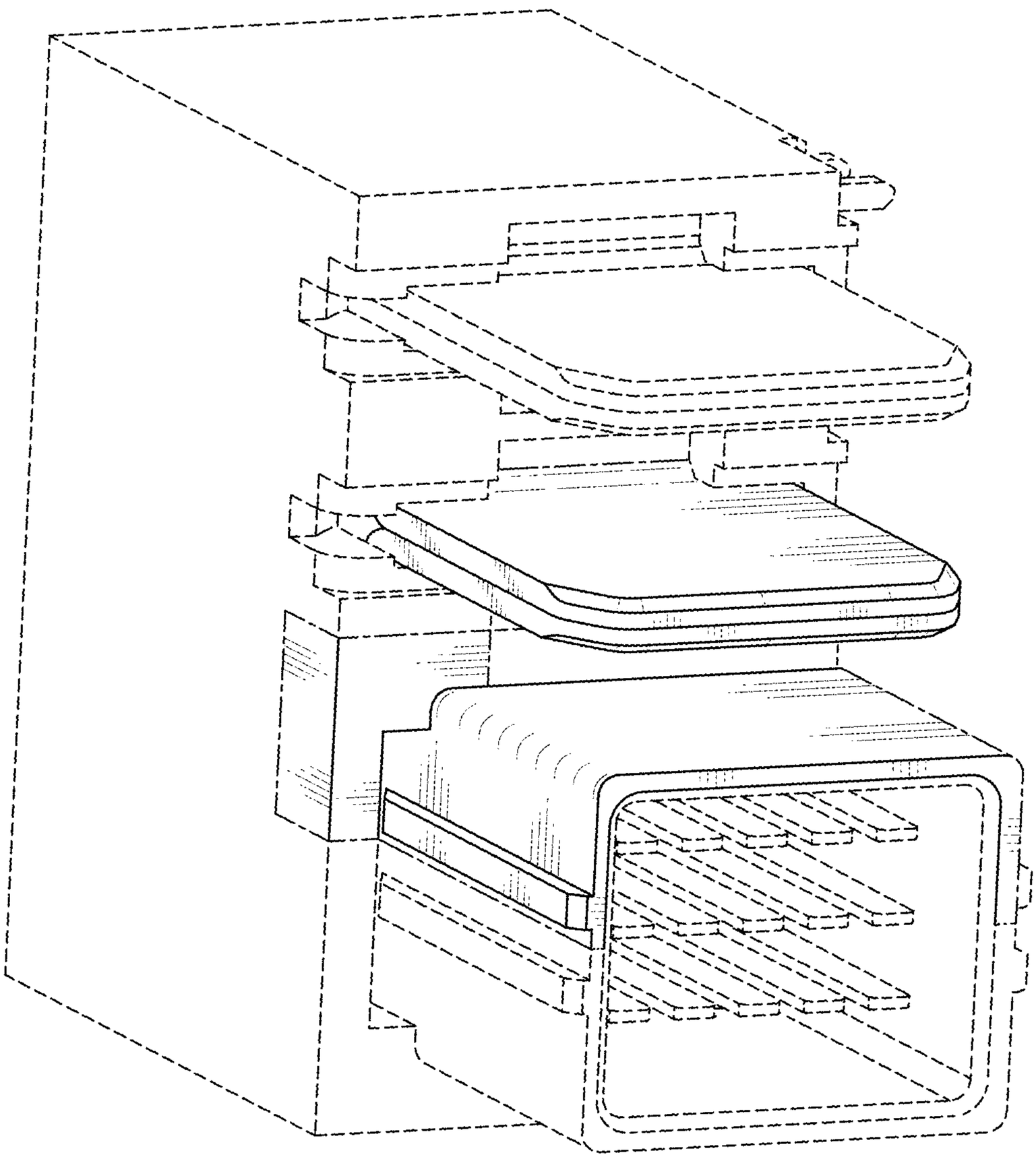


FIG. 1

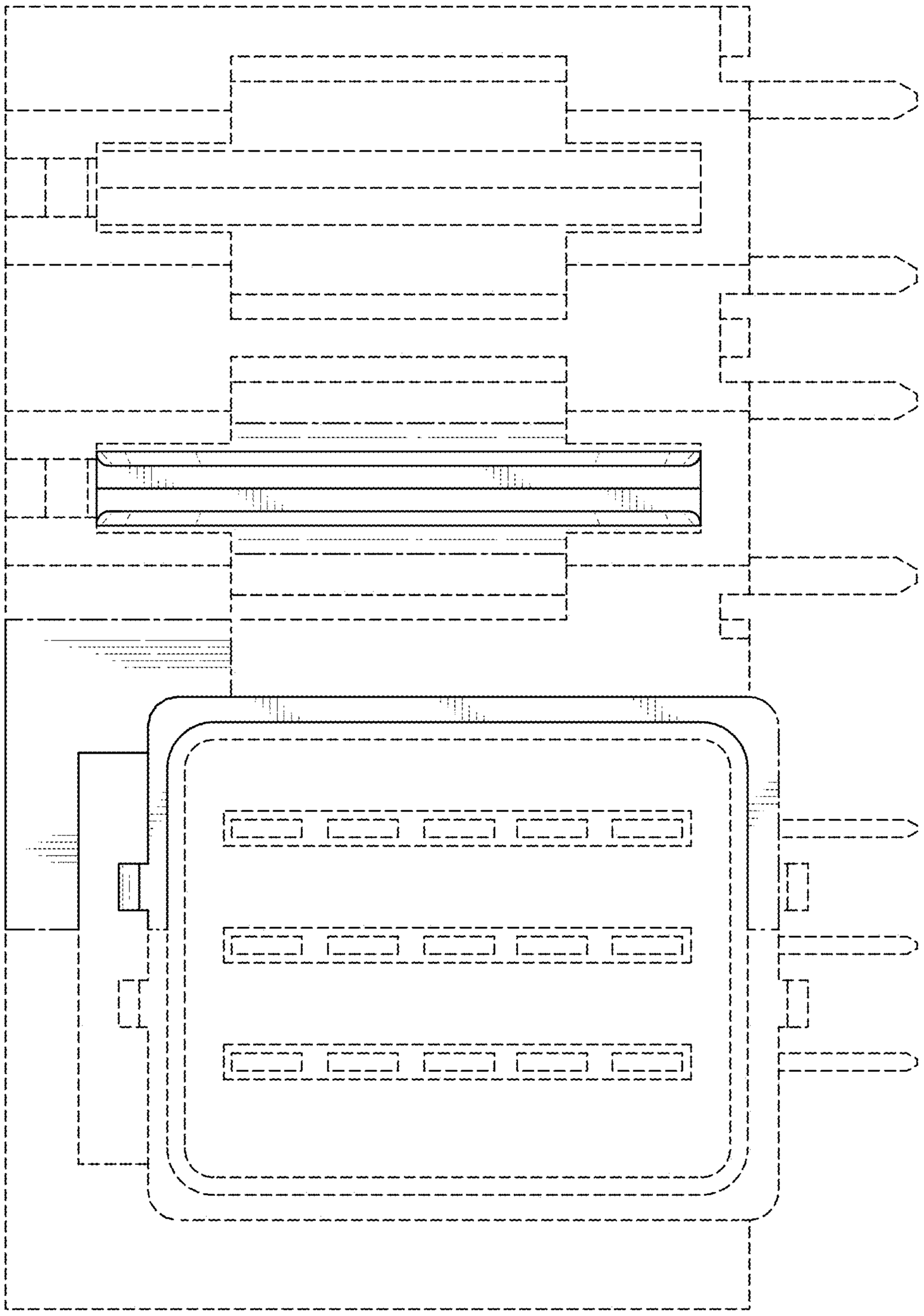


FIG. 2

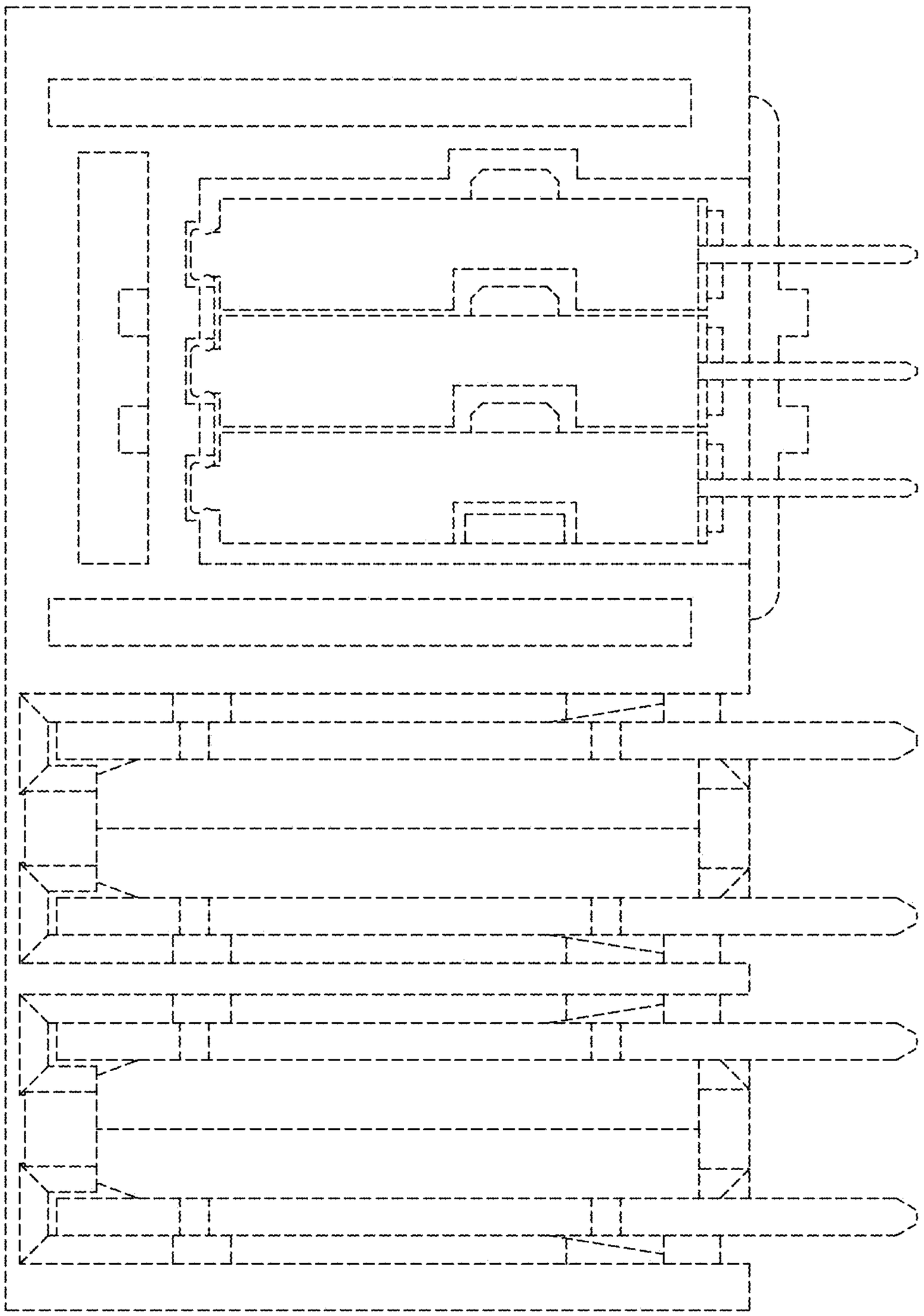


FIG. 3

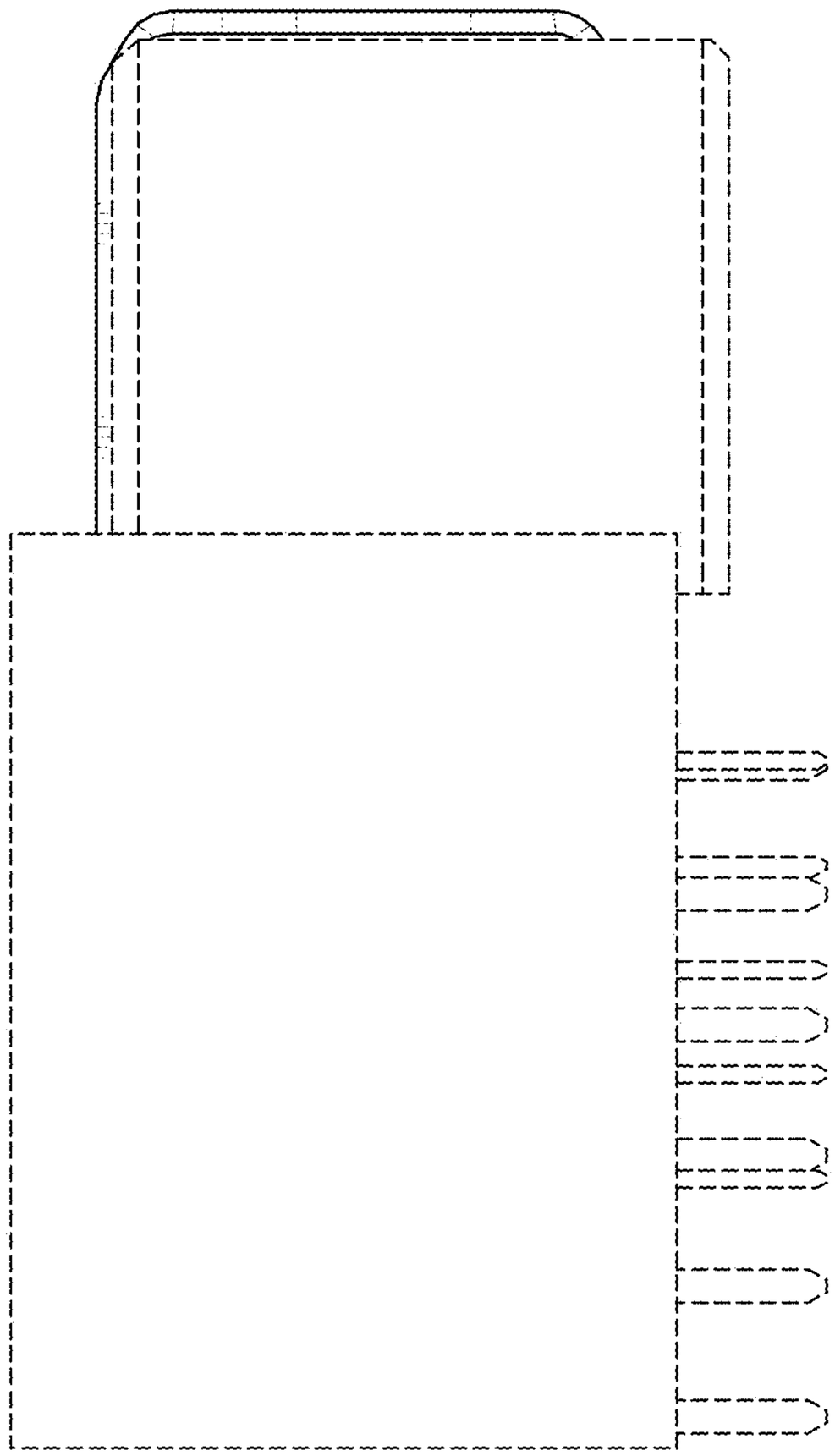


FIG. 4

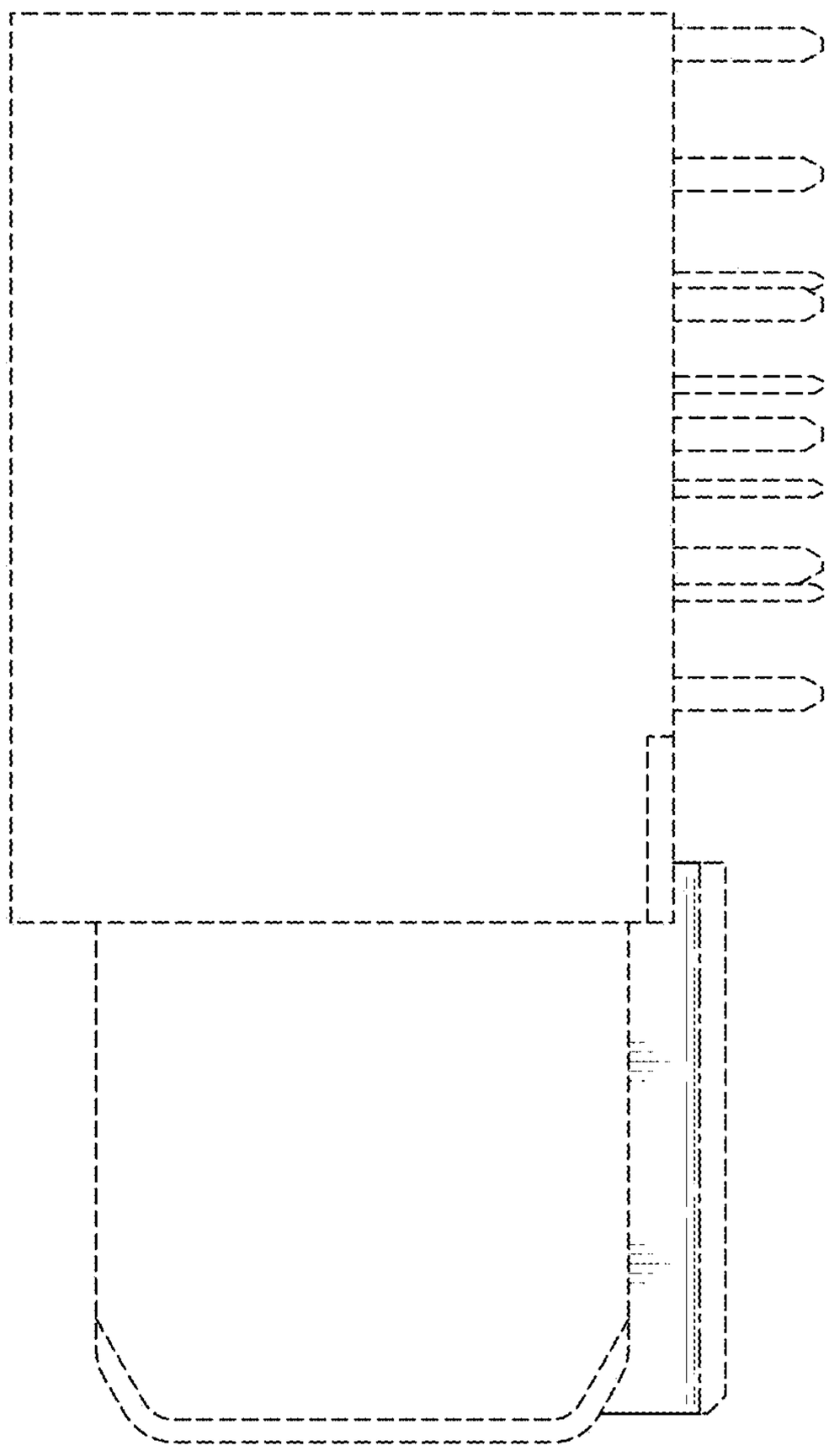


FIG. 5

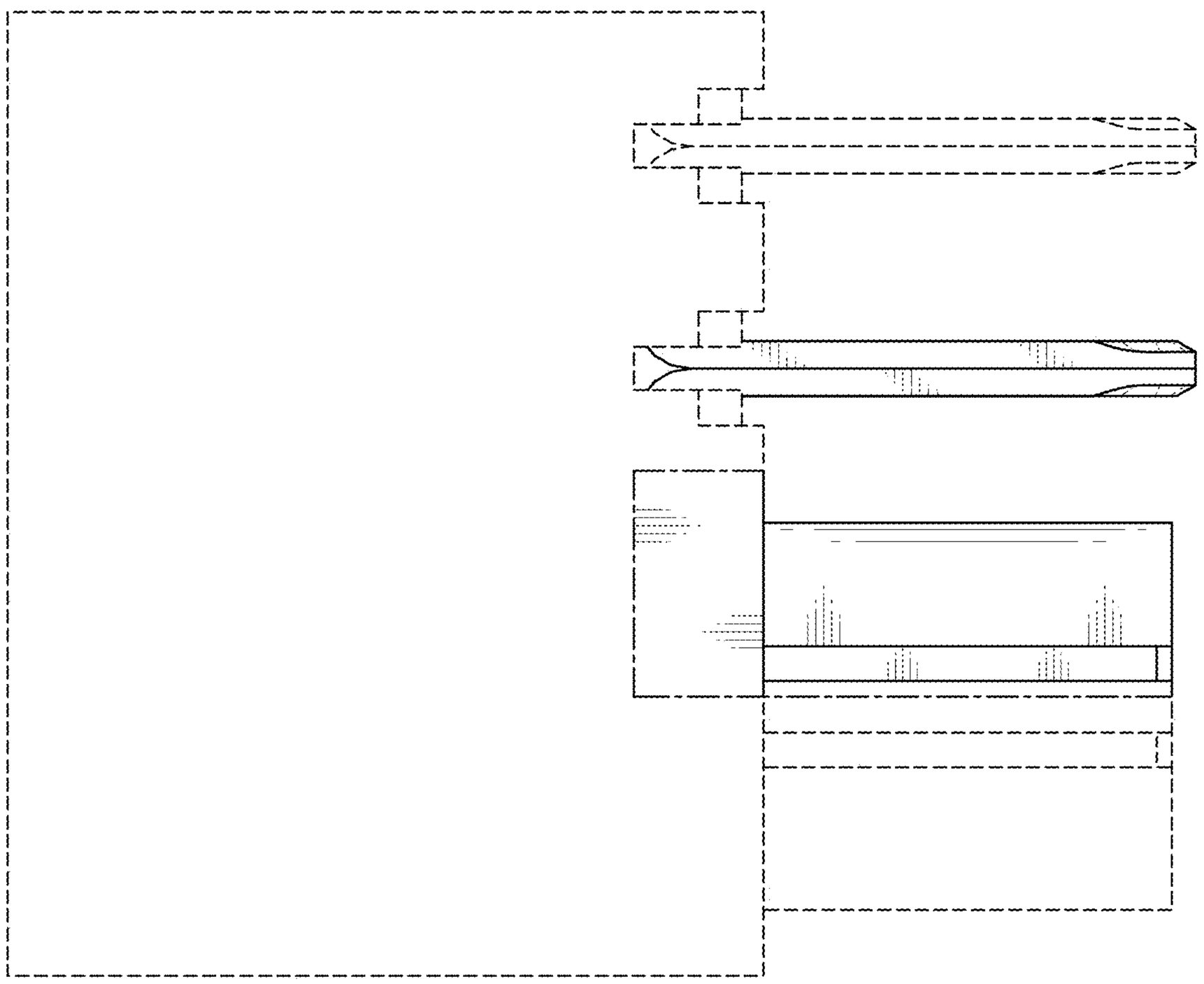


FIG. 6

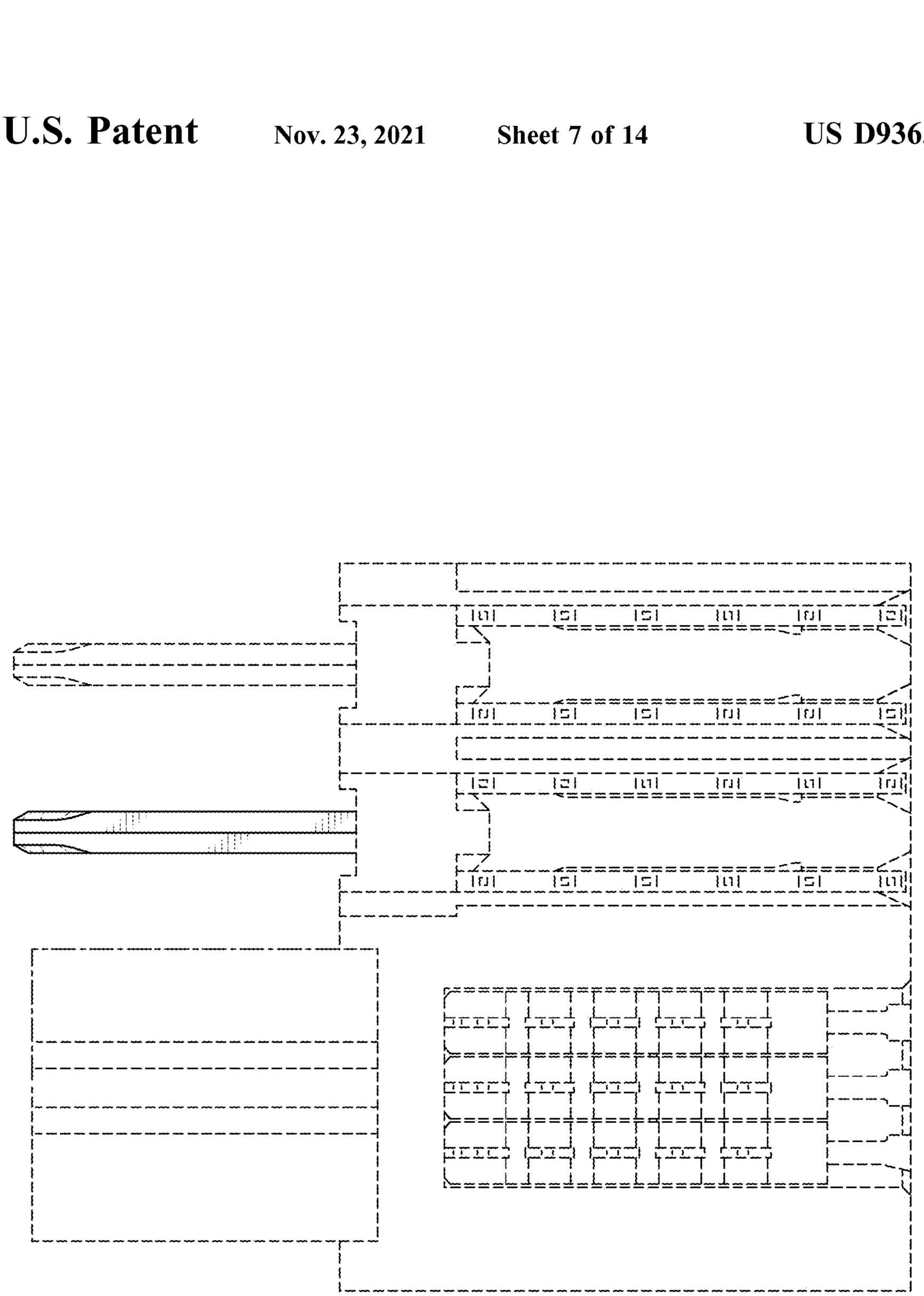


FIG. 7

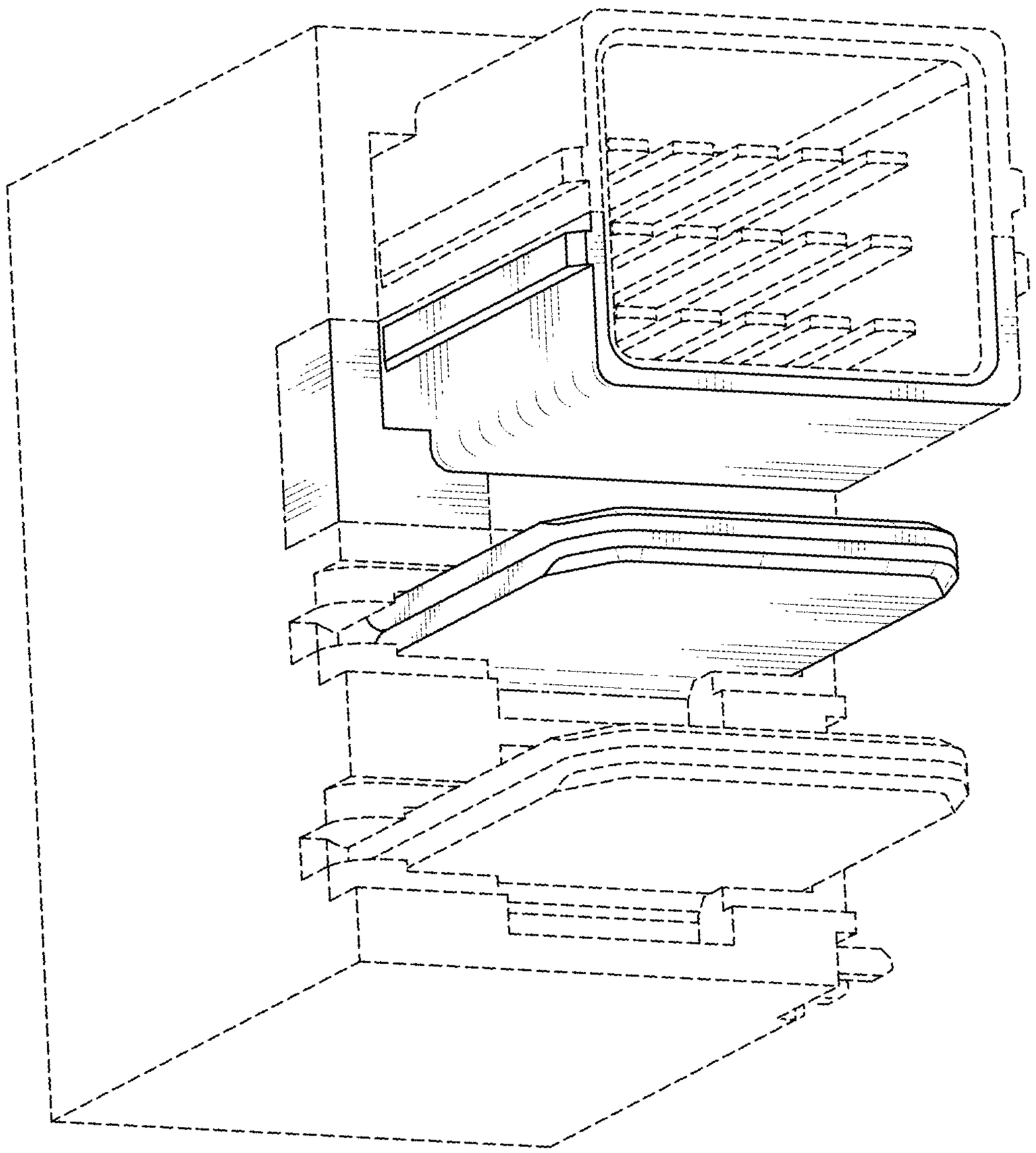


FIG. 8

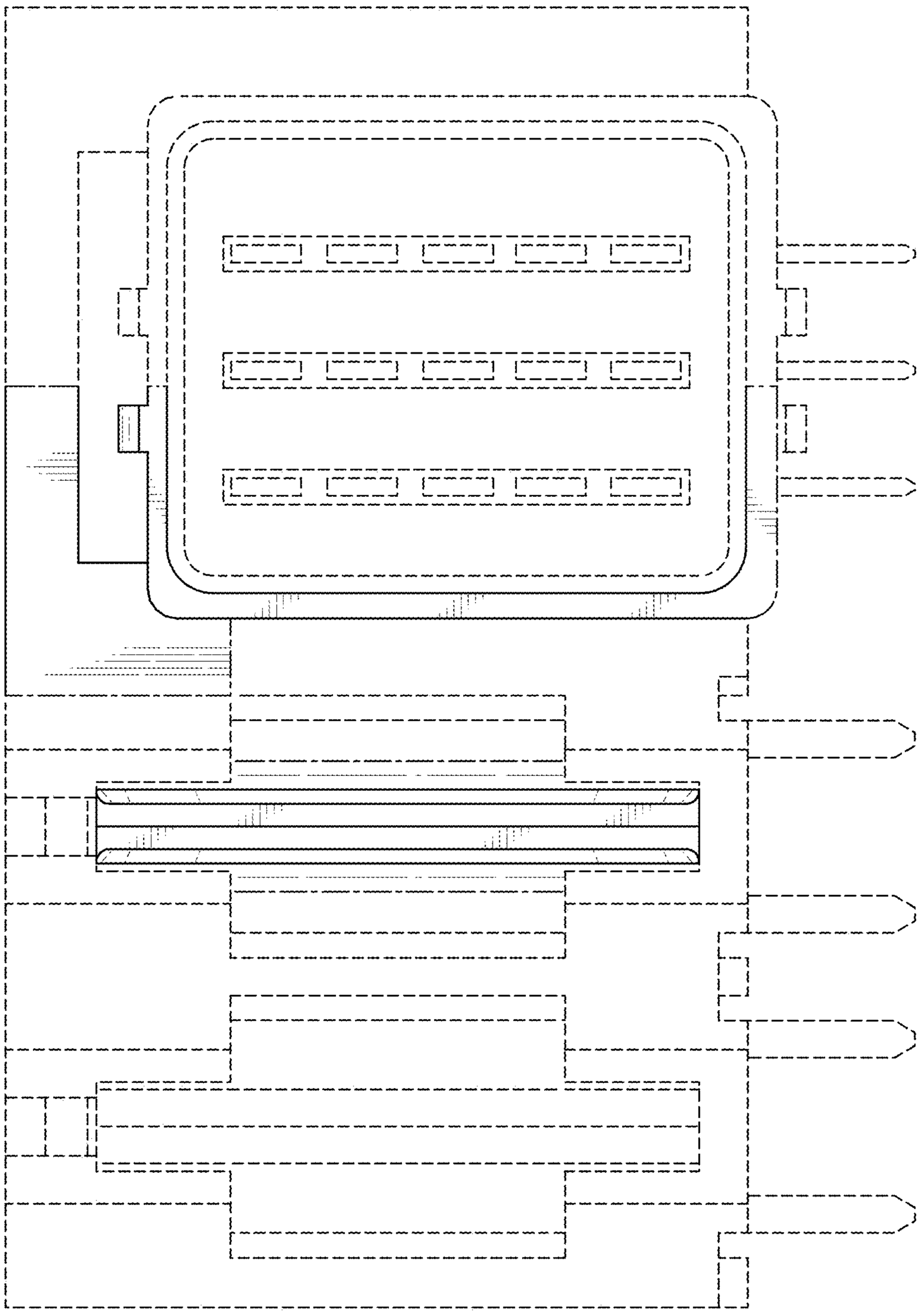


FIG. 9

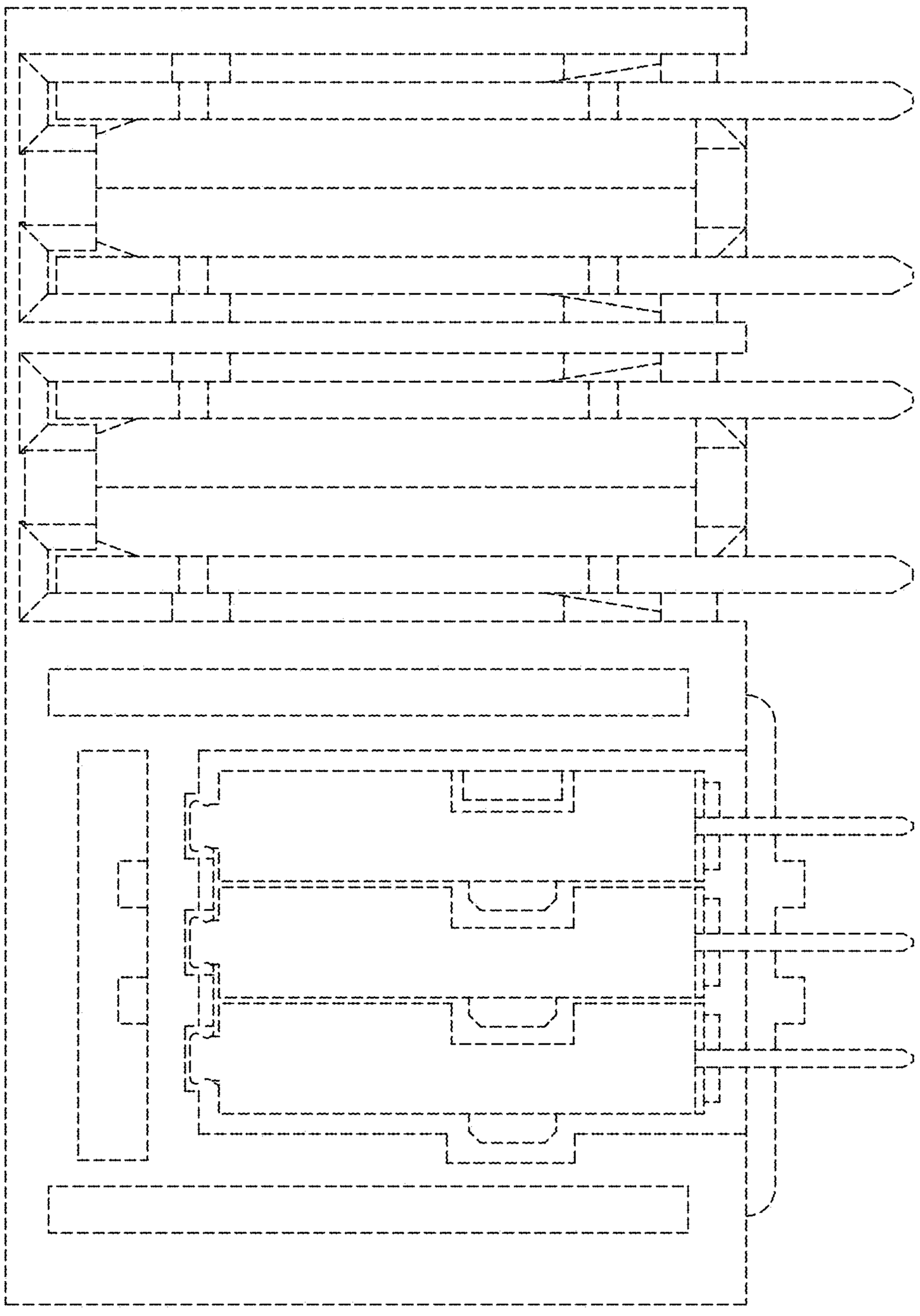


FIG. 10

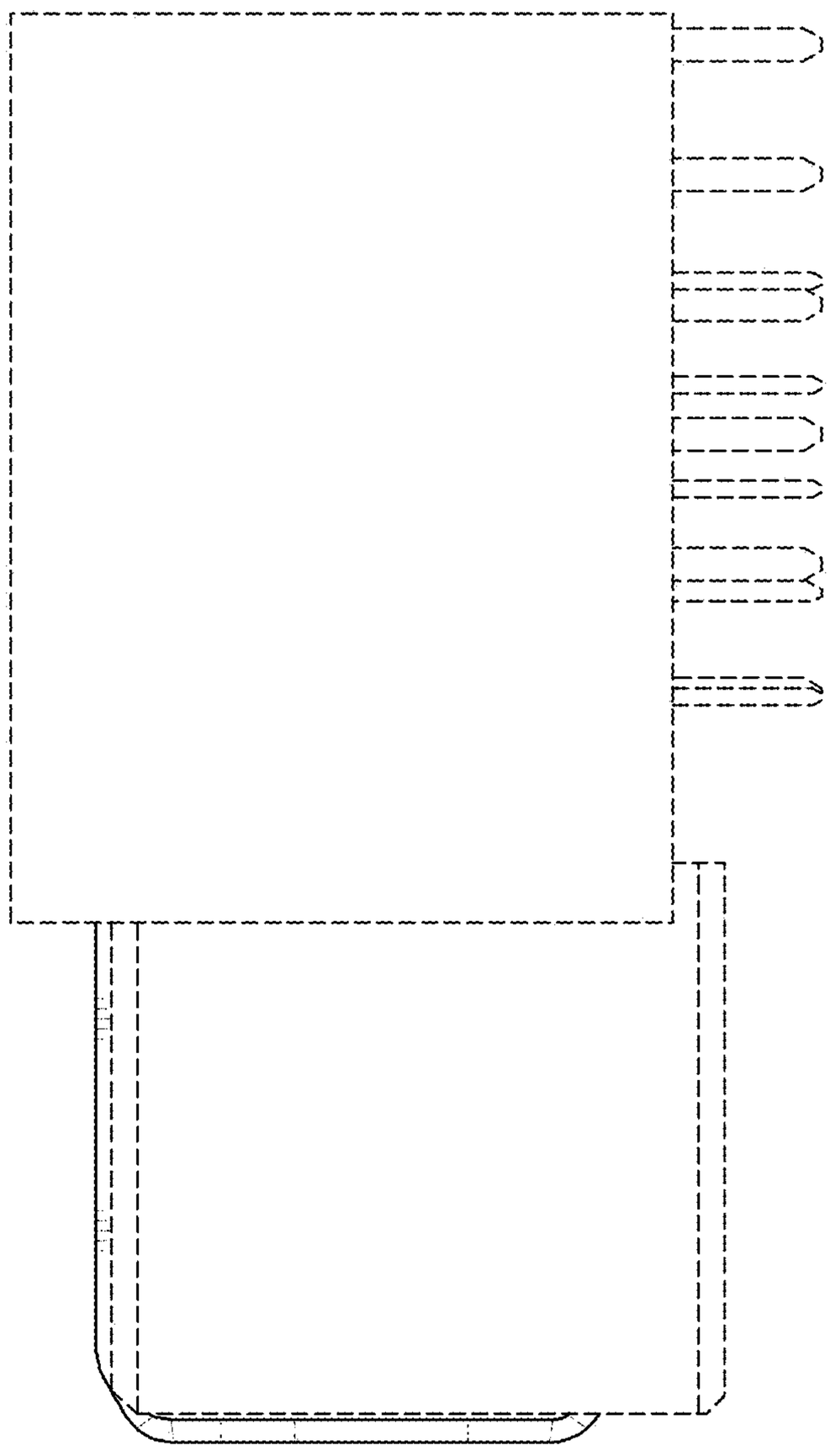


FIG. 11

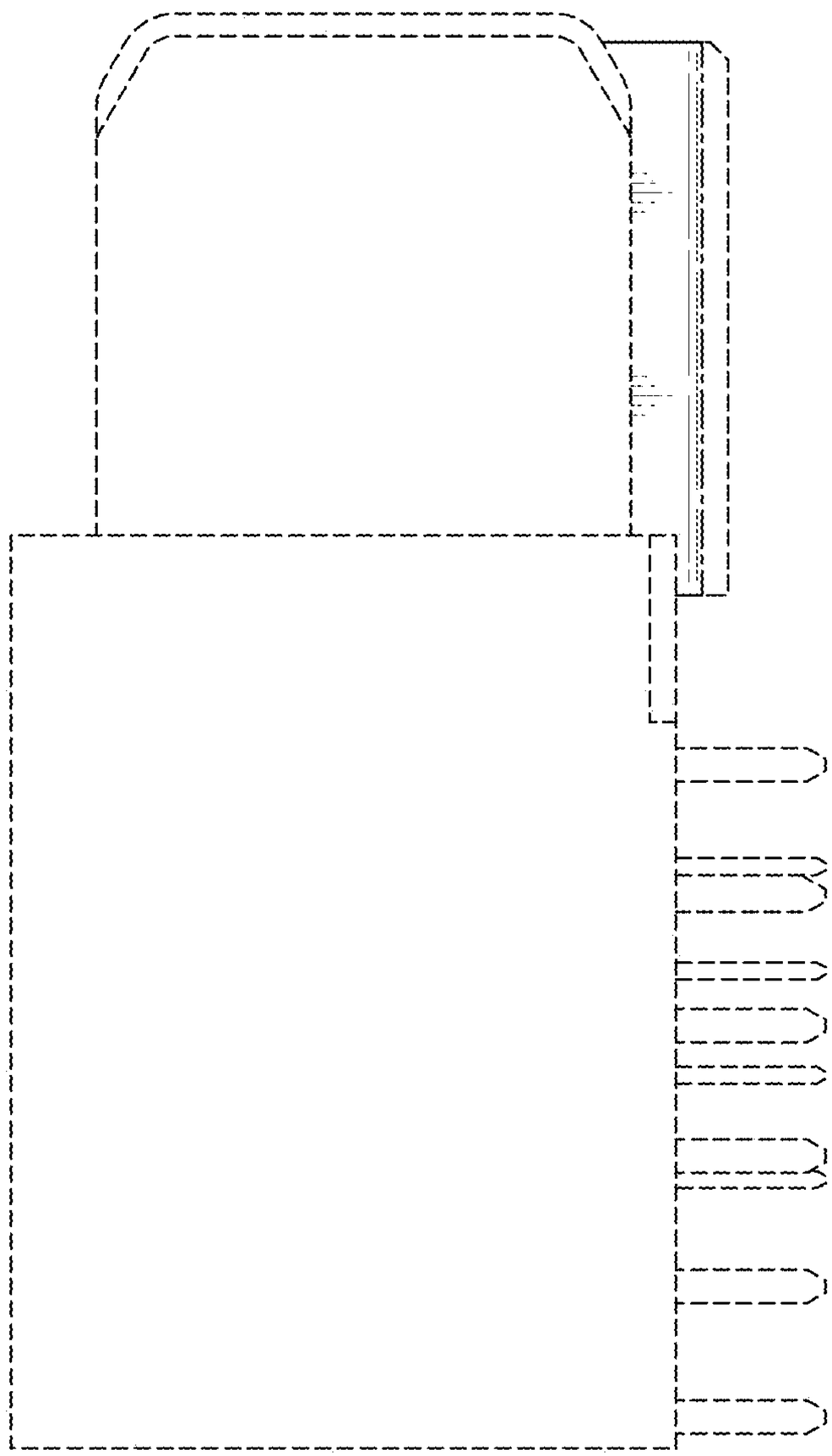


FIG. 12

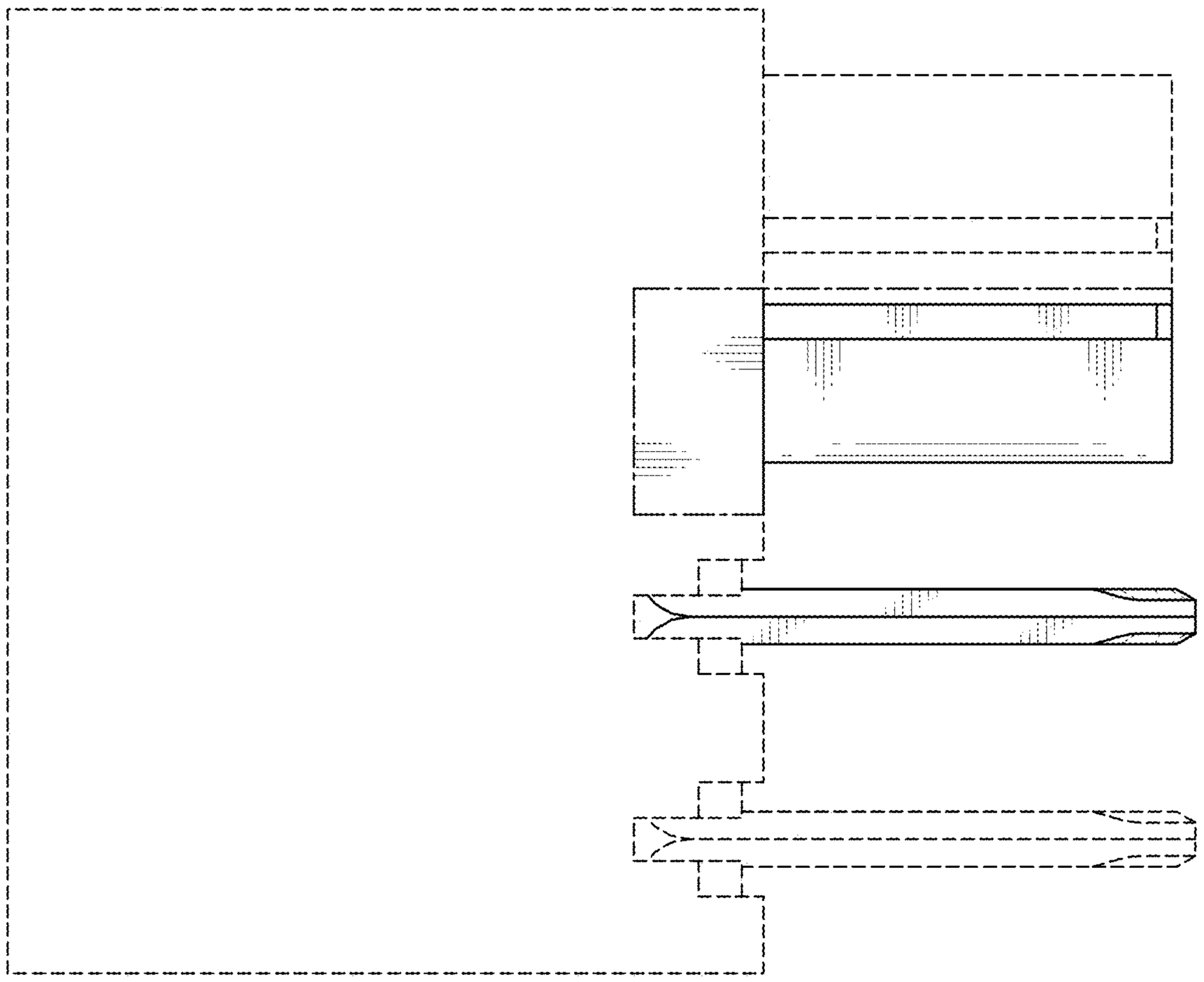


FIG. 13

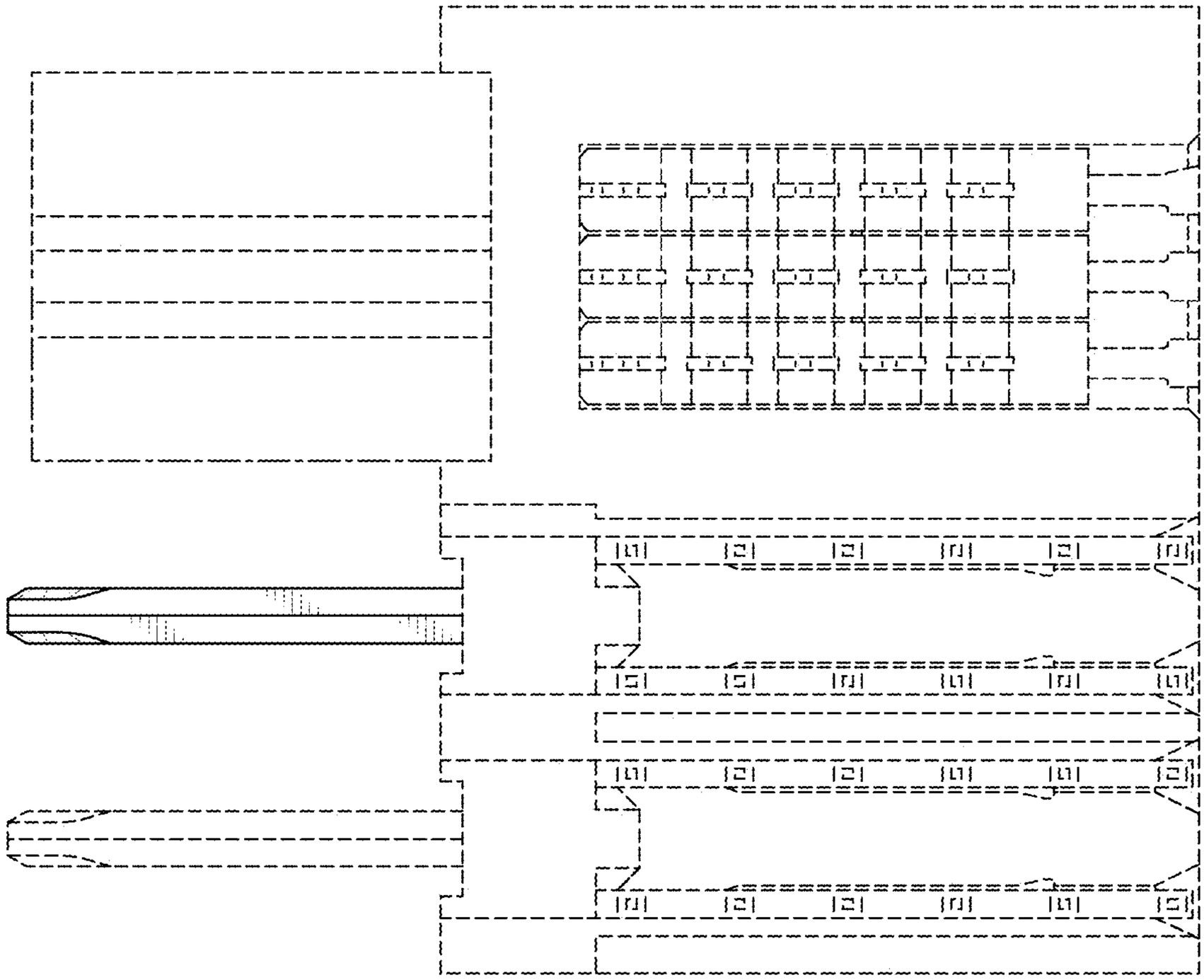


FIG. 14