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**Posey et al.**

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(54) **SURGICAL STAPLER DECK WITH TISSUE ENGAGEMENT CLEAT FEATURES**

FOREIGN PATENT DOCUMENTS

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JP 2002-165801 A 6/2002  
JP 2005-211651 A 8/2005

(Continued)

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OTHER PUBLICATIONS

Japanese Office Action dated Apr. 7, 2020, for Application No. 2019-014281, 1 page.

(Continued)

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

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(21) Appl. No.: **29/771,993**

(57) **CLAIM**

The ornamental design for a surgical stapler deck with tissue engagement cleat features, as shown and described.

(22) Filed: **Feb. 26, 2021**

**DESCRIPTION**

**Related U.S. Application Data**

(62) Division of application No. 29/675,045, filed on Dec. 28, 2018, now Pat. No. Des. 926,317.

(51) **LOC (14) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/145**

(58) **Field of Classification Search**  
USPC ..... D24/145-147  
CPC ..... A61B 17/072; A61B 17/068; A61B 17/07207; A61B 17/064; A61B 2017/07214; A61B 2017/07221; A61B 2017/07228; A61B 2017/07271  
See application file for complete search history.

FIG. 1 is an enlarged perspective view of a surgical stapler deck with tissue engagement cleat features showing our new design;

FIG. 2 is a front elevational view of the staple cartridge housing of FIG. 1;

FIG. 3 is a rear elevational view of the staple cartridge housing of FIG. 1;

FIG. 4 is a first side elevational view of the staple cartridge housing of FIG. 1;

FIG. 5 is a second side elevational view of the staple cartridge housing of FIG. 1;

FIG. 6 is a top plan view of the staple cartridge housing of FIG. 1; and,

FIG. 7 is a bottom plan view of the staple cartridge housing of FIG. 1.

The broken lines immediately adjacent the shaded areas represent the bounds of the claimed design while all other broken lines are directed to environment and are for illustrative purposes only; the broken lines form no part of the claimed design.

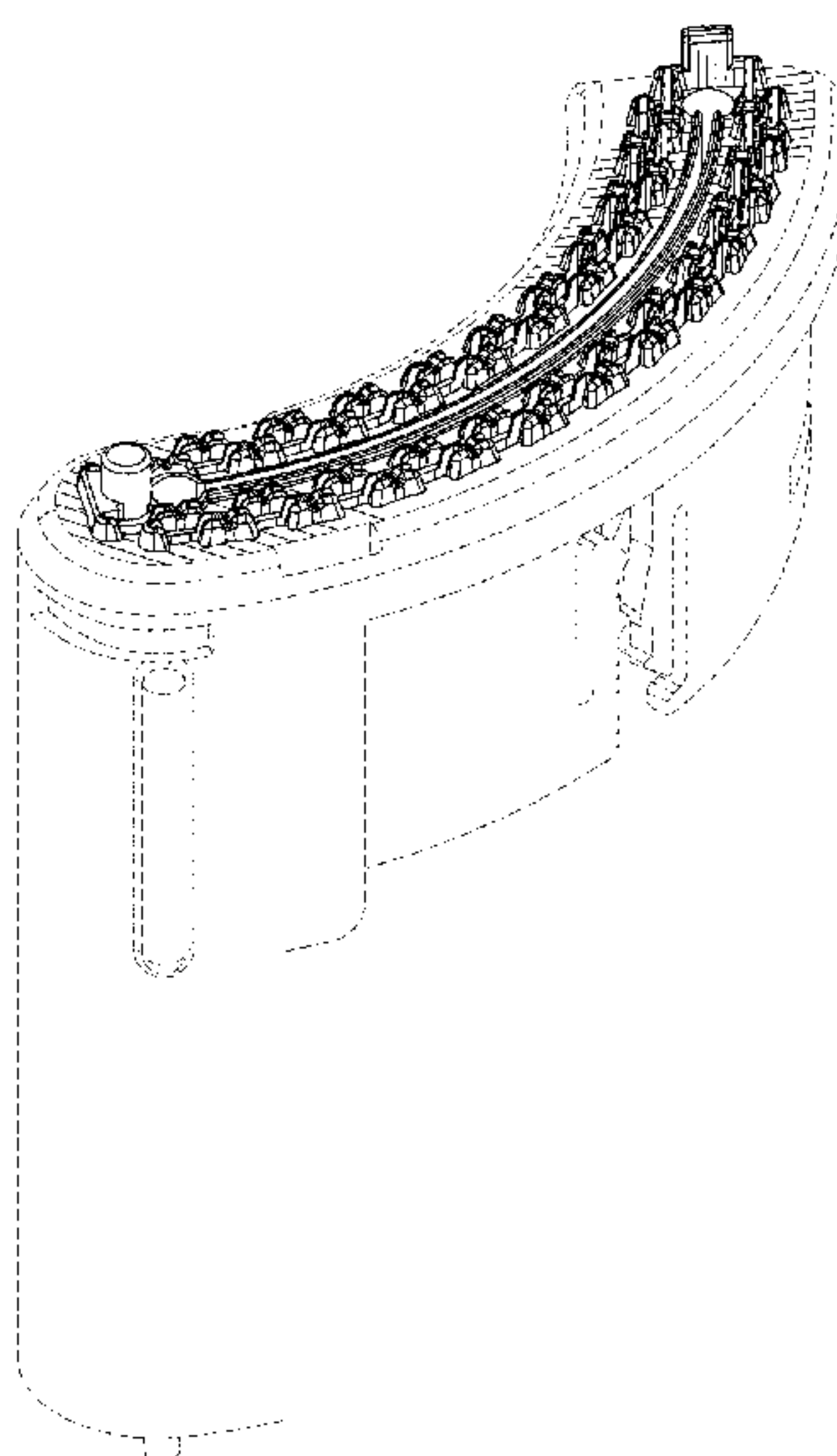
(56) **References Cited**

U.S. PATENT DOCUMENTS

4,805,823 A 2/1989 Rothfuss  
5,415,334 A 5/1995 Williamson, IV et al.

(Continued)

**1 Claim, 4 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

5,465,895 A	11/1995	Knodel et al.	9,913,642 B2	3/2018	Leimbach et al.
5,597,107 A	1/1997	Knodel et al.	9,924,943 B2	3/2018	Mohan Pinjala et al.
5,632,432 A	5/1997	Schulze et al.	D814,632 S	4/2018	Shankarsetty
5,673,840 A	10/1997	Schulze et al.	9,936,954 B2	4/2018	Shelton, IV et al.
5,704,534 A	1/1998	Huitema et al.	9,999,408 B2	6/2018	Boudreaux et al.
5,792,135 A	8/1998	Madhani et al.	10,045,780 B2 *	8/2018	Adams ..... A61B 17/072
5,814,055 A	9/1998	Knodel et al.	10,092,292 B2	10/2018	Boudreaux et al.
5,817,084 A	10/1998	Jensen	D833,010 S	11/2018	Harris et al.
5,878,193 A	3/1999	Wang et al.	10,123,798 B2	11/2018	Baxter, III et al.
6,231,565 B1	5/2001	Tovey et al.	10,136,887 B2	11/2018	Shelton, IV et al.
6,364,888 B1	4/2002	Niemeyer et al.	D836,198 S	12/2018	Harris et al.
6,783,524 B2	8/2004	Anderson et al.	D836,199 S	12/2018	Schowalter et al.
6,805,273 B2	10/2004	Bilotti et al.	10,149,680 B2	12/2018	Parihar et al.
6,978,921 B2	12/2005	Shelton, IV et al.	10,258,334 B2	4/2019	Adams et al.
6,988,650 B2	1/2006	Schwemberger et al.	10,285,693 B2	5/2019	Kimsey et al.
7,000,818 B2	2/2006	Shelton, IV et al.	10,314,582 B2	6/2019	Shelton, IV et al.
7,134,587 B2	11/2006	Schwemberger et al.	10,349,939 B2	7/2019	Shelton, IV et al.
7,143,923 B2	12/2006	Shelton, IV et al.	10,542,977 B2	1/2020	Mohan et al.
7,147,139 B2	12/2006	Schwemberger et al.	10,561,474 B2	2/2020	Adams et al.
7,147,140 B2	12/2006	Wukusick et al.	10,709,447 B2	7/2020	Mohan Pinjala et al.
7,204,404 B2	4/2007	Nguyen et al.	10,786,324 B2	9/2020	Marczyk
7,207,472 B2	4/2007	Wukusick et al.	D901,686 S	11/2020	Barton et al.
7,303,108 B2	12/2007	Shelton, IV	D903,115 S	11/2020	Zeiner et al.
7,367,485 B2	5/2008	Shelton, IV et al.	10,905,424 B2	2/2021	Bakos et al.
7,380,695 B2	6/2008	Doll et al.	10,918,384 B2	2/2021	Yigit et al.
7,380,696 B2	6/2008	Shelton, IV et al.	10,973,521 B2 *	4/2021	Adams ..... A61B 17/068
7,404,508 B2	7/2008	Smith et al.	D922,576 S	6/2021	Schellin et al.
7,434,715 B2	10/2008	Shelton, IV et al.	11,033,269 B2	6/2021	Vendely et al.
7,524,320 B2	4/2009	Tierney et al.	D926,317 S	7/2021	Posey et al.
7,644,848 B2	1/2010	Swayze et al.	D926,318 S	7/2021	Posey et al.
7,691,098 B2	4/2010	Wallace et al.	11,103,243 B2	8/2021	Bakos et al.
7,721,930 B2	5/2010	McKenna et al.	11,116,505 B2	9/2021	Vendely et al.
7,806,891 B2	10/2010	Nowlin et al.	D932,621 S	10/2021	Ridgley et al.
8,141,762 B2	3/2012	Bedi et al.	D933,220 S	10/2021	Tate et al.
8,210,411 B2	7/2012	Yates et al.	11,166,724 B2	11/2021	McGiveron et al.
8,371,491 B2	2/2013	Huitema et al.	11,166,725 B2	11/2021	Vendely et al.
8,408,439 B2	4/2013	Huang et al.	11,202,628 B2	12/2021	Posey et al.
8,453,914 B2	6/2013	Laurent et al.	2005/0139629 A1 *	6/2005	Schwemberger .... A61B 17/072 227/19
8,479,969 B2	7/2013	Shelton, IV	2005/0139634 A1 *	6/2005	Schwemberger .... A61B 17/072 227/19
8,573,461 B2	11/2013	Shelton, IV et al.	2005/0139636 A1	6/2005	Schwemberger et al.
8,573,465 B2	11/2013	Shelton, IV	2005/0143759 A1	6/2005	Kelly
8,579,990 B2	11/2013	Priewe	2005/0145672 A1	7/2005	Schwemberger et al.
8,602,288 B2	12/2013	Shelton, IV et al.	2008/0169328 A1	7/2008	Shelton, IV
8,616,431 B2	12/2013	Timm et al.	2011/0068147 A1	3/2011	Racenet et al.
8,783,541 B2	7/2014	Shelton, IV et al.	2012/0241493 A1	9/2012	Baxter, III et al.
8,800,838 B2	8/2014	Shelton, IV	2013/0068816 A1	3/2013	Vasudevan et al.
8,801,735 B2	8/2014	Shelton, IV et al.	2013/0075447 A1	3/2013	Weisenburgh et al.
8,814,025 B2	8/2014	Miller et al.	2013/0206813 A1	8/2013	Nalagatla
8,820,605 B2	9/2014	Shelton, IV	2014/0239037 A1	8/2014	Boudreaux et al.
8,844,789 B2	9/2014	Shelton, IV et al.	2014/0239048 A1	8/2014	Racenet et al.
8,899,464 B2	12/2014	Hueil et al.	2015/0351758 A1	12/2015	Shelton, IV et al.
8,992,060 B2	4/2015	Dassanayake et al.	2016/0089146 A1	3/2016	Harris et al.
8,998,060 B2	4/2015	Bruewer et al.	2016/0278774 A1	9/2016	Shelton, IV et al.
9,101,359 B2	8/2015	Smith et al.	2017/0027571 A1	2/2017	Nalagatla et al.
9,125,651 B2	9/2015	Vasudevan et al.	2017/0049444 A1	2/2017	Schellin et al.
9,186,142 B2	11/2015	Fanelli et al.	2017/0055980 A1	3/2017	Vendely et al.
9,198,644 B2	12/2015	Balek et al.	2017/0055981 A1	3/2017	Vendely et al.
9,211,120 B2	12/2015	Scheib et al.	2017/0055982 A1	3/2017	Zeiner et al.
9,301,759 B2	4/2016	Spivey et al.	2017/0055986 A1	3/2017	Harris et al.
9,393,018 B2	7/2016	Wang et al.	2017/0056016 A1	3/2017	Barton et al.
9,398,911 B2	7/2016	Auld et al.	2017/0056017 A1	3/2017	Vendely et al.
9,492,170 B2	11/2016	Bear et al.	2017/0056018 A1	3/2017	Zeiner et al.
9,517,065 B2	12/2016	Simms et al.	2017/0086823 A1	3/2017	Leimbach et al.
9,597,082 B2	3/2017	Stokes et al.	2017/0086837 A1	3/2017	Vendely et al.
9,622,746 B2	4/2017	Simms et al.	2017/0086842 A1	3/2017	Shelton, IV et al.
9,717,497 B2	8/2017	Zerkle et al.	2017/0189012 A1	7/2017	Adams et al.
9,795,379 B2	10/2017	Leimbach et al.	2017/0189022 A1	7/2017	Adams et al.
9,801,626 B2	10/2017	Parihar et al.	2017/0281177 A1	10/2017	Harris et al.
9,808,248 B2	11/2017	Hoffman	2018/0153544 A1	6/2018	Shankarsetty et al.
9,814,460 B2	11/2017	Kimsey et al.	2018/0235610 A1	8/2018	Harris et al.
9,839,421 B2	12/2017	Zerkle et al.	2018/0235611 A1	8/2018	Harris et al.
9,844,368 B2	12/2017	Boudreaux et al.	2018/0235619 A1	8/2018	Harris et al.
9,848,871 B2	12/2017	Harris et al.	2019/0000455 A1	1/2019	Adams et al.
9,867,612 B2	1/2018	Parihar et al.	2019/0000481 A1	1/2019	Harris et al.
9,867,615 B2	1/2018	Fanelli et al.	2019/0261985 A1	8/2019	Adams et al.
			2020/0205808 A1	7/2020	Adams et al.
			2020/0205811 A1	7/2020	Posey et al.



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2020/0205822 A1 7/2020 Heupel et al.  
2020/0205824 A1 7/2020 Barton et al.  
2020/0205826 A1 7/2020 Bakos et al.  
2020/0337698 A1\* 10/2020 Simms ..... A61B 17/072  
2020/0337699 A1\* 10/2020 Rector ..... A61B 17/072  
2020/0337700 A1\* 10/2020 Hontz ..... A61B 17/072  
2020/0337701 A1\* 10/2020 Campbell ..... A61B 17/072  
2021/0378668 A1\* 12/2021 Maddur ..... A61B 17/072  
2022/0000475 A1\* 1/2022 Varadhan ..... A61B 17/072

FOREIGN PATENT DOCUMENTS

JP 2006-346445 A 12/2006  
JP 2008-055165 A 3/2008  
JP 2008-212672 A 9/2008  
JP 2009-018163 A 1/2009  
JP 1578222 S 6/2017

OTHER PUBLICATIONS

Japanese Office Action dated Apr. 14, 2020, for Application No. 2020-001378, 1 page.

U.S. Appl. No. 62/209,041, entitled "Method and Apparatus for Applying a Buttress to End Effector of a Surgical Stapler," filed Aug. 24, 2015.

\* cited by examiner

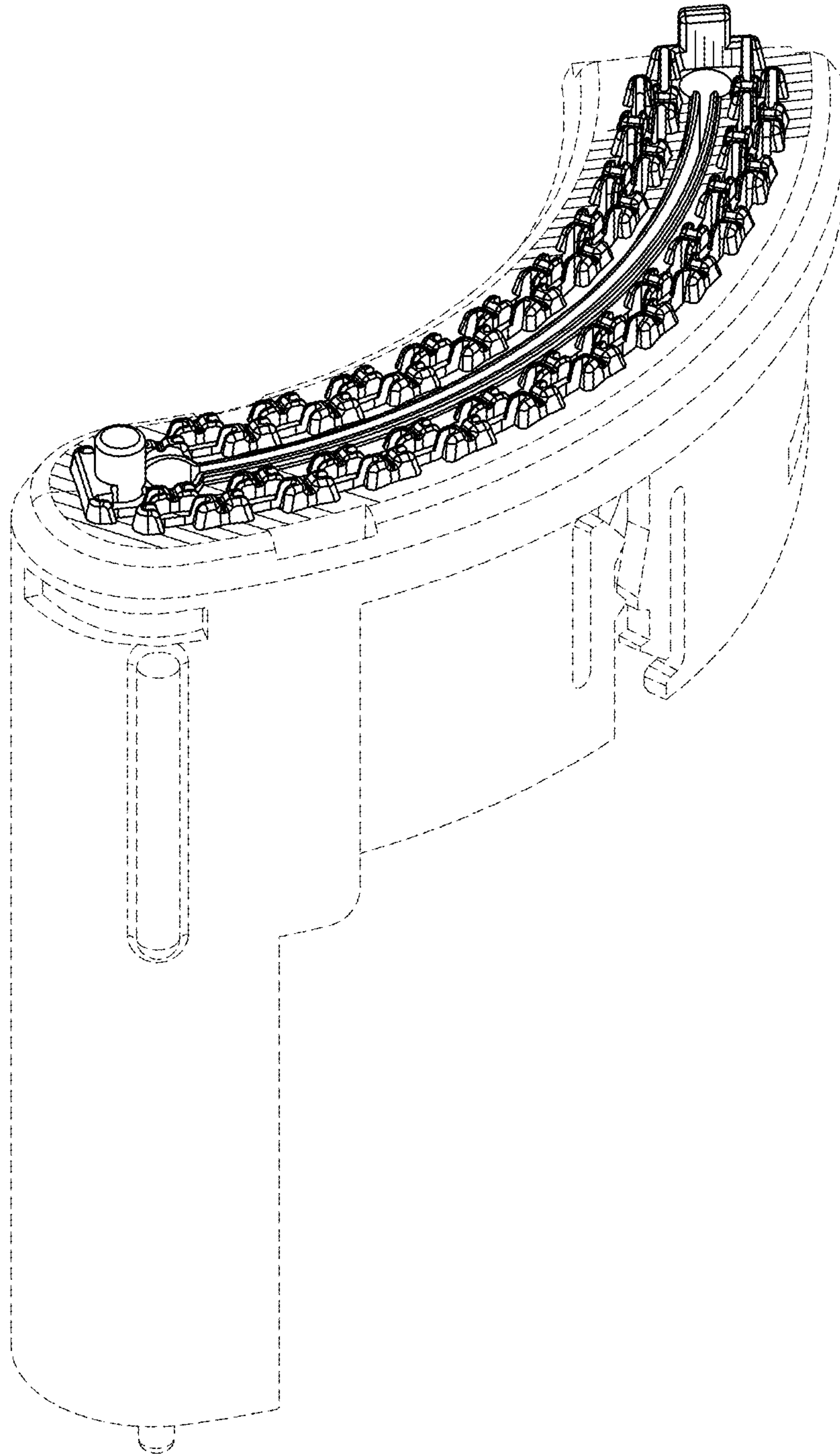


Fig. 1

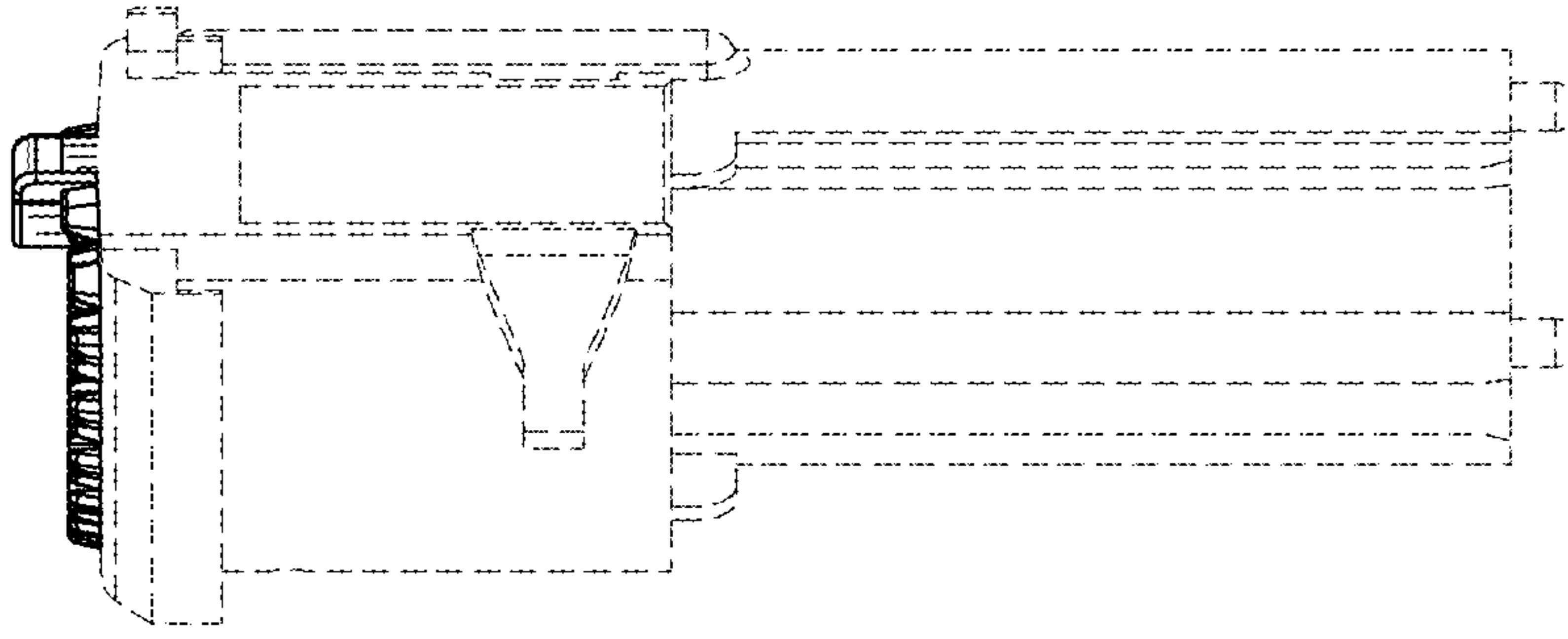


Fig. 3

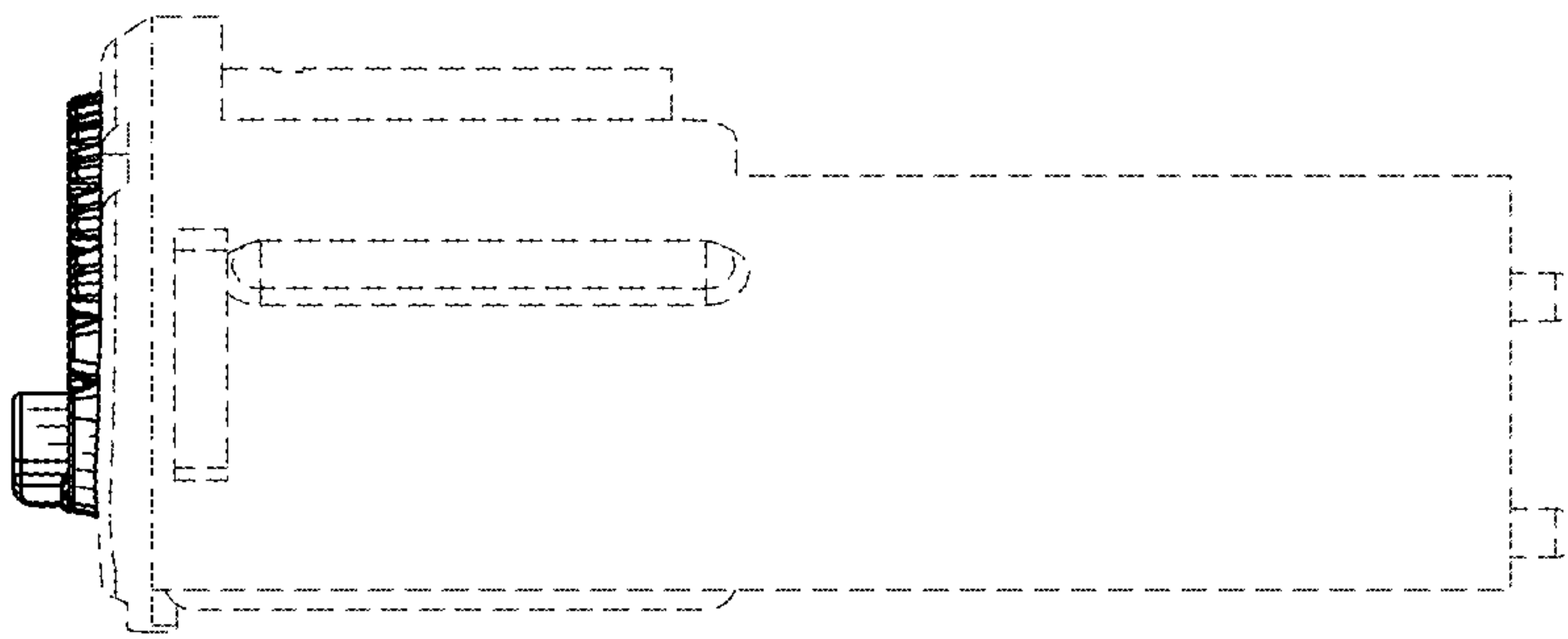


Fig. 2

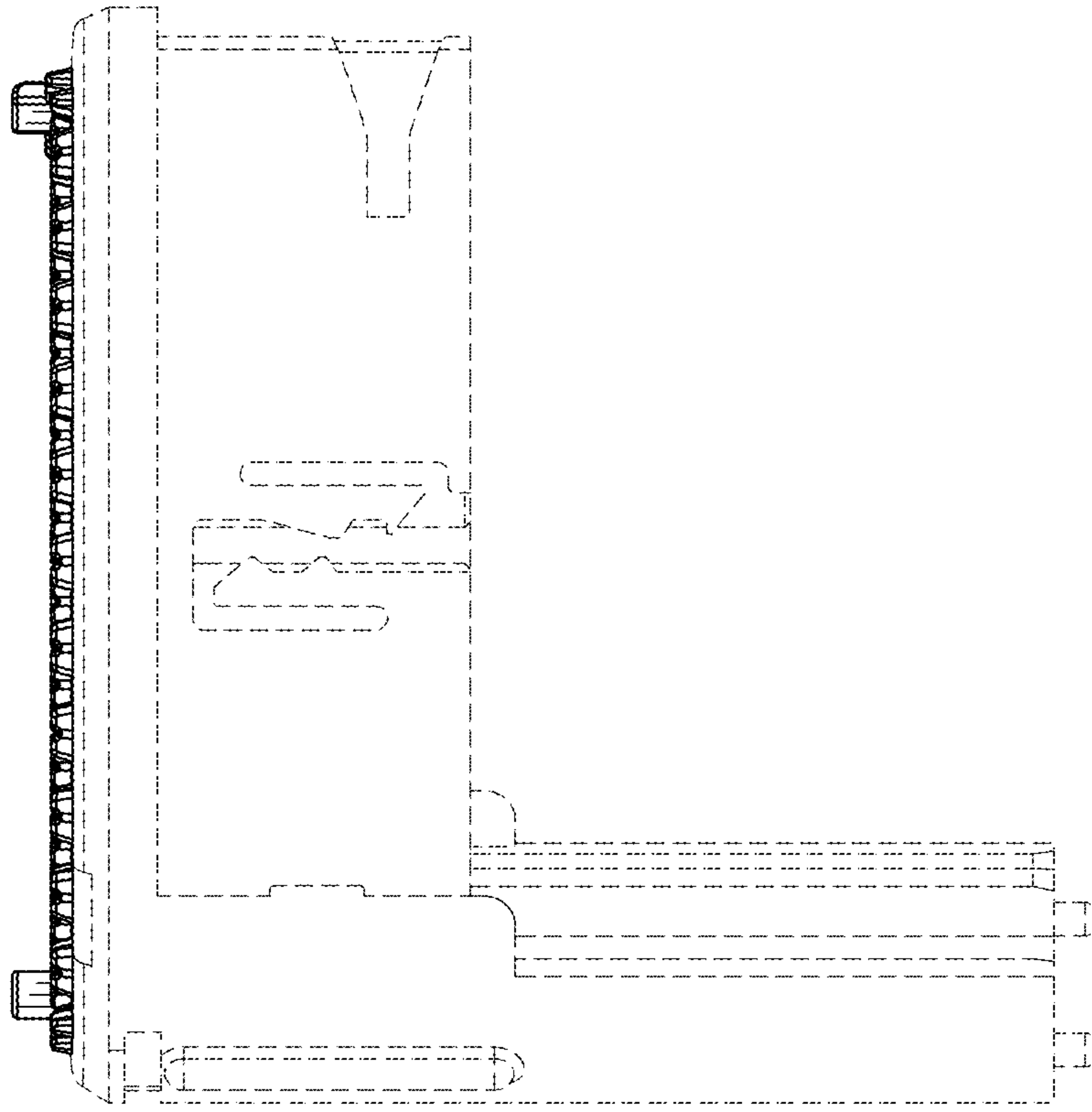


Fig. 5

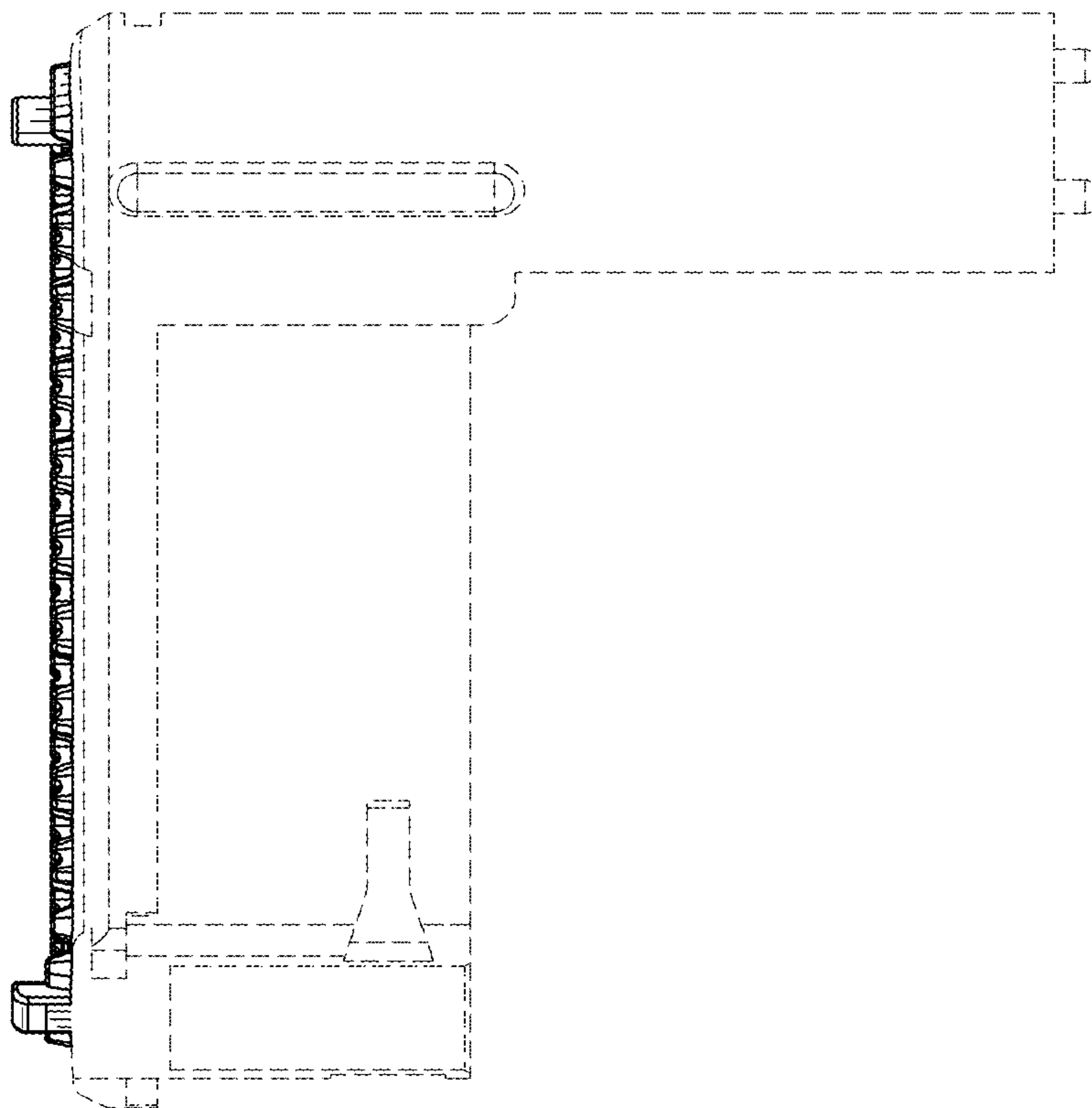


Fig. 4

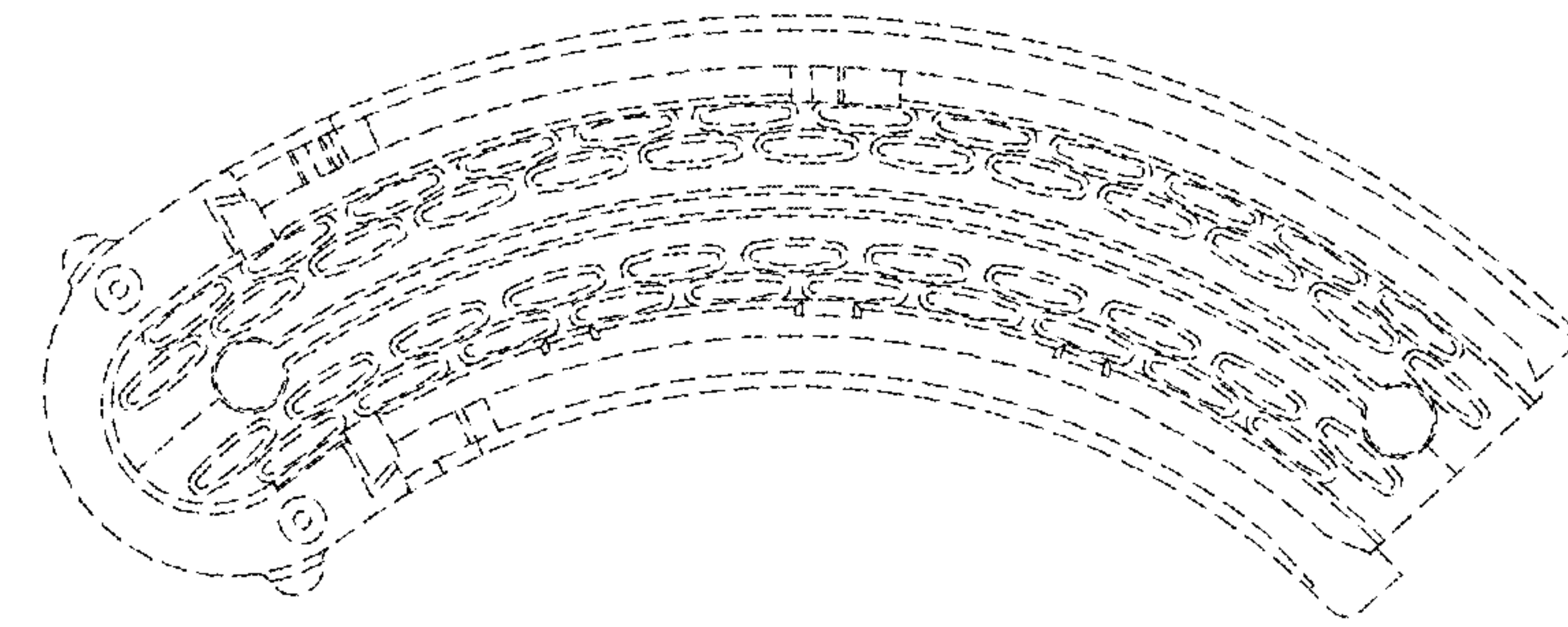


Fig. 7

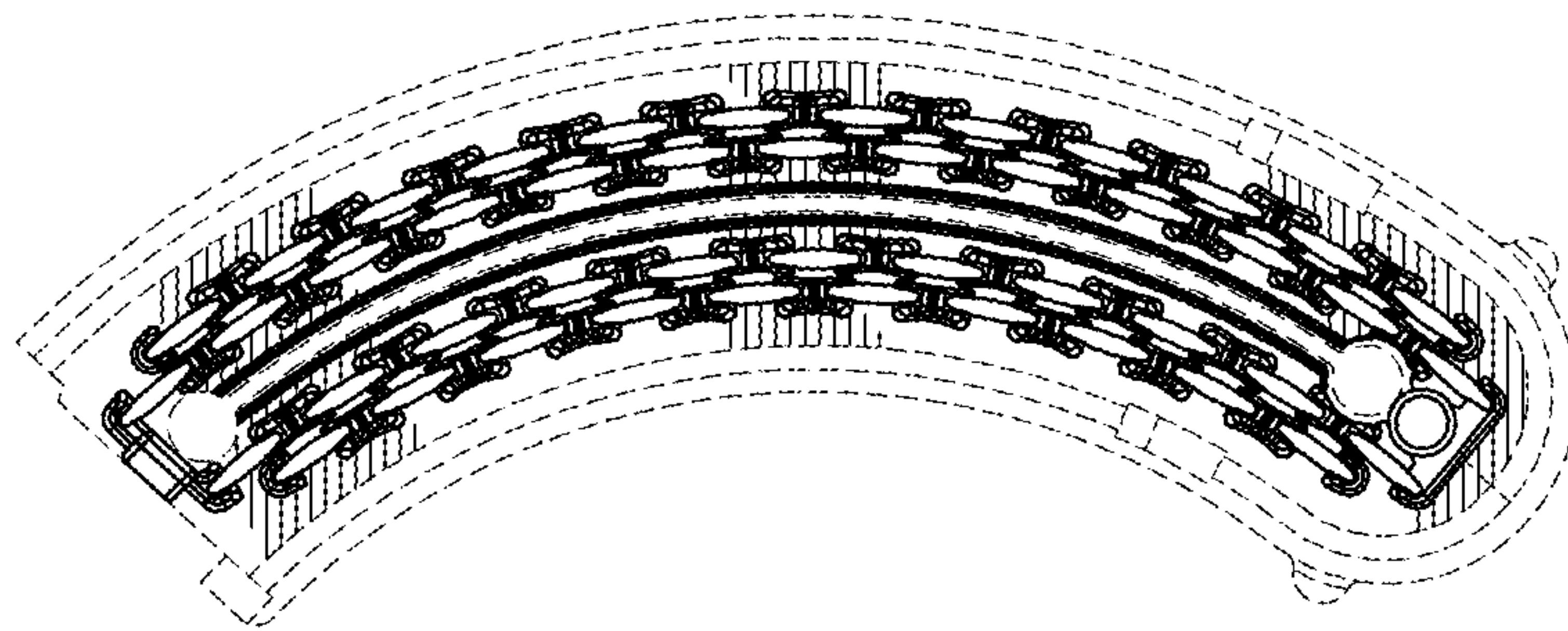


Fig. 6