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(12) **United States Design Patent** (10) **Patent No.:** **US D915,292 S**
Corona (45) **Date of Patent:** **** Apr. 6, 2021**

(54) **ELECTRICAL CONNECTOR INSERT**
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 (73) Assignee: **DSM&T COMPANY, INC.**, Fontana, CA (US)
 (**) Term: **15 Years**

5,201,669 A 4/1993 Lin
 D336,070 S 6/1993 Clark
 D344,490 S 2/1994 Nociar
 5,285,163 A 2/1994 Liotta
 5,401,181 A 3/1995 Wilson
 D360,187 S 7/1995 Starec et al.
 D360,871 S 8/1995 Wilson
 D360,872 S 8/1995 Wilson
 5,460,545 A 10/1995 Siemon et al.
 D366,646 S 1/1996 Carr
 D367,644 S 3/1996 Fukao et al.
 D371,112 S 6/1996 Anthony

(Continued)

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

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

(58) **Field of Classification Search**
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 CPC H01R 4/00; H01R 12/70; H01R 13/052
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

123,275 A	1/1872	McCurry	
D86,515 S	3/1932	Cox	
2,046,221 A	6/1936	Thomas	
2,633,482 A	3/1953	De Tar	
D188,419 S	7/1960	Danesi	
3,008,116 A	11/1961	Blanchenot	
3,560,908 A	2/1971	Dell et al.	
4,258,970 A	3/1981	Bourdon et al.	
4,606,596 A	8/1986	Whiting et al.	
4,611,873 A *	9/1986	Punako H01R 13/6588 439/277
D286,397 S	10/1986	Challans	
4,704,091 A	11/1987	Owens et al.	
D328,281 S	7/1992	Nociar	
D329,840 S	9/1992	Nociar	

OTHER PUBLICATIONS

“Aviation Connector Plug”. Found online Jul. 10, 2020 at amazon.com. Reference dated Dec. 18, 2013. Retrieved from https://www.amazon.com/Aviation-Connector-Thread-Female-Lsgoodcare/dp/B01NCT2SCU/ref=sr_1_1. (Year: 2013).*

(Continued)

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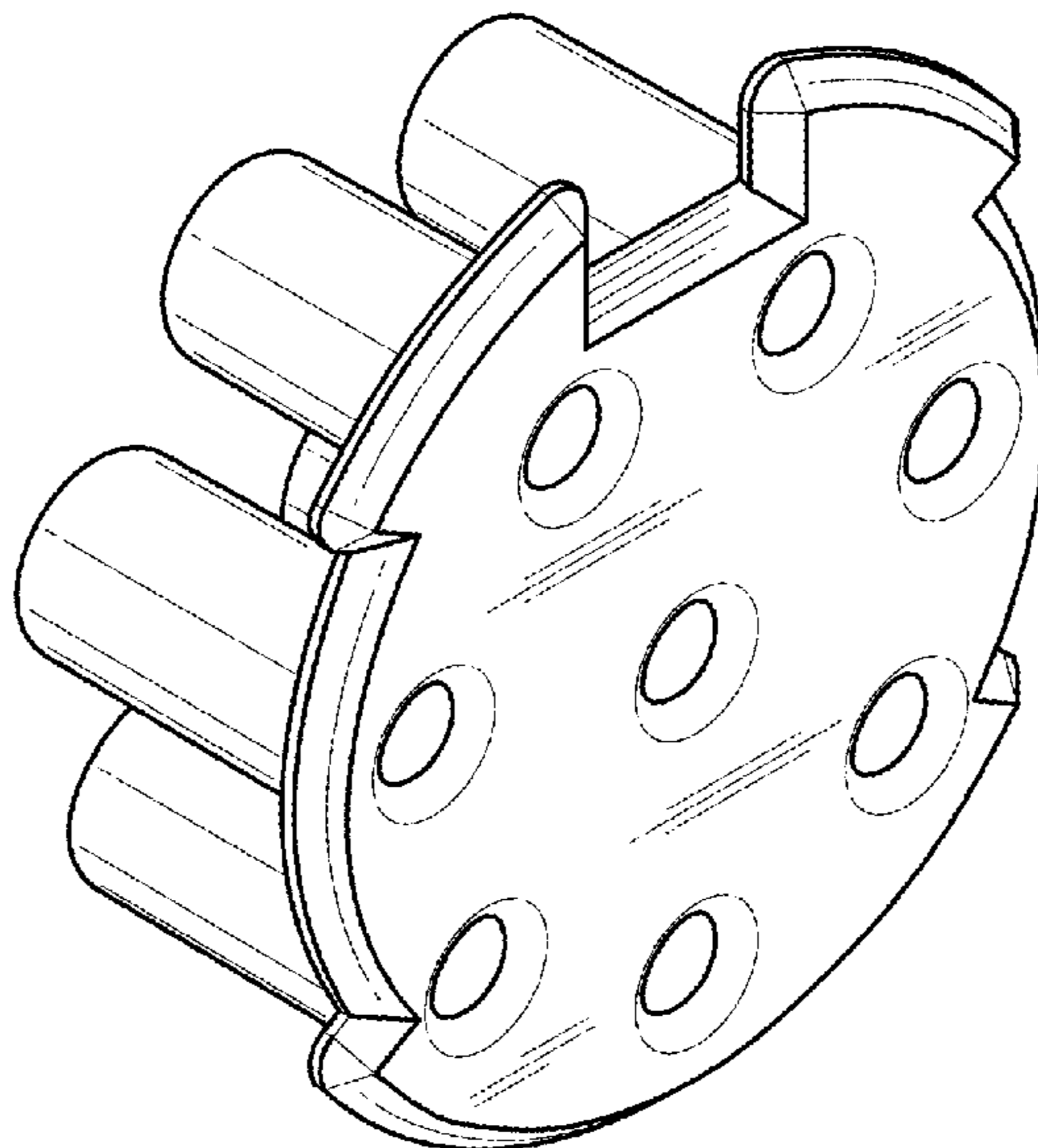
(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a top, front, left side perspective view of an electrical connector insert, showing my new design.
 FIG. 2 is a front elevational view thereof.
 FIG. 3 is a right side elevational view thereof.
 FIG. 4 is a back elevational view thereof.
 FIG. 5 is a left side elevational view thereof.
 FIG. 6 is a top plan view thereof; and,
 FIG. 7 is a bottom plan view thereof.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,641,310 A 6/1997 Tiberio, Jr.
 5,664,959 A * 9/1997 Duell H01R 13/5219
 439/278
 D393,831 S 4/1998 Siemon et al.
 D416,230 S 11/1999 Narumo et al.
 D425,028 S 5/2000 Lee
 D434,377 S 11/2000 Bussett et al.
 D437,828 S 2/2001 Corona
 D439,221 S 3/2001 Corona
 D444,128 S 6/2001 Tan et al.
 D445,763 S 7/2001 Corona
 D446,186 S 8/2001 Corona
 D454,115 S 3/2002 Zemba
 6,379,169 B1 4/2002 Corona
 6,383,003 B1 5/2002 Corona
 D472,523 S 4/2003 Hansen
 D473,844 S 4/2003 Bender et al.
 D502,919 S 3/2005 Studnicky
 D503,150 S 3/2005 Yamawaki et al.
 D513,405 S 1/2006 Rohr
 D514,070 S 1/2006 Bachmann
 D516,028 S 2/2006 Deng
 D521,933 S 5/2006 Wade et al.
 D524,736 S 7/2006 Morita et al.
 D524,737 S 7/2006 Lai et al.
 D529,441 S 10/2006 LaPere
 D529,865 S 10/2006 LaPere
 D533,502 S 12/2006 Wakefield et al.
 D535,618 S 1/2007 Hu et al.
 D555,594 S 11/2007 So
 7,300,318 B2 11/2007 Deja
 D559,785 S 1/2008 Tosetti
 D560,168 S 1/2008 McCoy
 D560,610 S 1/2008 McCoy
 D561,107 S * 2/2008 Cuff D13/147
 D569,955 S 5/2008 Chen
 D571,727 S 6/2008 Yang et al.
 7,390,210 B2 6/2008 Corona
 D573,536 S 7/2008 Hariharesan et al.
 7,395,166 B2 7/2008 Plishner
 D577,671 S 9/2008 Schnitzler
 D586,750 S 2/2009 Li
 D596,125 S 7/2009 Norin et al.
 D601,090 S 9/2009 Vigorito et al.
 D604,697 S 11/2009 Sogo et al.
 D605,599 S 12/2009 Wong
 D606,944 S 12/2009 Mehnert et al.
 D611,904 S 3/2010 Mehnert et al.
 D613,246 S 4/2010 Muecke et al.
 D615,042 S 5/2010 Morgan et al.
 D615,496 S 5/2010 Mennekes
 7,722,397 B2 5/2010 Schleith
 D616,821 S 6/2010 The
 D622,670 S * 8/2010 Otasu D13/154
 7,785,123 B2 8/2010 Corona
 D626,506 S 11/2010 Giefers et al.
 D627,056 S * 11/2010 Quensel D24/107
 RE42,230 E 3/2011 Norin et al.
 D635,520 S 4/2011 Kiely
 D637,159 S 5/2011 Hu
 D639,243 S 6/2011 Gharib et al.
 D639,250 S 6/2011 Svelnis et al.
 D639,743 S 6/2011 Smith et al.
 D643,815 S 8/2011 Mark et al.
 D651,171 S 12/2011 Yamauchi et al.
 D651,172 S 12/2011 Yamauchi et al.
 D670,650 S 11/2012 Ebihara
 D673,118 S 12/2012 Giefers et al.
 D677,629 S 3/2013 Corona
 D678,200 S 3/2013 Corona
 D678,201 S 3/2013 Corona
 D678,202 S 3/2013 Corona
 D678,203 S 3/2013 Corona
 D678,204 S 3/2013 Corona
 D679,662 S 4/2013 Svelnis et al.

D682,209 S 5/2013 Henrick et al.
 D682,793 S 5/2013 Igelmund
 D692,829 S 11/2013 Dobler
 D694,189 S 11/2013 Ledinger et al.
 D697,030 S 1/2014 Ledinger et al.
 D698,730 S 2/2014 Hori et al.
 D703,142 S 4/2014 Hoshino et al.
 D704,645 S 5/2014 Nomura et al.
 D705,738 S 5/2014 Schmidt et al.
 D707,179 S 6/2014 Smith
 D708,142 S 7/2014 Luther et al.
 D712,359 S * 9/2014 Allen D13/147
 D712,840 S 9/2014 Sykes et al.
 D715,227 S 10/2014 Leem
 D716,233 S 10/2014 Lai
 D716,732 S 11/2014 Neumann
 D717,246 S * 11/2014 Ilkhanov D13/120
 D722,025 S * 2/2015 Smith D13/147
 D729,169 S 5/2015 Corona
 D733,655 S 7/2015 Sato et al.
 D735,671 S 8/2015 Kuhnert
 D737,771 S 9/2015 Hofmann
 D743,893 S 11/2015 Kuribayashi
 D747,271 S 1/2016 Endo
 D748,058 S 1/2016 Corona
 D753,065 S 4/2016 Corona
 D753,600 S 4/2016 Svelnis
 D755,729 S * 5/2016 Smith D13/155
 D756,929 S 5/2016 Harck
 D762,178 S 7/2016 Liu et al.
 D766,183 S 9/2016 Corona
 D766,184 S 9/2016 Corona
 D768,082 S 10/2016 Chuang
 D770,386 S 11/2016 Corona
 D770,981 S 11/2016 Corona
 D771,569 S 11/2016 Smith
 D774,459 S * 12/2016 Renaud-Byrne D13/146
 D774,465 S 12/2016 Corona
 D774,466 S 12/2016 Corona
 D777,106 S 1/2017 Katagiyama
 D780,123 S 2/2017 Zetterqvist et al.
 D781,787 S 3/2017 Spiel
 D787,446 S 5/2017 Cockerill
 9,680,268 B1 6/2017 Finona
 9,692,144 B1 6/2017 Hung
 D793,340 S 8/2017 Wang
 D794,572 S 8/2017 Corona
 D797,052 S 9/2017 Moseke et al.
 D801,933 S 11/2017 Sasaki
 D813,821 S 3/2018 Corona
 D813,822 S 3/2018 Corona
 D816,040 S 4/2018 Corona
 D816,616 S 5/2018 Corona
 D818,964 S 5/2018 Corona
 D824,856 S 8/2018 Corona
 D824,862 S 8/2018 Corona
 D837,741 S 1/2019 Corona
 D838,247 S 1/2019 Corona
 D852,144 S * 6/2019 Maegawa D13/155
 2002/0123275 A1 9/2002 Zhao
 2003/0139094 A1 7/2003 Venditti et al.
 2004/0147170 A1 7/2004 Greenwood et al.
 2006/0172577 A1 * 8/2006 Howard H01R 13/5219
 439/282
 2008/0233773 A1 9/2008 Meleck
 2011/0003512 A1 1/2011 Bower et al.
 2014/0120761 A1 5/2014 Chiu
 2014/0141634 A1 5/2014 Sasano
 2014/0302724 A1 10/2014 Ono
 2015/0303617 A1 10/2015 Smith
 2016/0020547 A1 * 1/2016 Khadkikar F04B 53/16
 439/587
 2016/0049747 A1 2/2016 Yu

OTHER PUBLICATIONS

“Hermetically Sealed Connectors”. Found online Jul. 13, 2020 at connectorsupplier.com. Reference dated Feb. 28, 2017. Retrieved

(56)

References Cited

OTHER PUBLICATIONS

from <https://www.connectorsupplier.com/hermetically-sealed-connectors-product-roundup/>. (Year: 2017).*

“Circular Thermoplastic Connector”. Found online Jul. 13, 2020 at [amphenol-sine.com](http://www.amphenol-sine.com). Reference dated Oct. 2018. Retrieved from <http://www.amphenol-sine.com/pdf/catalog/AHD-Series-Flyer-2016.pdf>. (Year: 2018).*

“Amphenol Industrial-Circular Connector Insert”. Found online Jul. 22, 2020 at [newark.com](http://www.newark.com). Reference dated Jul. 18, 2014. Retrieved from https://tineye.com/search/9e63acba8e6768e95b2b880129bfb99028f399af?sort=crawl_date&order=asc&page=1. (Year: 2014).*

Jameco Challenge: Male and Female Connectors, dated Mar. 9, 2012, [online]. Available from Internet, <URL: <https://www.jameco.com/Jameco/workshop/challenge/maleorfemale.html>>, Accessed Jul. 18, 2019.

3/4 in. Male Terminal Adapter, dated Jan. 16, 2016, [online]. Available from Internet, <URL: <https://www.homedepot.com/p/3-4-in-Male-Terminal-Adapter-R5140104/202043511>>, Accessed Jul. 18, 2019.

* cited by examiner

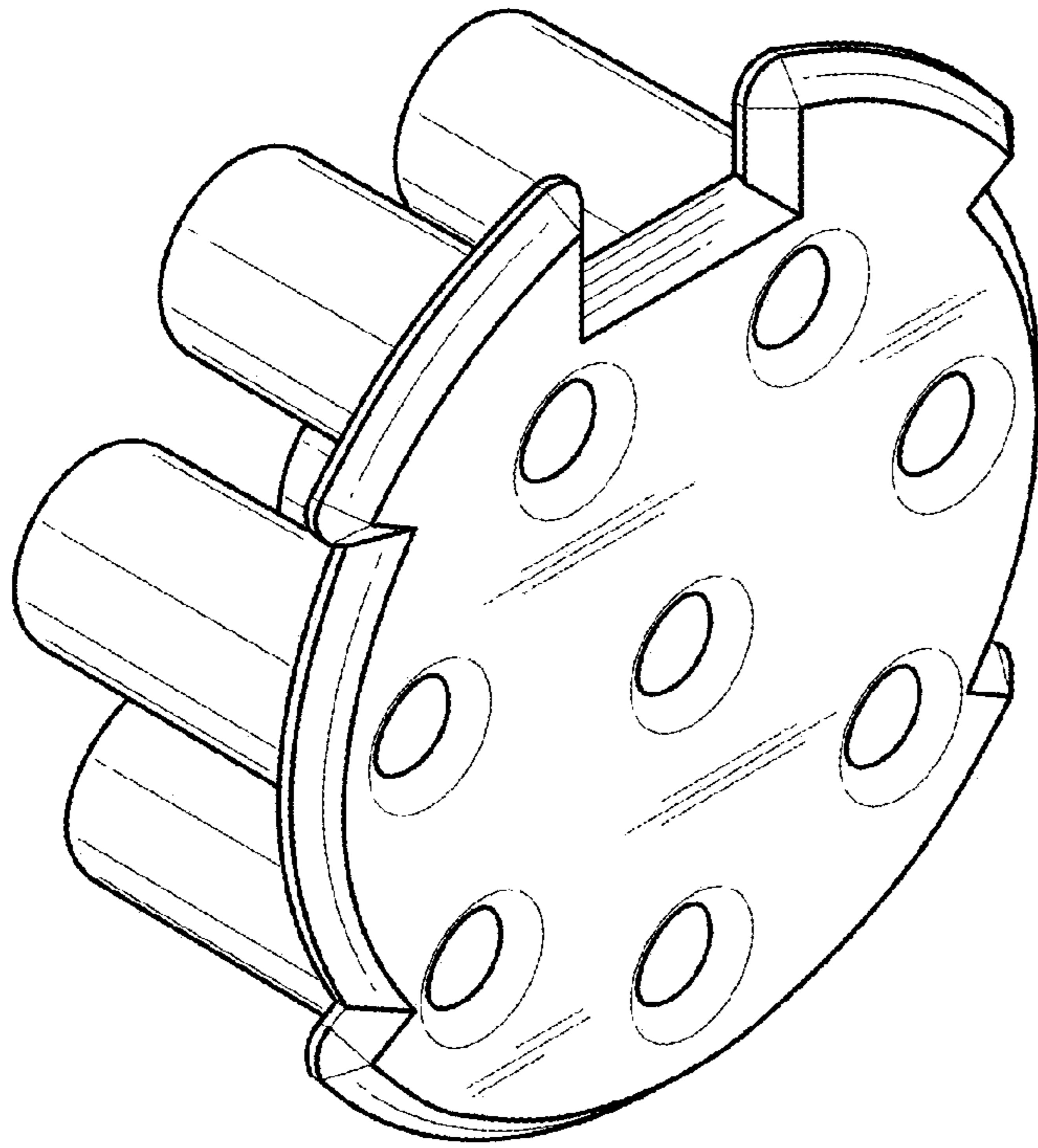


FIG. 1

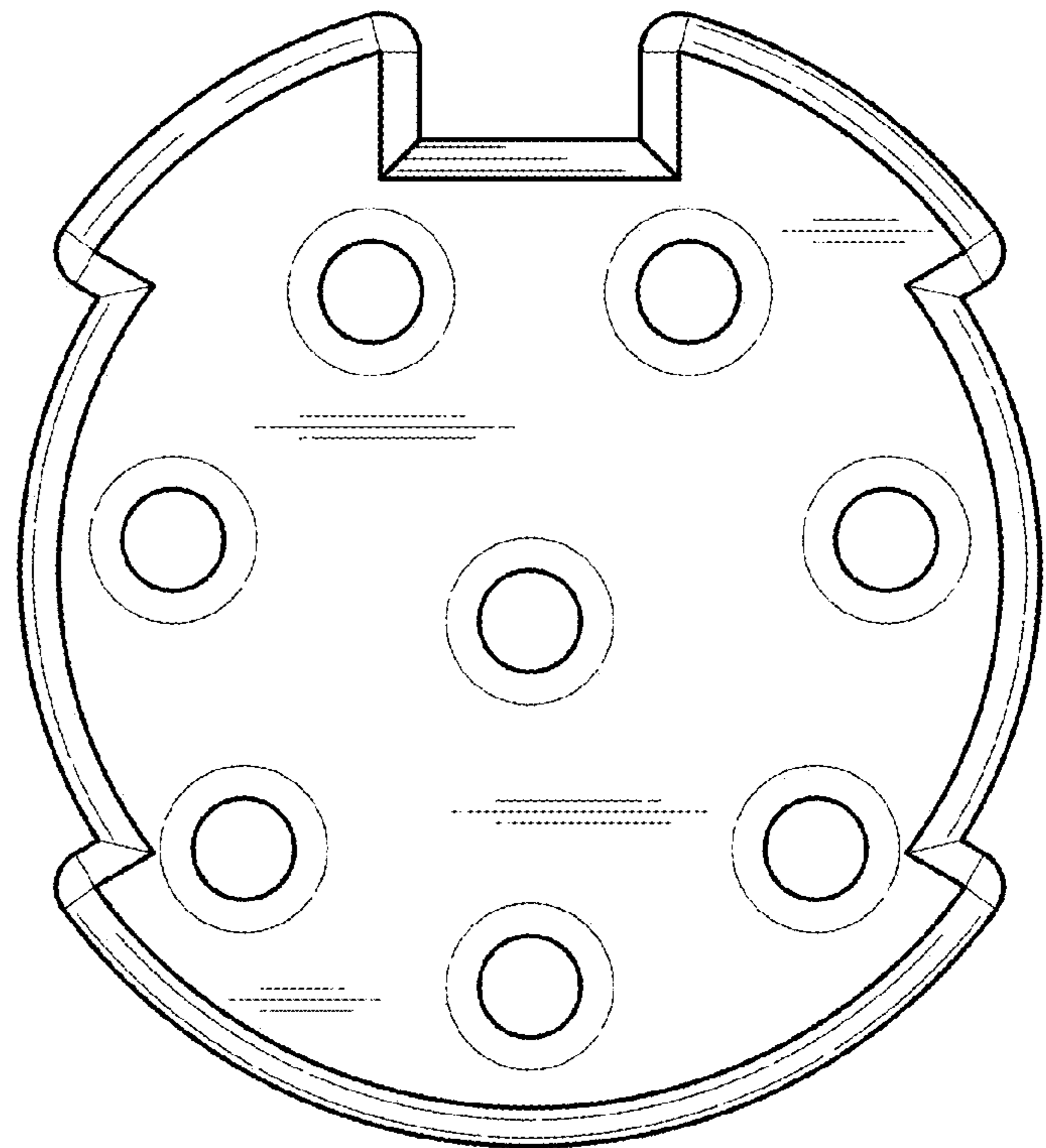


FIG. 2

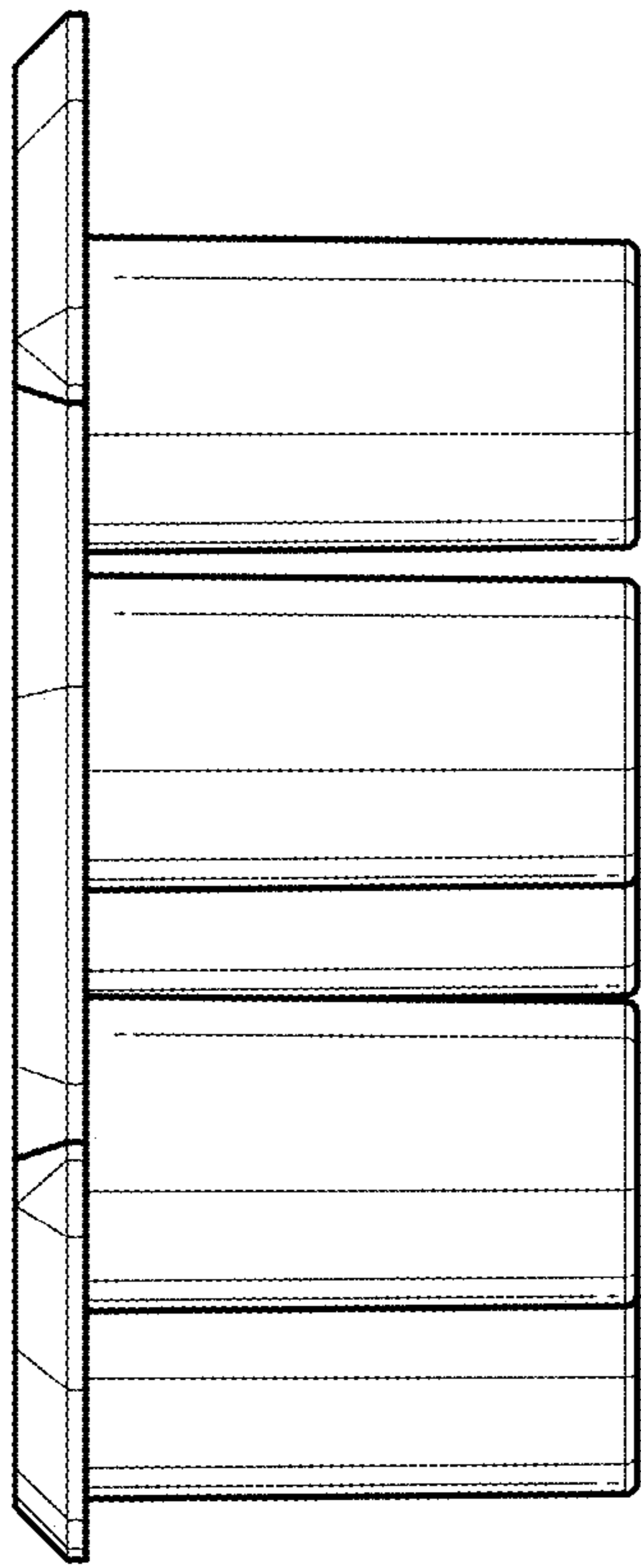


FIG. 3

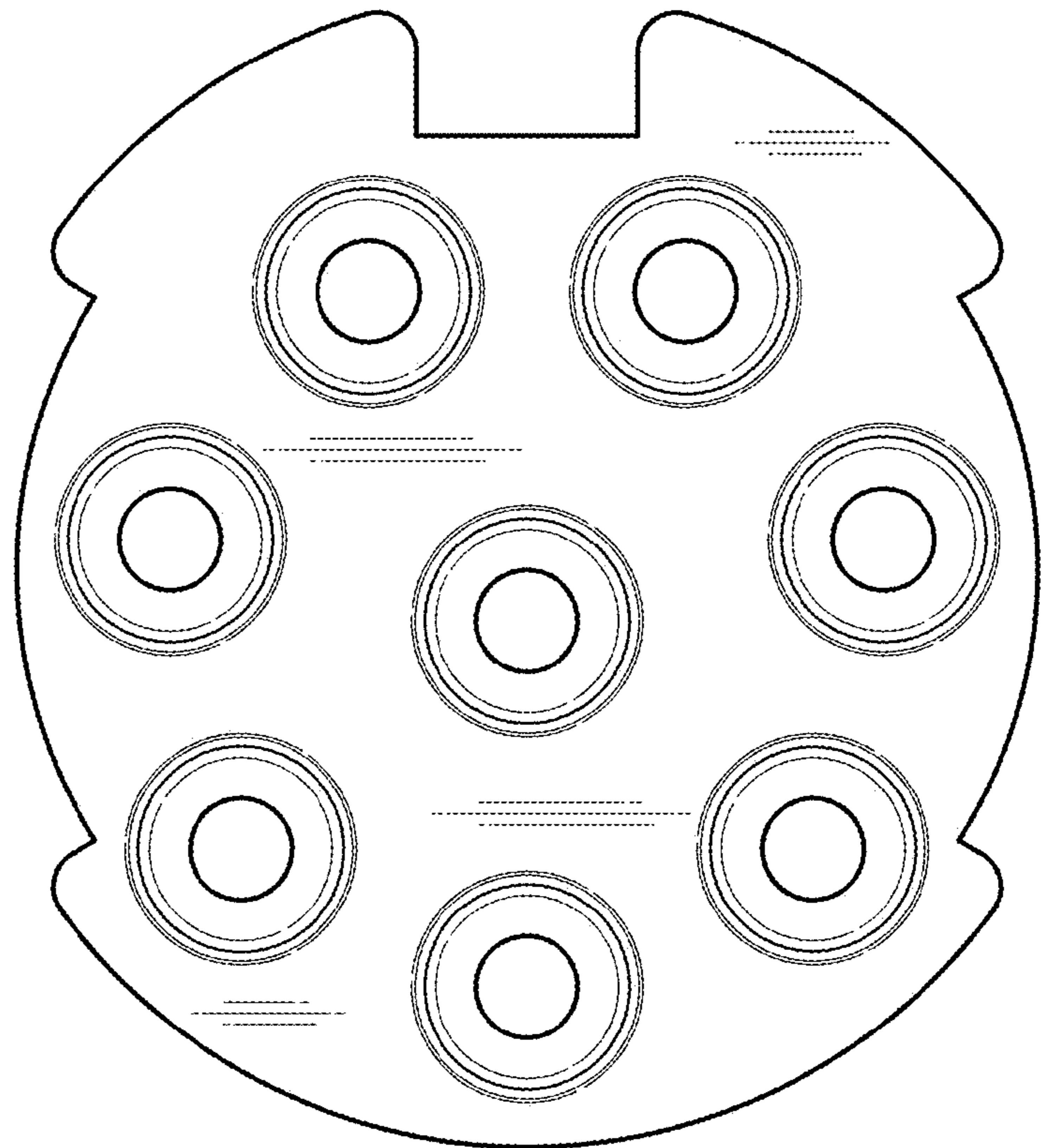


FIG. 4

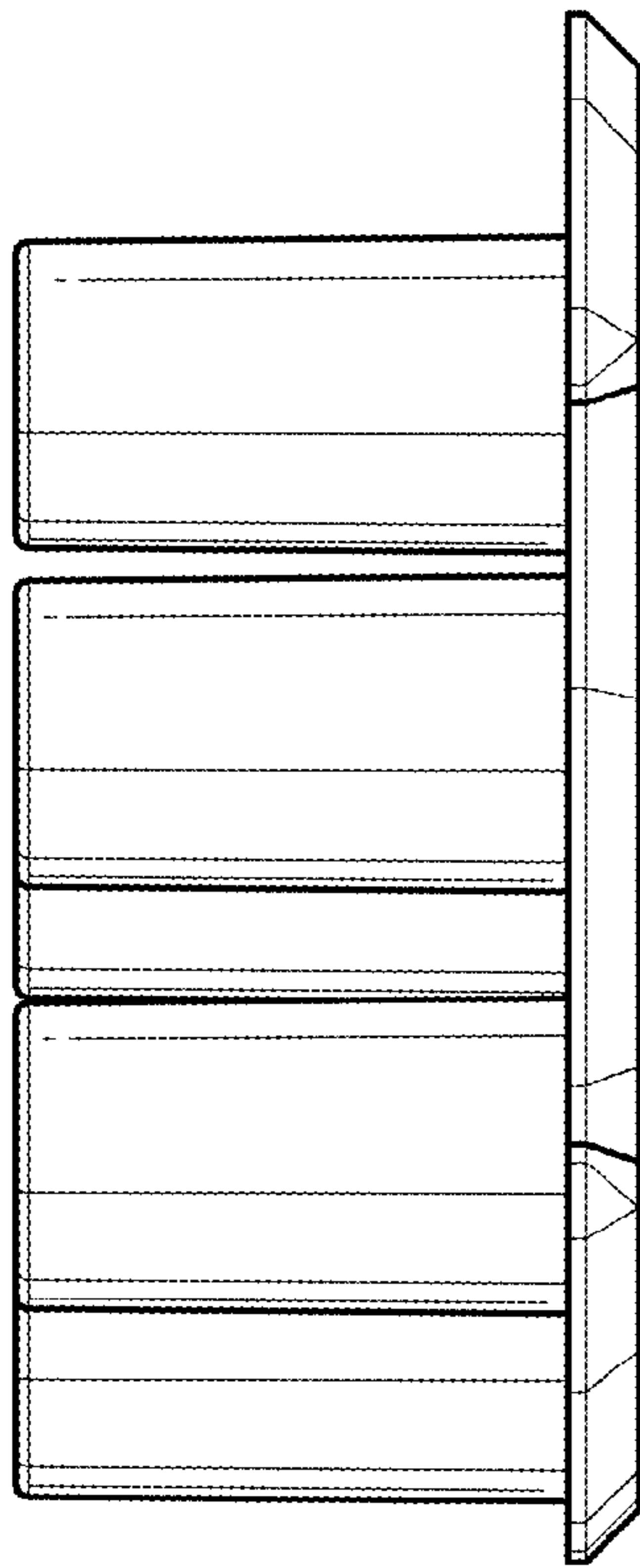


FIG. 5

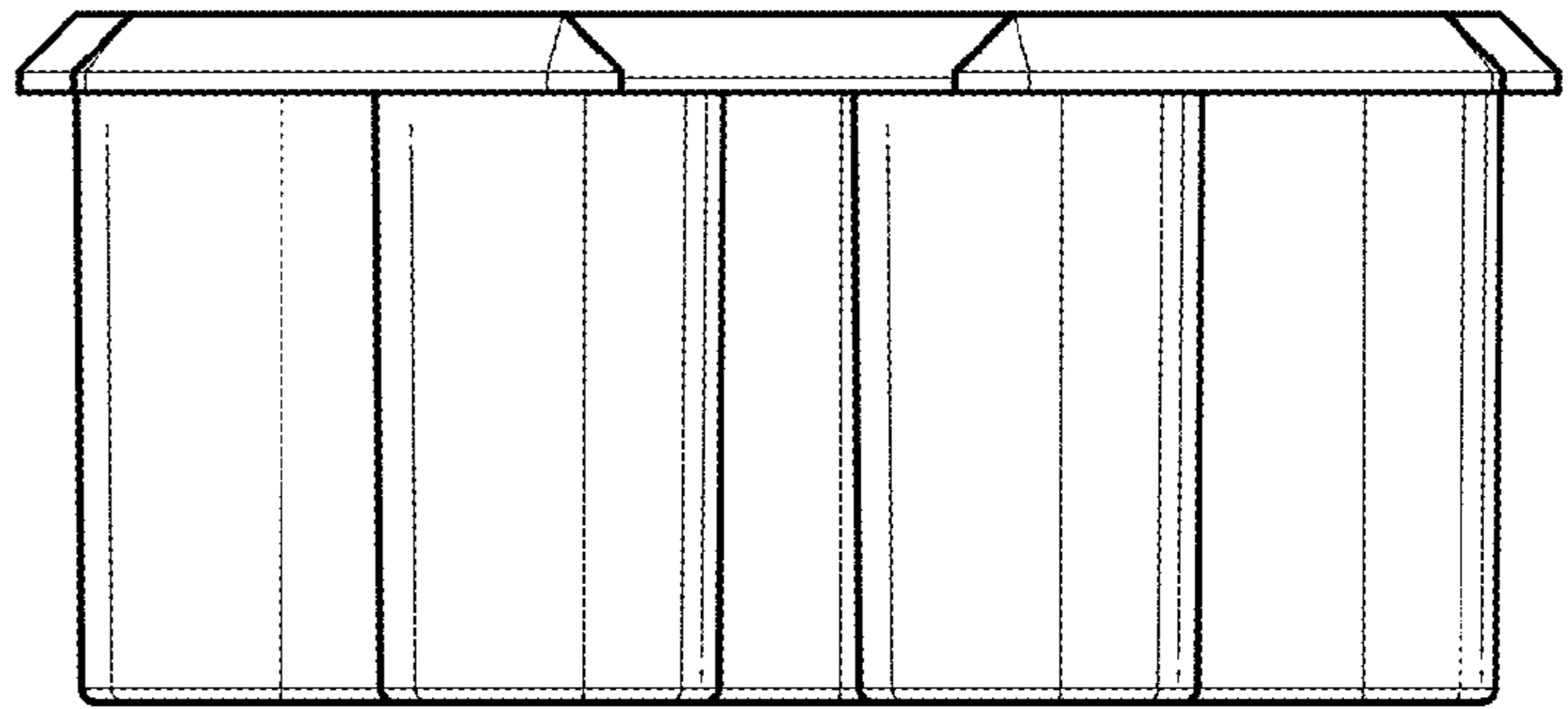


FIG. 6

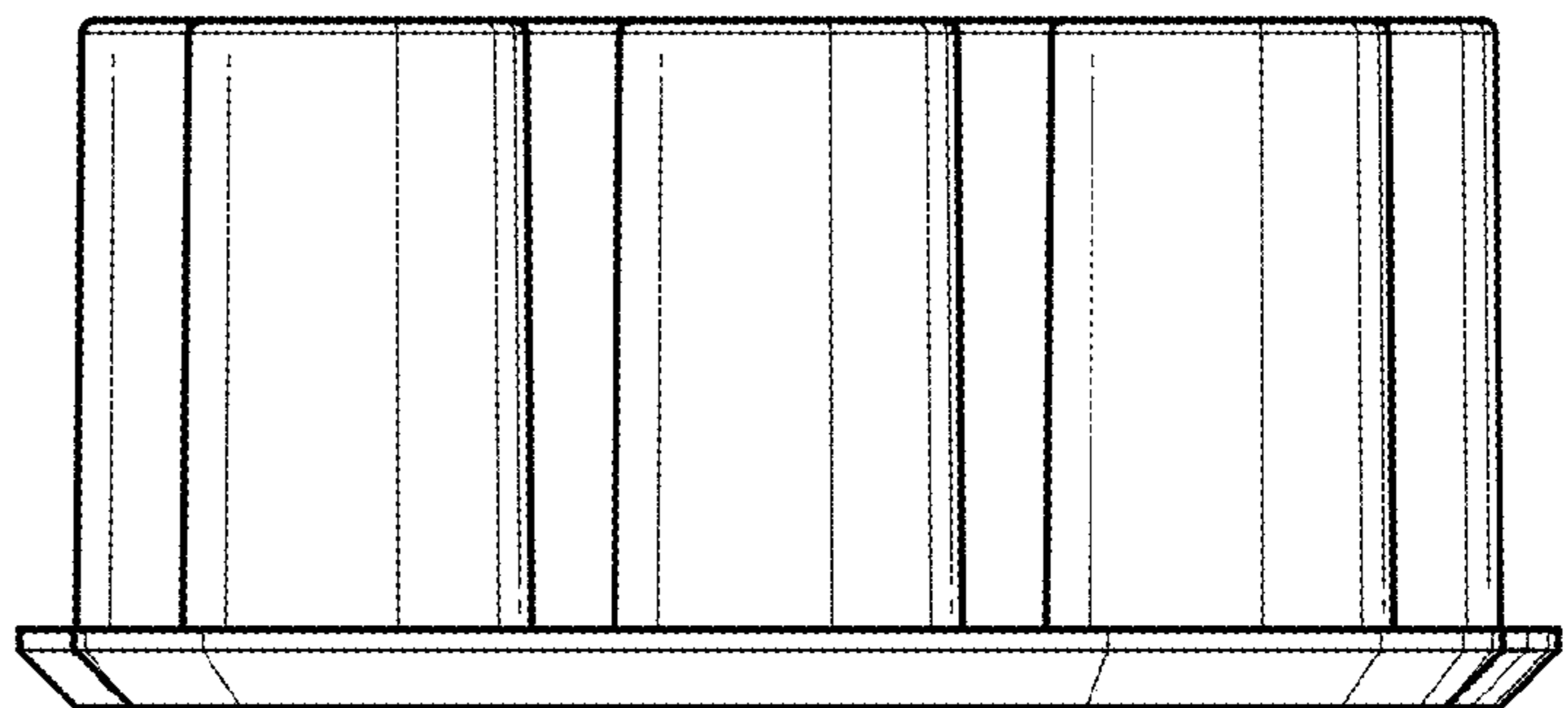


FIG. 7