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

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- (54) **POLE CLAMP FOR MEDICAL DEVICE**
- (71) Applicant: **Smiths Medical ASD, Inc.**, Plymouth, MN (US)
- (72) Inventors: **Christopher Allen Lacy**, Arden Hills, MN (US); **Kevin Krautbauer**, Saint Paul, MN (US)
- (73) Assignee: **Smiths Medical ASD, Inc.**, Plymouth, MN (US)

5,230,496 A 7/1993 Shillington
 D346,655 S 5/1994 Harris
 D379,042 S 5/1997 Meisner
 5,733,061 A 3/1998 Child
 5,779,207 A 7/1998 Danby
 (Continued)

FOREIGN PATENT DOCUMENTS

CN 103083755 B 7/2015
 EP 0477551 B1 1/1995
 (Continued)

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

OTHER PUBLICATIONS

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- (52) **U.S. Cl.**
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- (58) **Field of Classification Search**
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CPC H05K 5/0021; H05K 7/1435; F16M 13/02;
F16M 11/24; F16M 2200/027
See application file for complete search history.

International Search Report and Written Opinion from PCT Application PCT/US2018/028093, dated Aug. 3, 2018, 11 pgs.
 (Continued)

Primary Examiner — David G Muller
 (74) *Attorney, Agent, or Firm* — Patterson Thuent Pedersen, P.A.

(57) **CLAIM**
 We claim the ornamental design for a pole clamp for medical device, as shown and described.

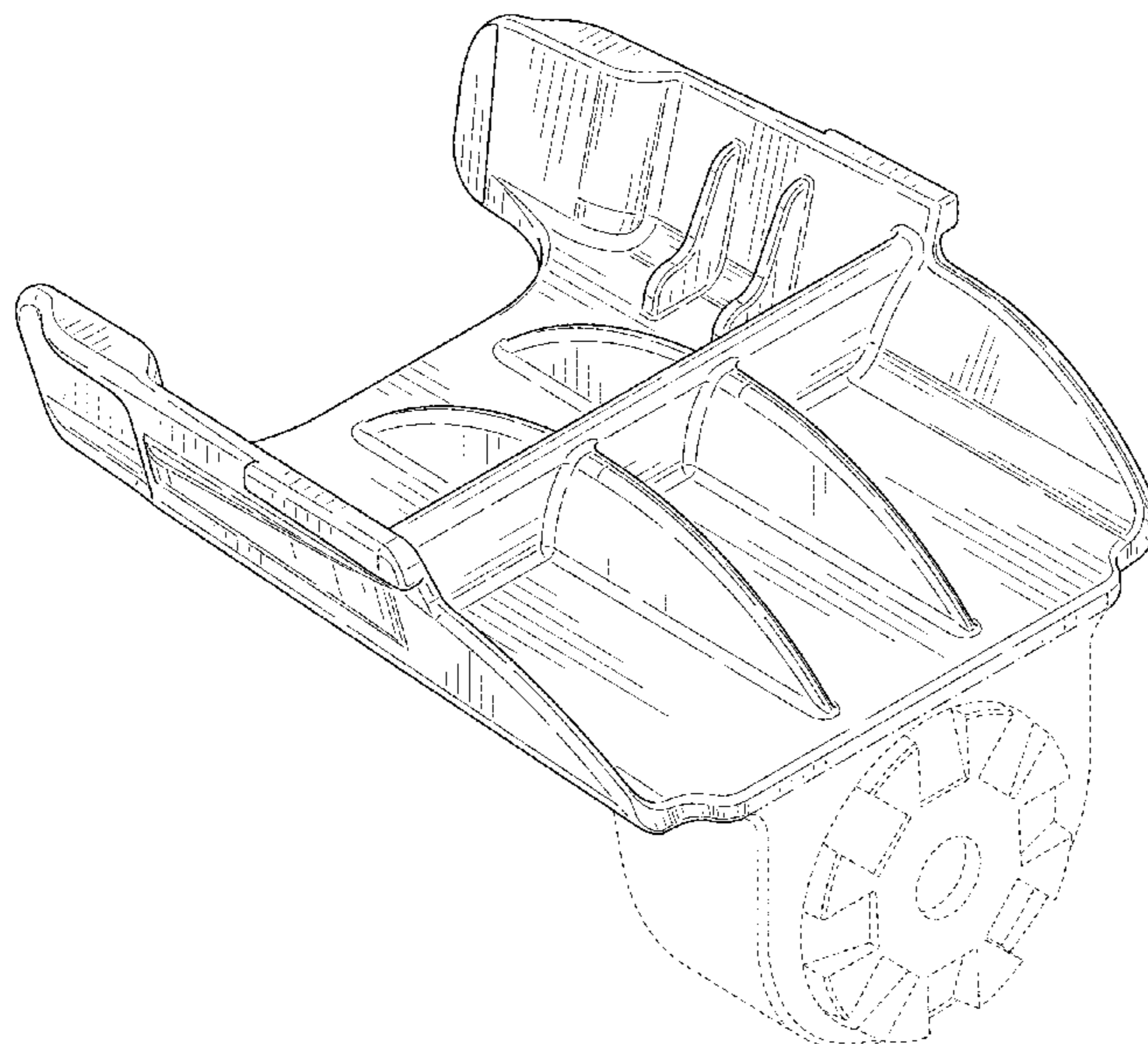
DESCRIPTION

FIG. 1 is a front right perspective view of a pole clamp for medical device.
 FIG. 2 is a front elevation view thereof.
 FIG. 3 is a rear elevation view thereof.
 FIG. 4 is a left side elevation view thereof.
 FIG. 5 is a right side elevation view thereof.
 FIG. 6 is a top plan view thereof.
 FIG. 7 is a bottom plan view thereof; and,
 FIG. 8 is a rear left perspective view thereof.
 Items shown in broken lines depict environment and portions of the pole clamp for medical device that form no part of the claimed invention. The dash-dot lines represent the bounds of the claimed design.

(56) **References Cited**
U.S. PATENT DOCUMENTS

2,423,933 A	7/1947	Gosh
3,448,957 A	6/1969	Friedman
4,511,158 A	4/1985	Varga et al.
4,756,706 A	7/1988	Kerns et al.
4,832,299 A	5/1989	Gorton
4,844,397 A	7/1989	Skakoon
4,905,944 A	3/1990	Jost et al.
4,921,199 A	5/1990	Villaveces
D314,433 S	2/1991	Frantz
5,114,023 A	5/1992	Lavin
5,169,106 A	12/1992	Rasmussen
5,170,817 A	12/1992	Sunderland

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D401,690 S 11/1998 Simm
 5,836,559 A 11/1998 Ronci
 D410,846 S 6/1999 Leong et al.
 5,918,843 A 7/1999 Stammers
 D423,679 S * 4/2000 Jenkins D24/227
 6,277,109 B1 8/2001 Harper et al.
 6,290,694 B1 9/2001 Harper et al.
 6,540,091 B2 * 4/2003 Mathieson H05K 5/0021
 211/26
 6,593,528 B2 7/2003 Franklin-Lees et al.
 D547,863 S 7/2007 Heinsch
 7,556,616 B2 7/2009 Fathallah et al.
 D608,456 S * 1/2010 Sandel D24/227
 D616,250 S 5/2010 Peyton et al.
 D618,821 S * 6/2010 Larsen D24/227
 D628,299 S 11/2010 Held
 D642,402 S 8/2011 Rickard
 8,011,629 B2 9/2011 Herkovic
 8,047,482 B2 11/2011 Poncon et al.
 D650,912 S * 12/2011 Tomes D24/227
 D660,102 S 5/2012 Allred
 8,167,259 B2 5/2012 Spang, Jr. et al.
 D662,218 S * 6/2012 Pittman D24/227
 8,256,984 B2 9/2012 Fathallah et al.
 8,336,839 B2 12/2012 Boccoleri et al.
 8,459,602 B2 6/2013 Herskovic
 D689,194 S * 9/2013 Vivenzio D24/229
 D692,132 S 10/2013 Damron
 D698,448 S 1/2014 Heck
 8,695,957 B2 4/2014 Quintania et al.
 9,295,778 B2 3/2016 Kamen et al.
 9,321,168 B2 4/2016 Brassette
 9,341,308 B2 5/2016 Lacy
 D762,300 S 7/2016 Breitweiser et al.
 D779,678 S * 2/2017 Feins D24/227
 D780,936 S * 3/2017 Guaragno D24/227
 D788,936 S * 6/2017 Schill D24/229
 9,744,300 B2 8/2017 Kamen et al.
 D799,025 S 10/2017 Johnson et al.
 D816,501 S * 5/2018 Oldham D9/456
 D816,864 S 5/2018 Lacy et al.
 D828,551 S 9/2018 Zou et al.
 D836,205 S 12/2018 Gonzalez et al.
 D836,940 S 1/2019 Pena et al.
 D848,845 S * 5/2019 Dacey D9/456
 D852,978 S * 7/2019 Krensky D24/231
 2002/0134570 A1 9/2002 Franklin-Lees et al.
 2007/0219495 A1 9/2007 Kato et al.
 2007/0267556 A1 11/2007 Herskovic
 2010/0065700 A1 3/2010 Poncon et al.
 2010/0252702 A1 10/2010 Spang, Jr. et al.
 2010/0258690 A1 10/2010 Kleitsch
 2010/0314517 A1 12/2010 Patzer

2013/0184676 A1 7/2013 Kamen et al.
 2013/0324929 A1 12/2013 Mochizuki et al.
 2014/0046296 A1 2/2014 Clarke
 2014/0259837 A1 9/2014 Belliveau et al.
 2014/0294496 A1 10/2014 Gardiner
 2014/0321096 A1 10/2014 Kajackas
 2015/0001285 A1 1/2015 Halbert et al.
 2015/0041419 A1 2/2015 Hasegawa
 2015/0190567 A1 7/2015 Asama et al.
 2015/0198283 A1 7/2015 Lacy
 2015/0224252 A1 8/2015 Borges et al.
 2017/0266389 A1 9/2017 McLoughlin et al.

FOREIGN PATENT DOCUMENTS

EP 1233799 B1 2/2006
 EP 3067077 A1 9/2016
 GB 581429 10/1946
 JP 2004305280 A 11/2004
 JP D1247382 8/2005
 JP 2007-125248 A 5/2007
 JP 4939707 B2 5/2012
 JP D1491891 3/2014
 JP 3200476 9/2015
 KR 10-2013-0114533 A 10/2013
 RU 00059734 7/2006
 WO WO 2015/108844 7/2015

OTHER PUBLICATIONS

Medline, I.V. Pole Stands and Tool-Free Accessories as available at https://www.medline.com/irj/servlet/prt/portal/prtroot/pcd!3aportal_content!2fmedline!2fGlobal!2fPublicDocs/publicdocuments/Medline%20Documents/Marketing%20Materials/MarketingDocuments_AI/IV%20PolesSell%20sheet%20MKT209237_LIT094R.pdf, © 2010, 4 pages.
 Farley, WT, IV Poles & Stands, available at <https://www.wtfarley.com/iv-poles>, as of Jun. 2, 2015, © 2015, 2 pages.
 Sensitec Sensitive Technology, IV Poles and IV-stands systems, available at <http://www.sensitec.nl/index.php?id=65>, © 2006-2007, 1 page.
 Centicare Corporation, "The Finest IV Poles in the Healthcare Industry", as available at http://www.centicare.com/Brochure_IV_Poles.pdf, as of Jun. 2, 2015, 12 pages.
 International Search Report and Written Opinion, International Application No. PCT/US2015/011134, dated Apr. 29, 2015, 5 pages.
 Application and File History for U.S. Appl. No. 12/457,510, filed Jun. 12, 2009, Inventor: Charles R. Patzer.
 Application and File History for U.S. Appl. No. 14/595,521, filed Jan. 13, 2015, issued as U.S. Pat. No. 9,341,308 on May 17, 2016, inventors Lacy et al.

* cited by examiner

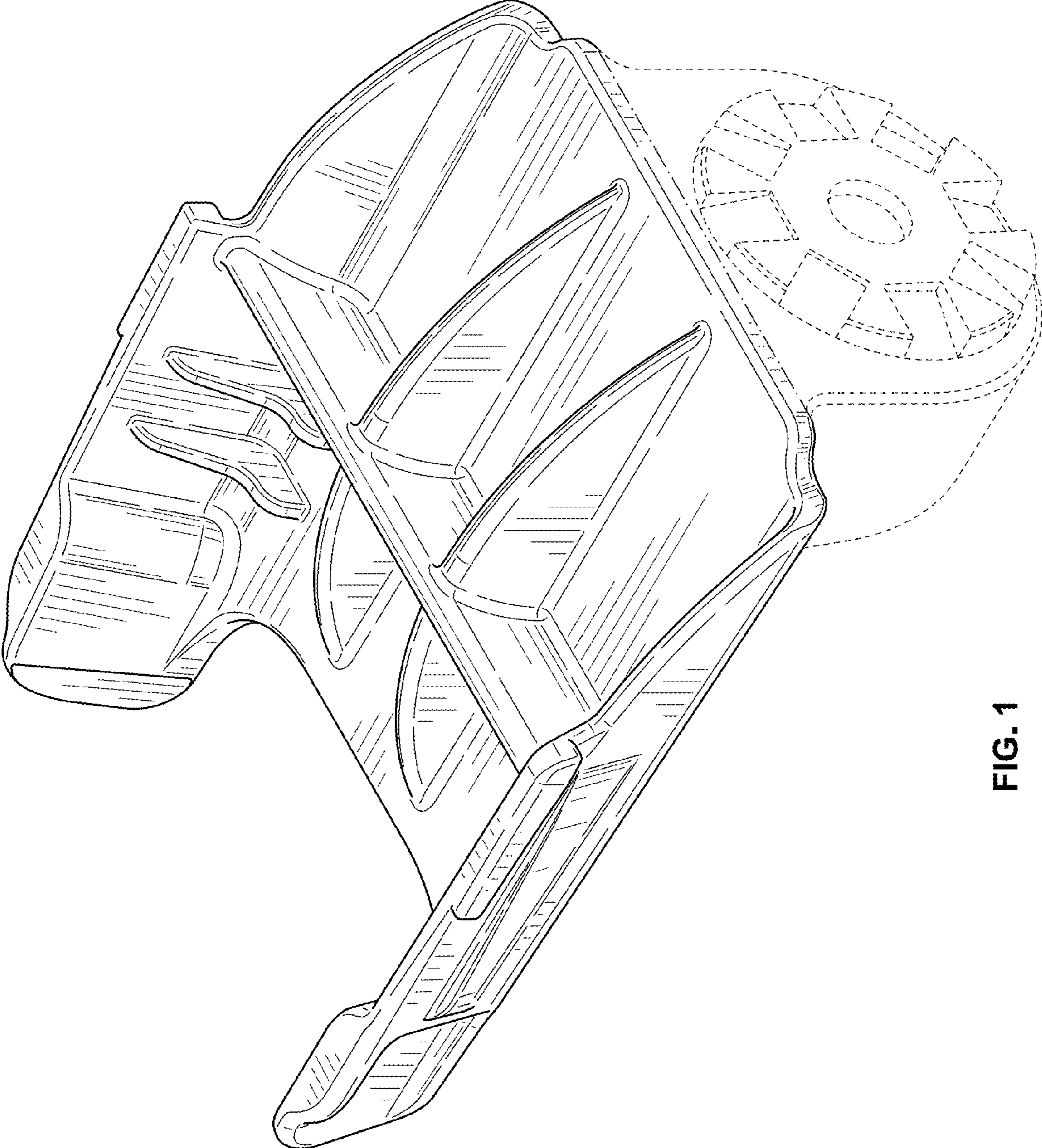


FIG. 1

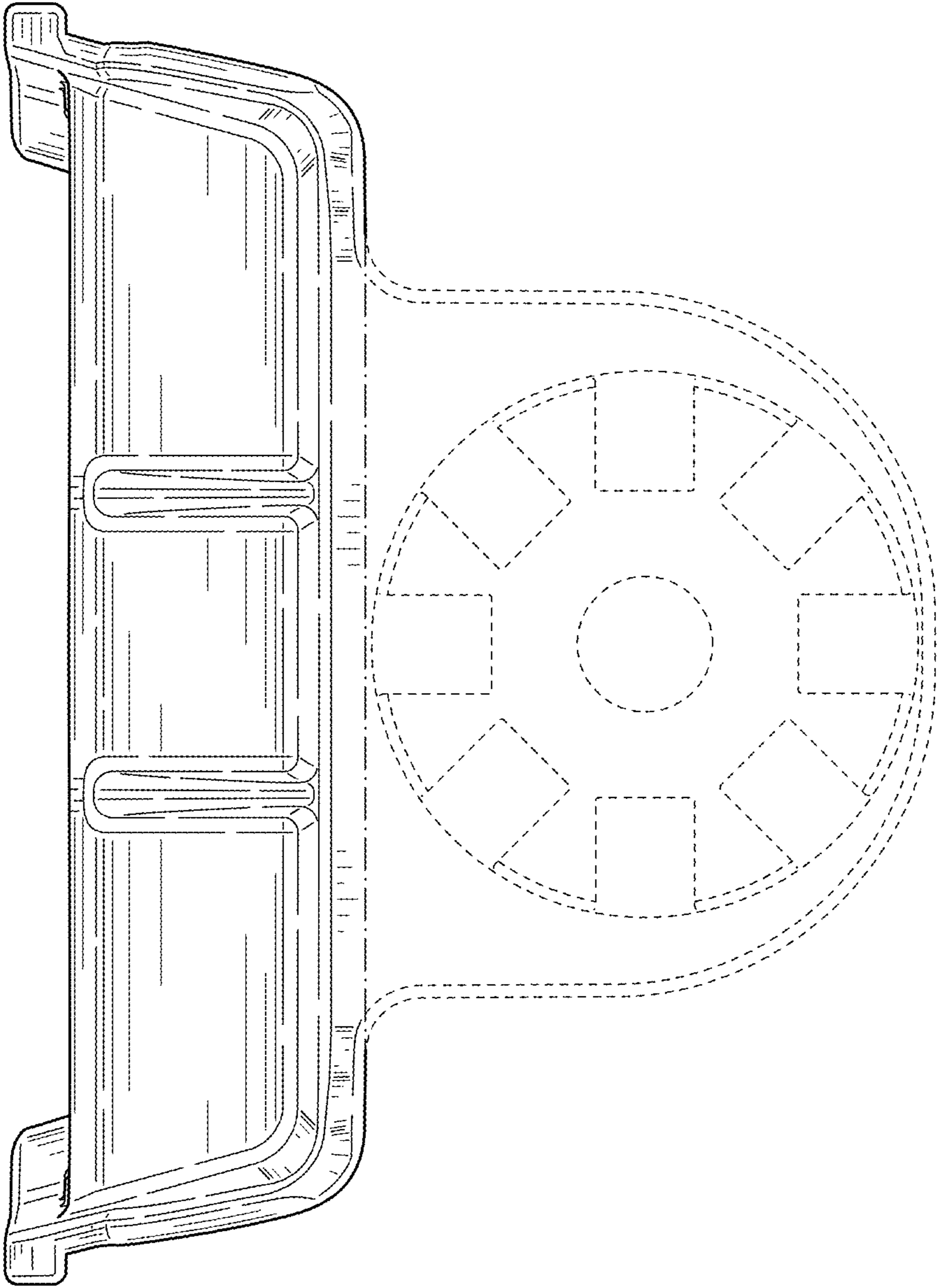


FIG. 2

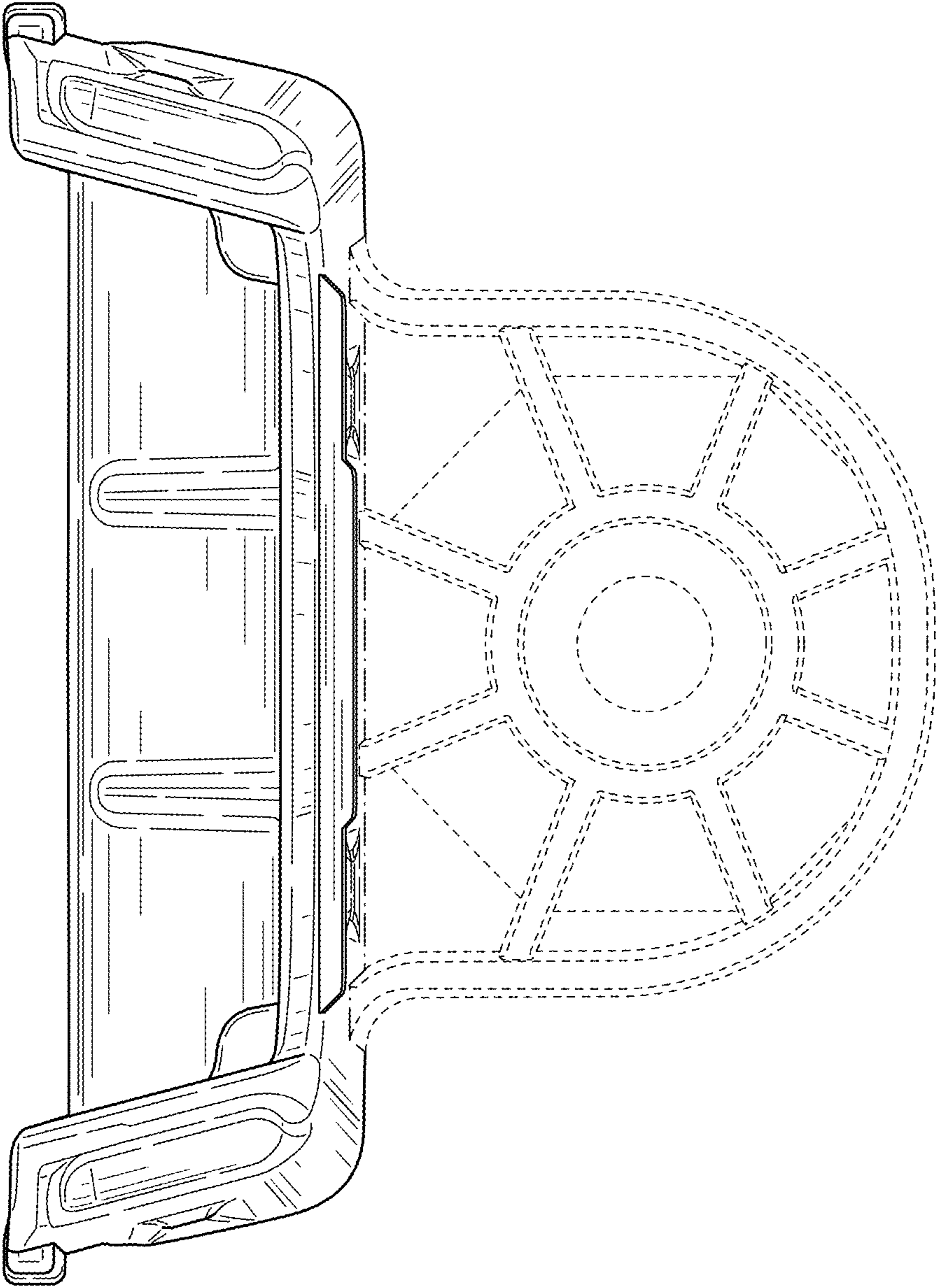


FIG. 3

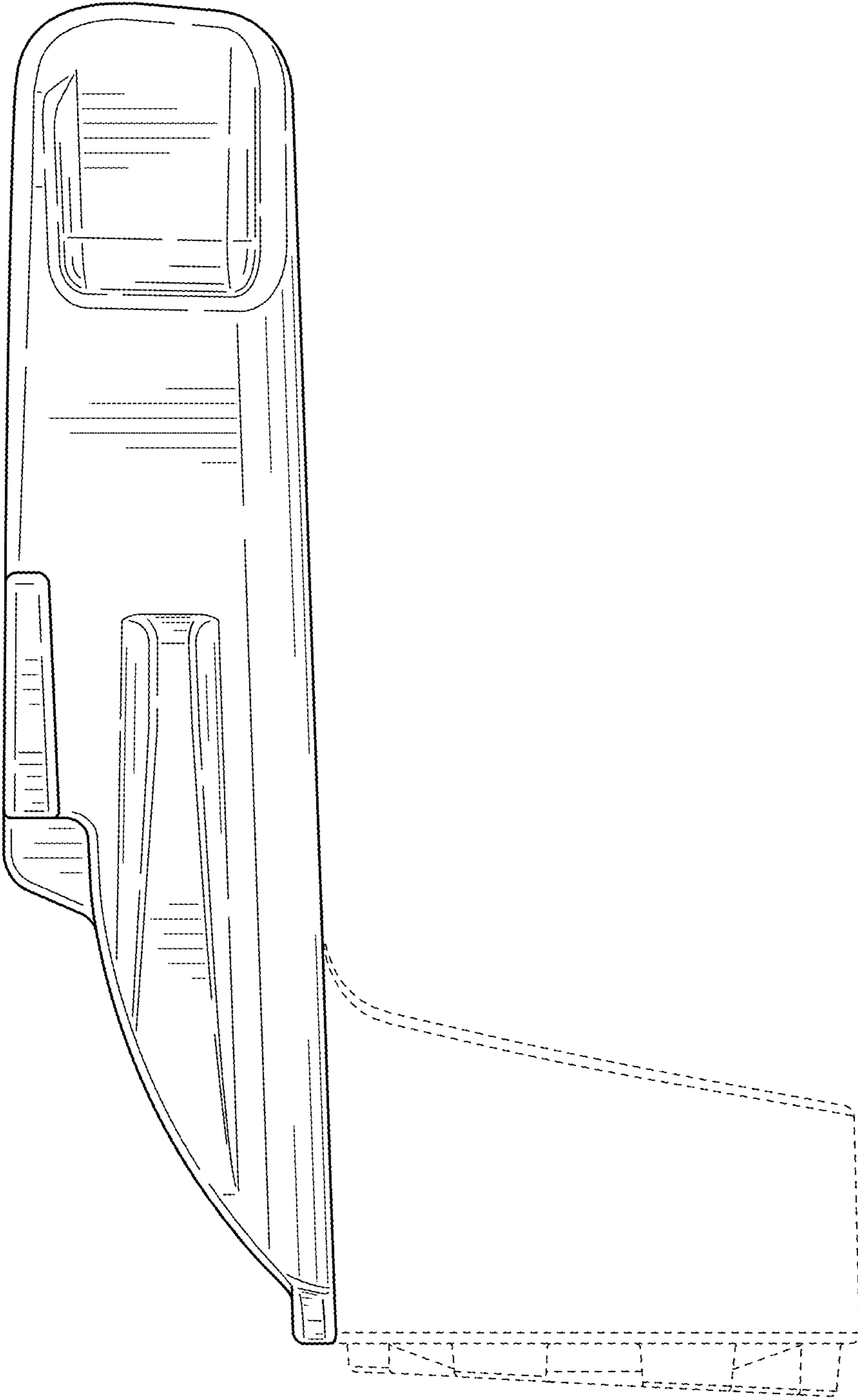


FIG. 4

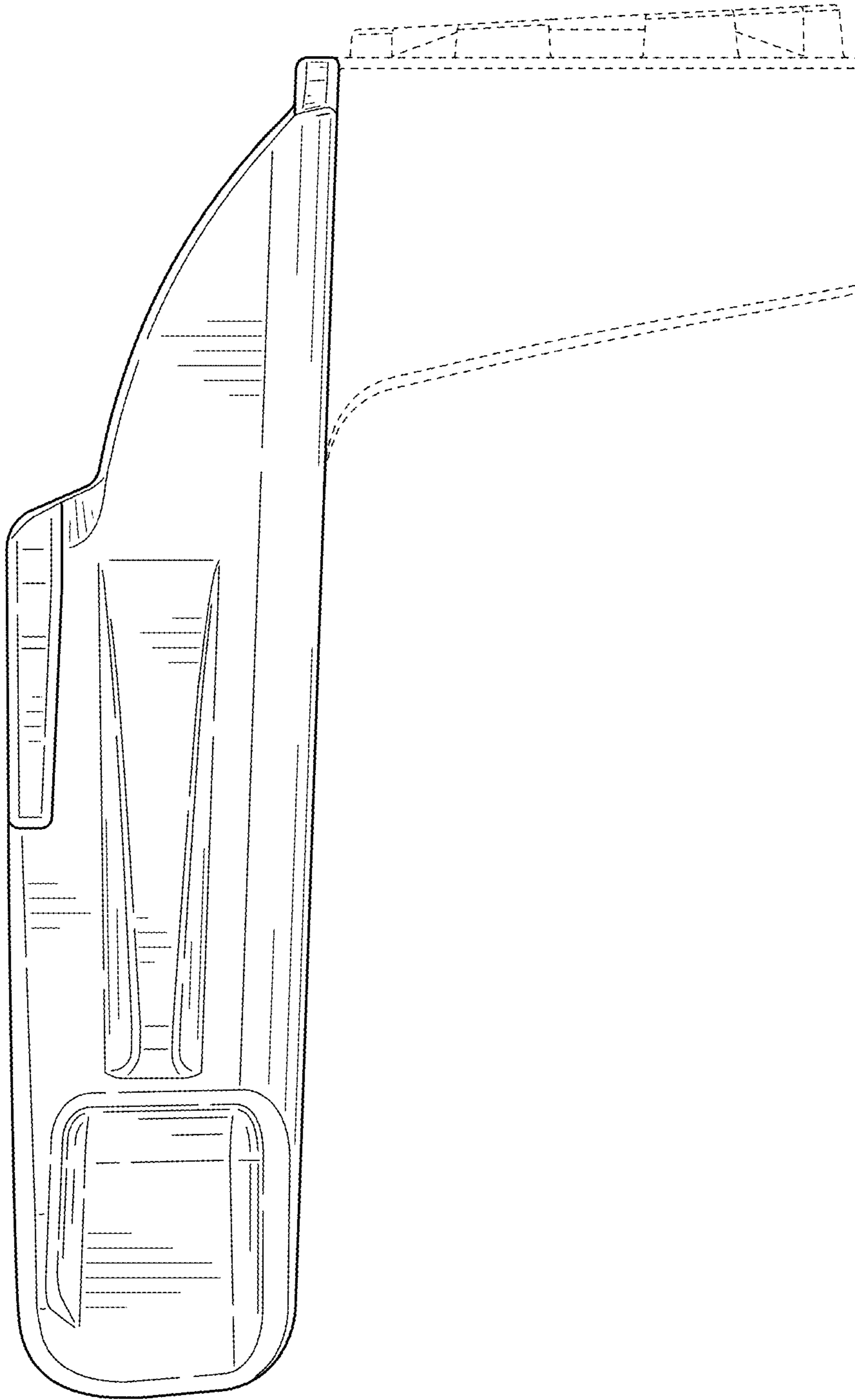


FIG. 5

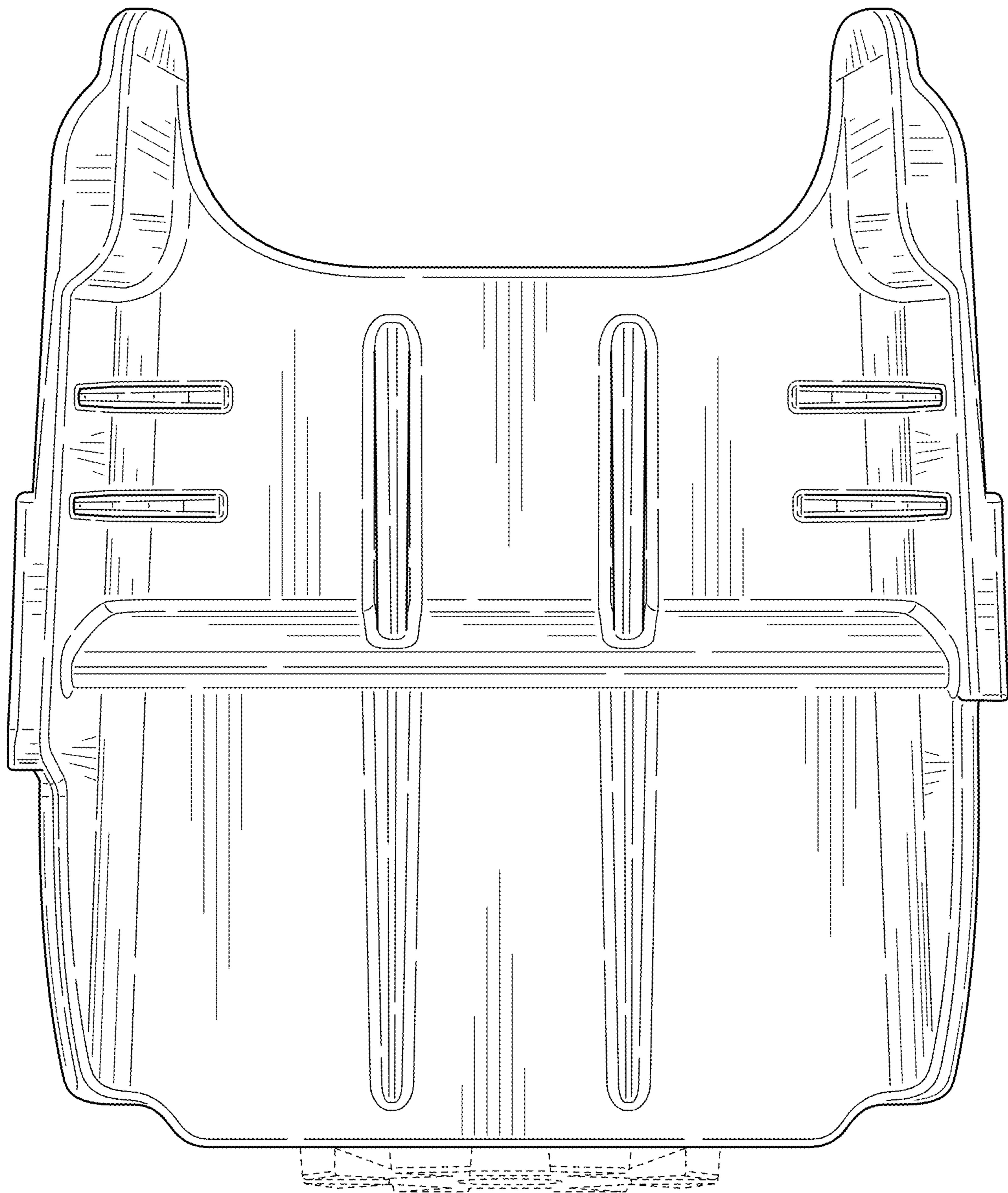


FIG. 6

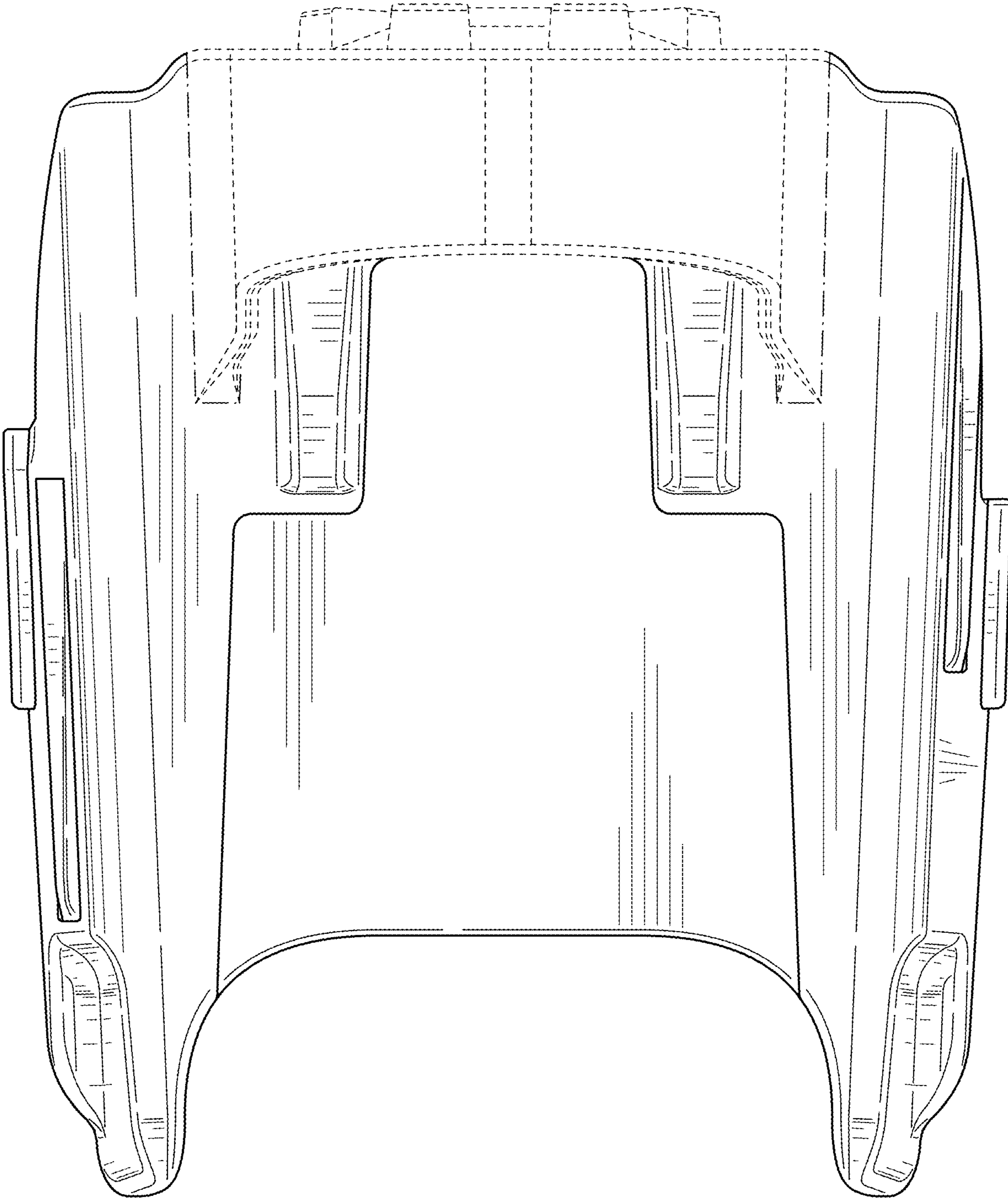


FIG. 7

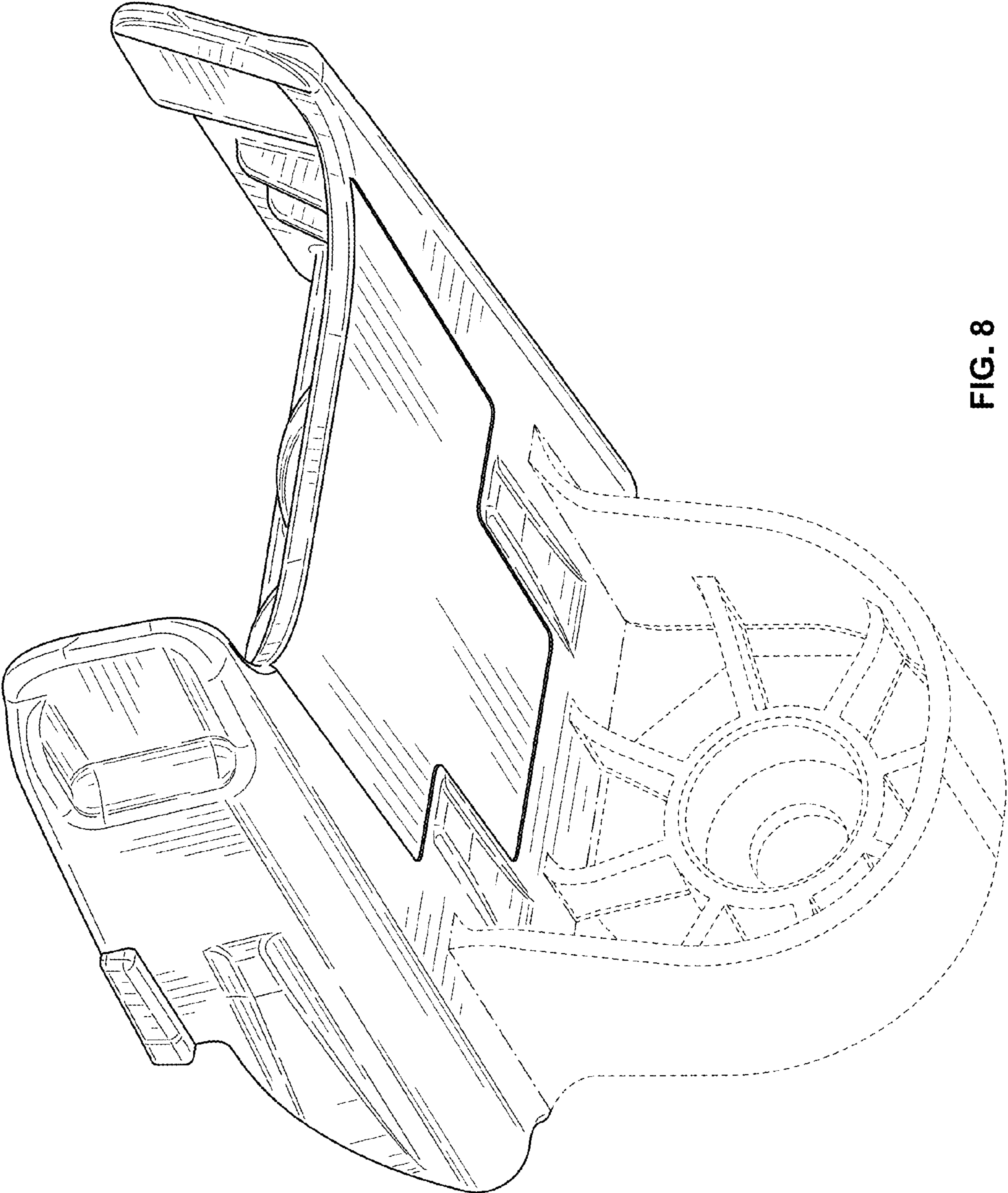


FIG. 8