



US0D1079419S

(12)

United States Design Patent

Christianson et al.

(10) Patent No.:

US D1,079,419 S

(45) Date of Patent:

** Jun. 17, 2025

- (54) **WRENCH**
- (71) Applicant: **Milwaukee Electric Tool Corporation**,
Brookfield, WI (US)
- (72) Inventors: **Ian L. Christianson**, Wauwatosa, WI
(US); **Jared M. Amann**, New Berlin,
WI (US); **Devin W. Herritz**, Sussex,
WI (US)
- (73) Assignee: **Milwaukee Electric Tool Corporation**,
Brookfield, WI (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/875,314**
- (22) Filed: **May 2, 2023**

Related U.S. Application Data

- (62) Division of application No. 29/764,526, filed on Dec.
30, 2020, now Pat. No. Des. 1,002,309.
- (51) **LOC (15) Cl.** **08-05**
- (52) **U.S. Cl.**
USPC **D8/25**
- (58) **Field of Classification Search**
USPC D8/24, 107, 21, 22, 25; D10/83
(Continued)

References Cited

U.S. PATENT DOCUMENTS

1,473,436 A

11/1923

Leopold

1,942,640 A

1/1934

Fromme

(Continued)

FOREIGN PATENT DOCUMENTS

CN

105014591

4/2017

DE

3006651

8/1981

(Continued)

Primary Examiner — Rachel A. Voorhies

Assistant Examiner — Benjamin D. Wannemacher

(74) Attorney, Agent, or Firm — Reinhart Boerner Van
Deuren s.c.

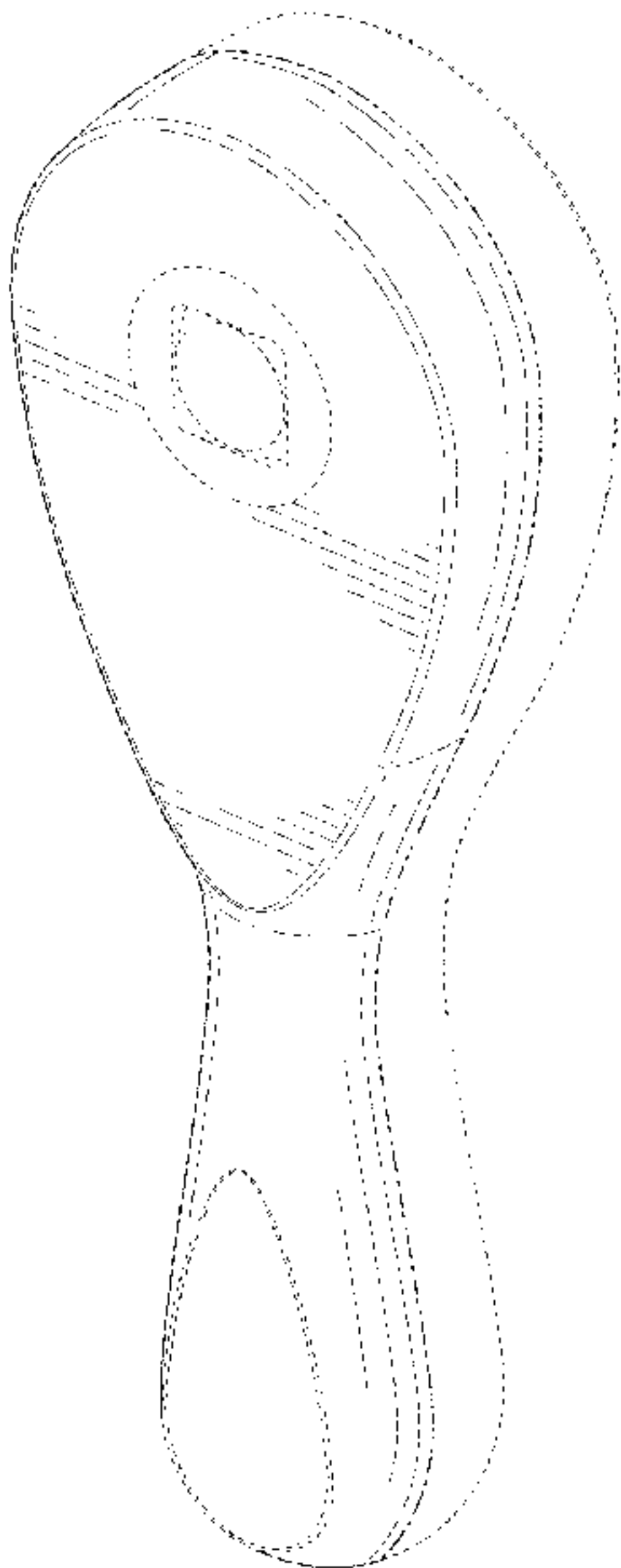
(57) **CLAIM**

The ornamental design for wrench as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view from above of an embodiment of the claimed design;
FIG. 2 is a front perspective view from below of the claimed design of FIG. 1;
FIG. 3 is a rear perspective view from above of the claimed design of FIG. 1;
FIG. 4 is a front view of the claimed design of FIG. 1;
FIG. 5 is a rear view of the claimed design of FIG. 1;
FIG. 6 is a left side view of the claimed design of FIG. 1;
FIG. 7 is a right side view of the claimed design of FIG. 1;
FIG. 8 is a top view of the claimed design of FIG. 1;
FIG. 9 is a bottom view of the claimed design of FIG. 1;
FIG. 10 is a front perspective view from above of another embodiment of the claimed design;
FIG. 11 is a front perspective view from below of the claimed design of FIG. 10;
FIG. 12 is a rear perspective view from above of the claimed design of FIG. 10;
FIG. 13 is a front view of the claimed design of FIG. 10;
FIG. 14 is a rear view of the claimed design of FIG. 10;
FIG. 15 is a left side view of the claimed design of FIG. 10;
FIG. 16 is a right side view of the claimed design of FIG. 10;
FIG. 17 is a top view of the claimed design of FIG. 10; and,
FIG. 18 is a bottom view of the claimed design of FIG. 10.
The ornamental design which is claimed is shown in solid lines in the drawings. The broken dot-dash lines define boundaries of the claimed design and form no part thereof. The other broken lines in the drawings are for illustrative purposes only and form no part of the claimed design.

1 Claim, 12 Drawing Sheets



(58) **Field of Classification Search**
CPC B25B 23/1425
See application file for complete search history.

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

4,328,720 A 5/1982 Shiel
4,901,608 A 2/1990 Shieh
5,199,335 A 4/1993 Arnold et al.
D362,909 S 10/1995 Warner
D402,867 S 12/1998 Macor
6,003,413 A 12/1999 Macor
6,151,996 A 11/2000 Whiteford
6,186,034 B1 2/2001 Lamons
6,286,395 B1 9/2001 Frazier
6,332,380 B1 12/2001 Macor
6,382,058 B1 5/2002 Owoc
6,405,621 B1 6/2002 Krivec et al.
6,481,316 B1 11/2002 Liao
6,557,442 B1 5/2003 Owoc
D476,867 S * 7/2003 Walker D8/25
6,857,341 B1 2/2005 Cheng
6,877,404 B2 4/2005 Chen
D506,370 S * 6/2005 Tuanmu D8/25
6,957,600 B2 10/2005 Hu
7,000,507 B1 2/2006 Lin
D516,405 S 3/2006 Saunders
7,059,218 B1 6/2006 Lin et al.
7,131,356 B2 11/2006 Lin
7,165,480 B2 1/2007 Lin
7,168,346 B2 1/2007 Lin
7,171,875 B2 2/2007 Hu
D551,925 S * 10/2007 Liao D8/25
D558,544 S * 1/2008 Liao D8/25
7,318,366 B2 1/2008 Lee et al.
D562,652 S * 2/2008 Liao D8/25
D572,548 S * 7/2008 Chen D8/25
7,401,538 B2 7/2008 Cheng
D618,076 S * 6/2010 Garcia D8/22
D619,866 S * 7/2010 Deguglimo D8/25

8,028,607 B2 10/2011 Lee et al.
D663,177 S * 7/2012 Chen D8/25
8,245,604 B2 8/2012 Chen
D666,466 S * 9/2012 Gresham D8/25
8,276,485 B1 10/2012 Chen
8,413,553 B2 4/2013 Chen
8,459,151 B2 6/2013 Wang et al.
8,474,350 B2 7/2013 Lee et al.
8,539,864 B1 9/2013 Kennedy
8,695,459 B2 4/2014 Lee et al.
D714,113 S * 9/2014 Robinson D8/25
D714,115 S * 9/2014 Robinson D8/25
D722,847 S * 2/2015 Lin D8/25
D729,024 S * 5/2015 Lin D8/25
9,132,535 B2 9/2015 Hsieh
9,302,373 B2 4/2016 Johnson
9,327,388 B2 5/2016 Chen
9,452,515 B2 9/2016 Lee
9,511,485 B2 12/2016 Chang
D1,002,309 S * 10/2023 Christianson D8/25
2002/0092387 A1 7/2002 Lee
2005/0061117 A1 3/2005 Chen
2008/0141833 A1 6/2008 Shen
2009/0090223 A1 4/2009 Wu
2011/0226099 A1 9/2011 Chen
2015/0013503 A1 1/2015 Lee et al.
2017/0320199 A1 11/2017 Frye
2019/0099865 A1 4/2019 Ou

FOREIGN PATENT DOCUMENTS

DE 3023882 4/1989
DE 19819457 3/2000
DE 202006006369 7/2006
DE 102010000162 7/2014
DE 102011002465 7/2014
EP 0070725 1/1983
EP 0309880 11/1992
EP 0755757 12/1999
EP 1958736 8/2008

* cited by examiner

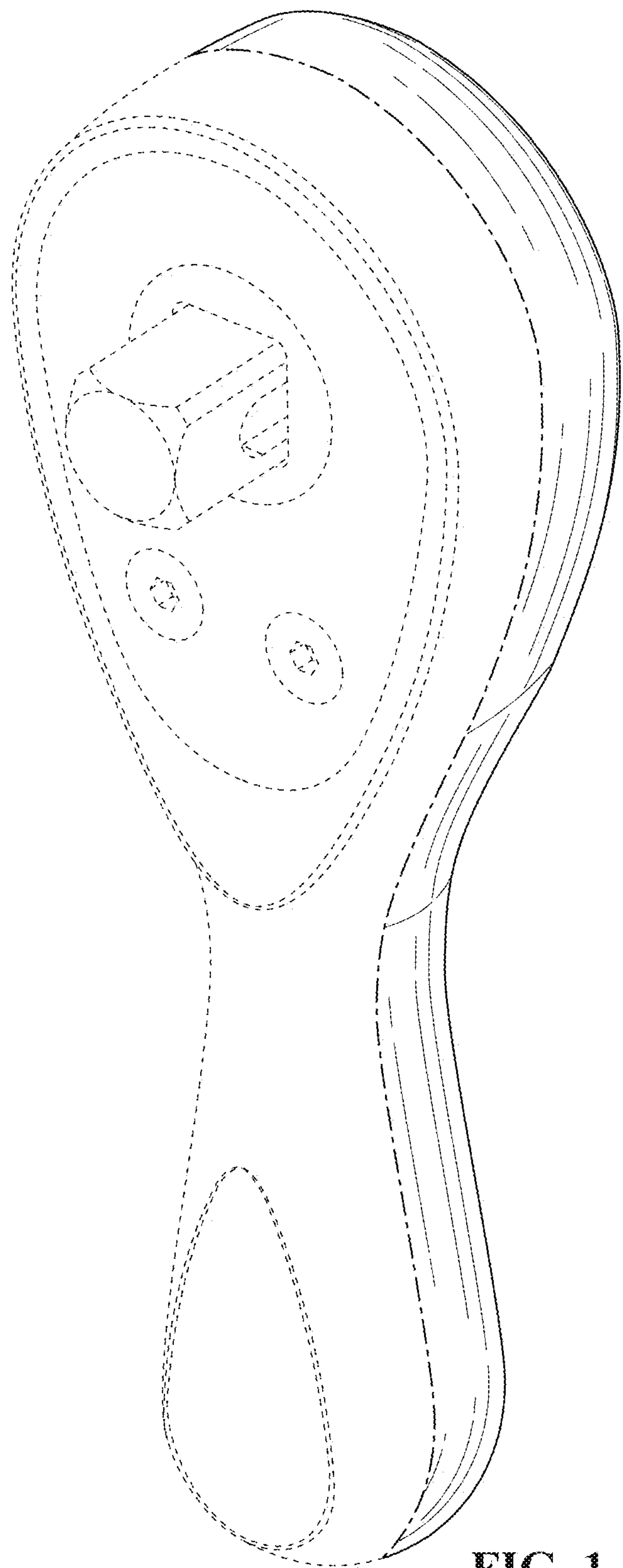


FIG. 1

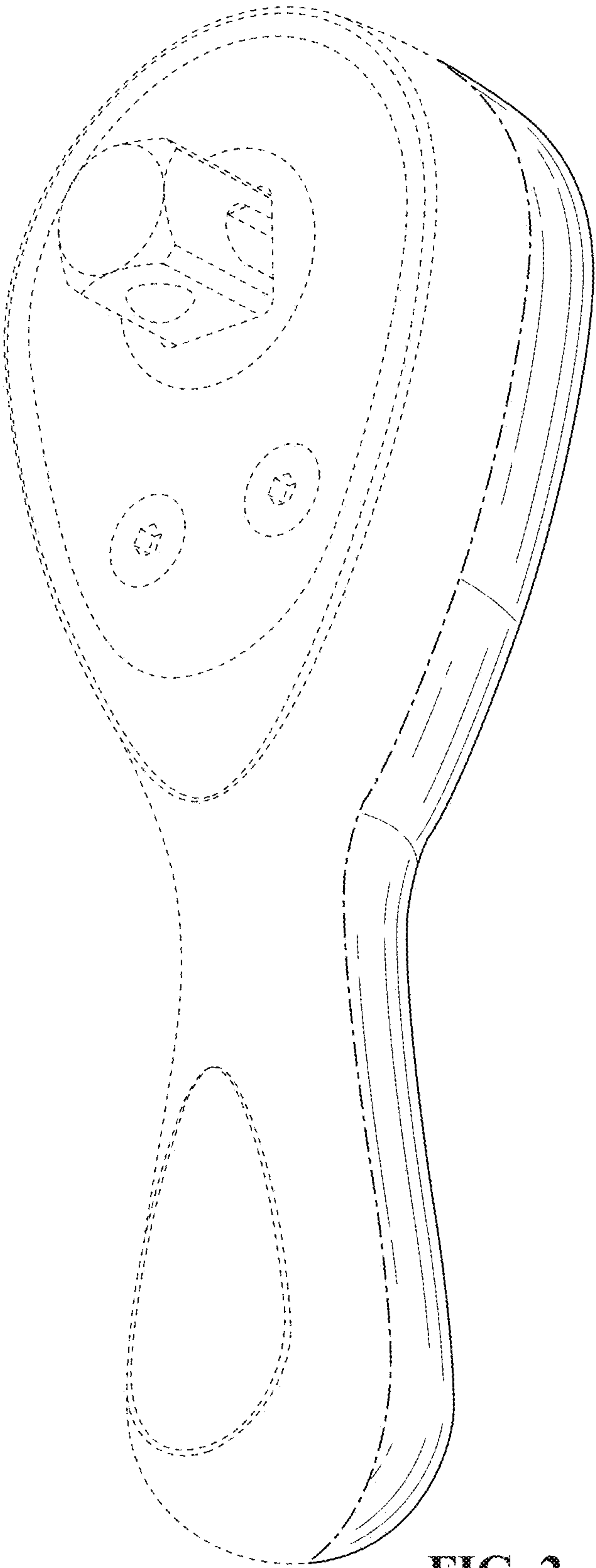


FIG. 2

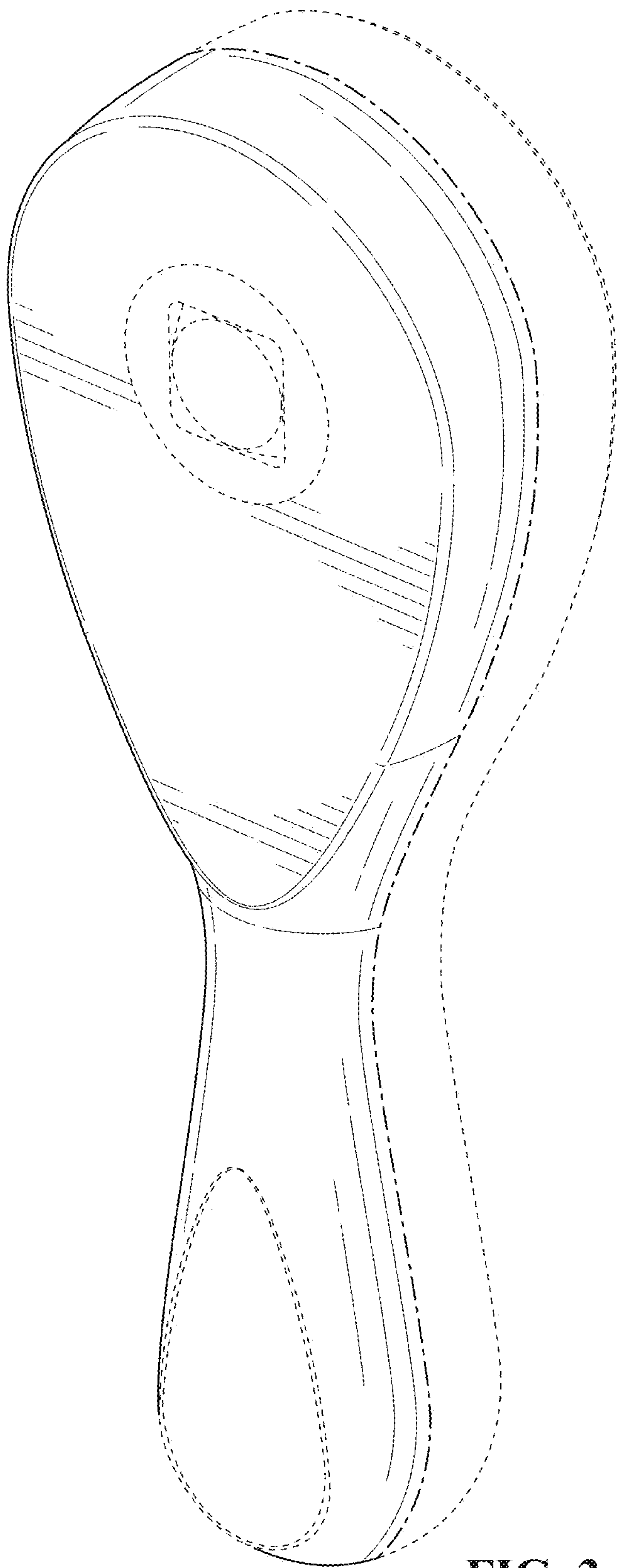


FIG. 3

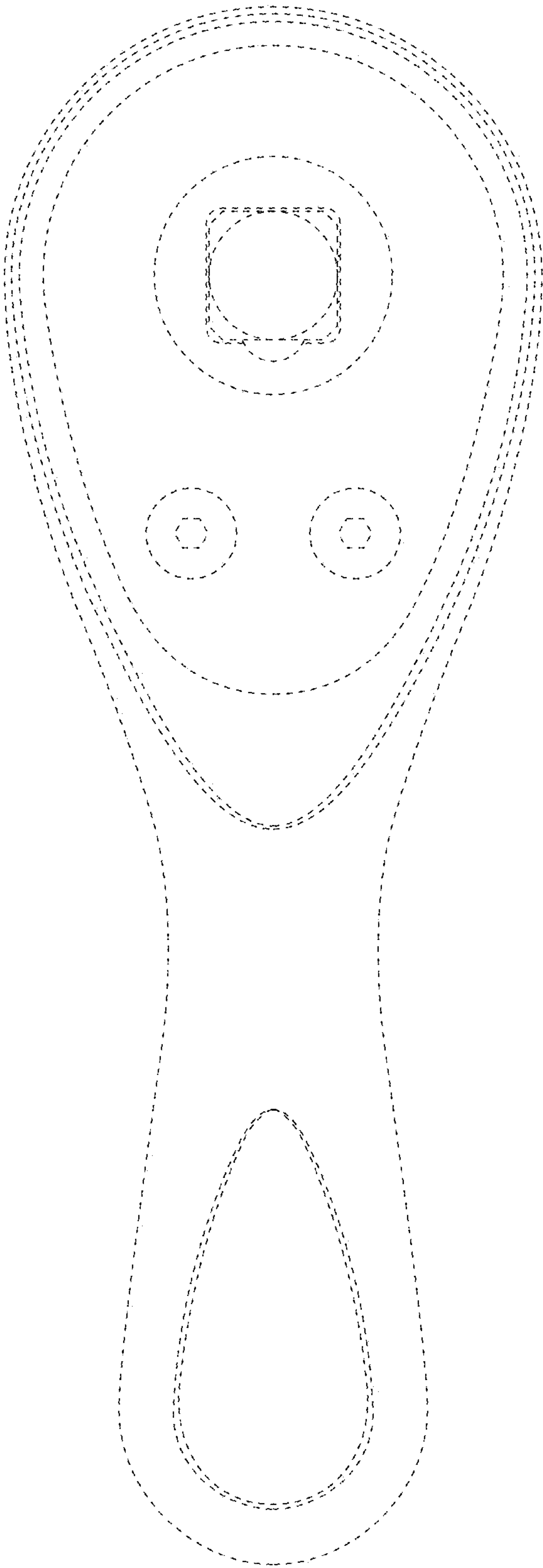


FIG. 4

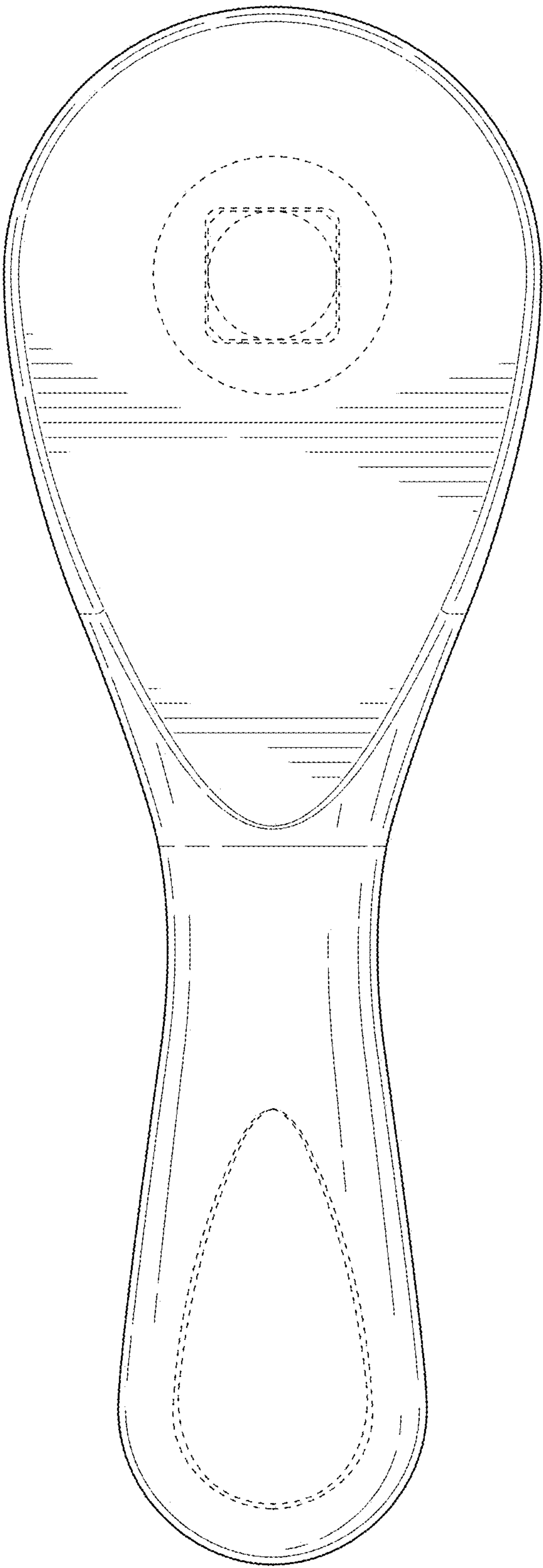


FIG. 5

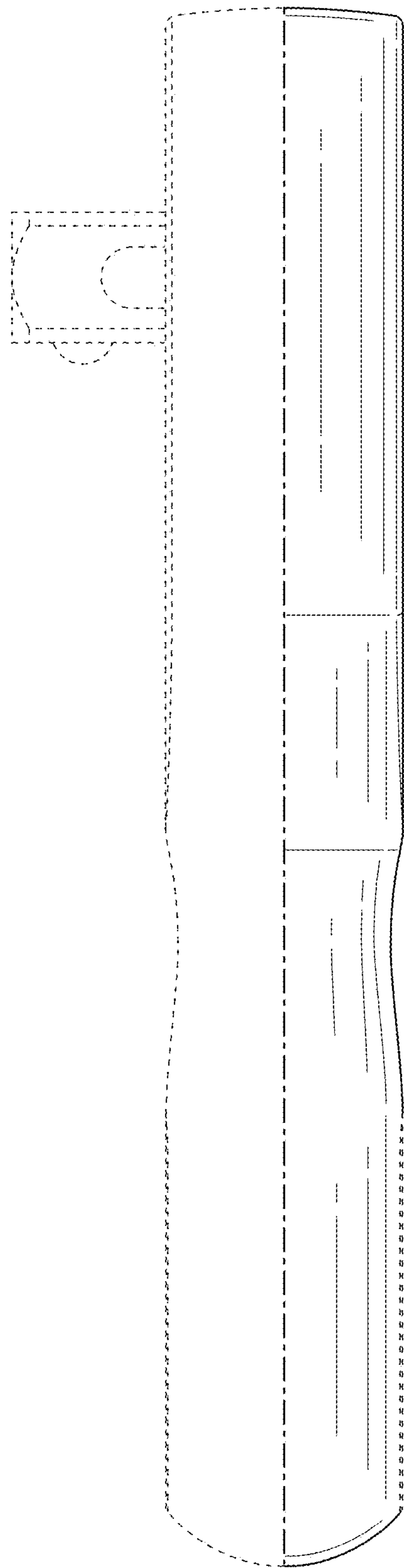


FIG. 6

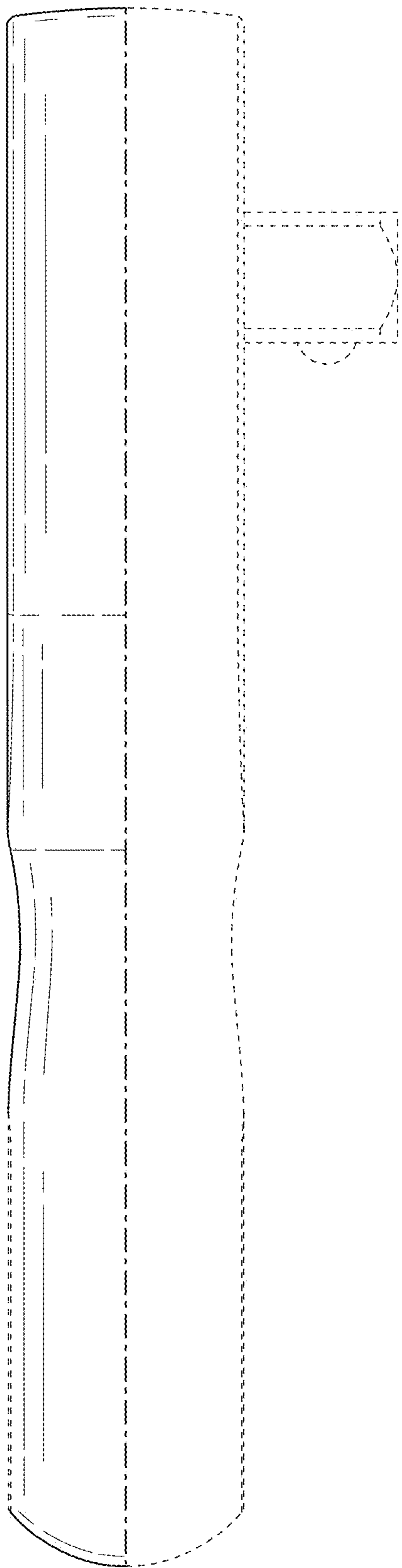


FIG. 7

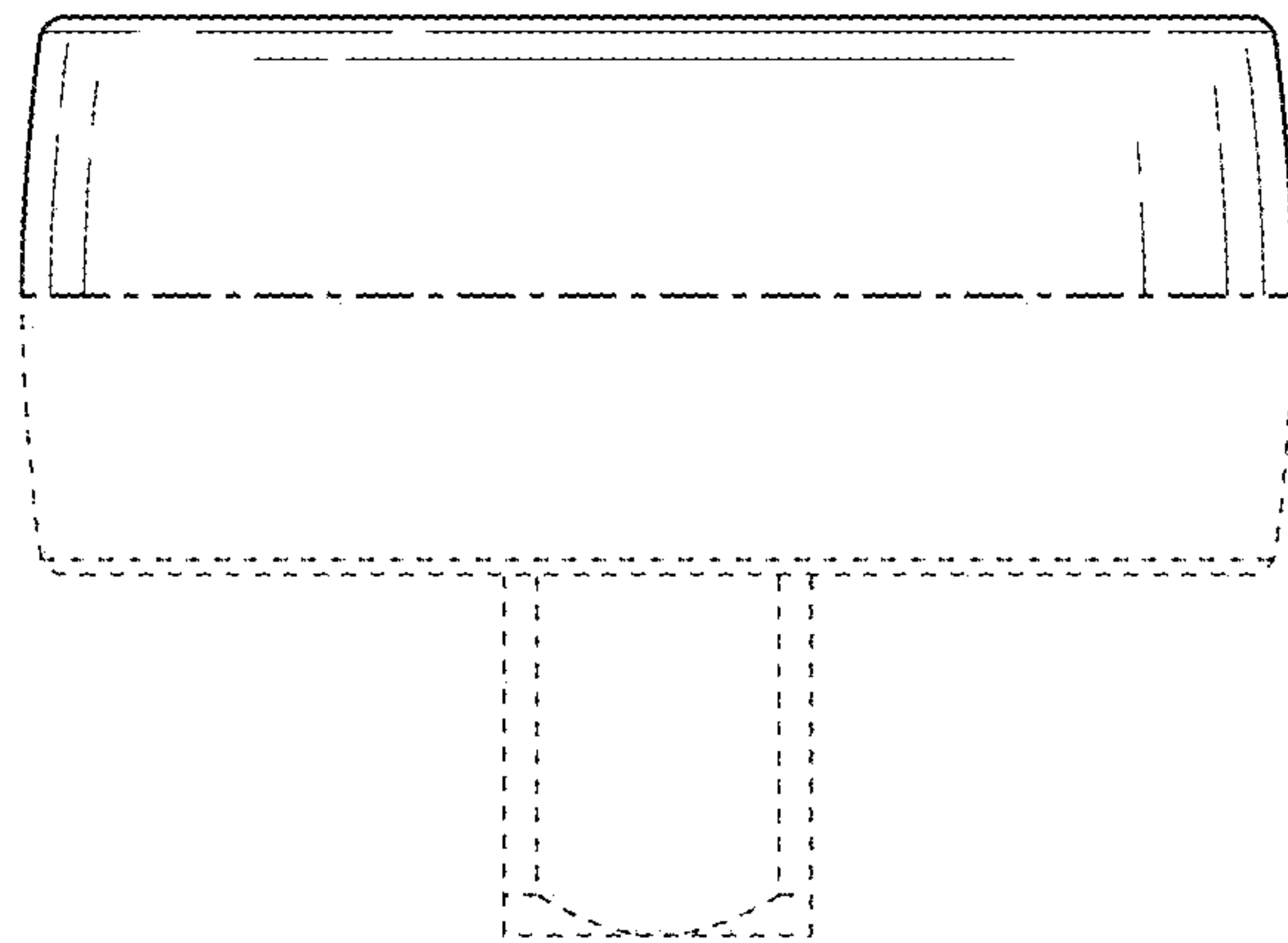


FIG. 8

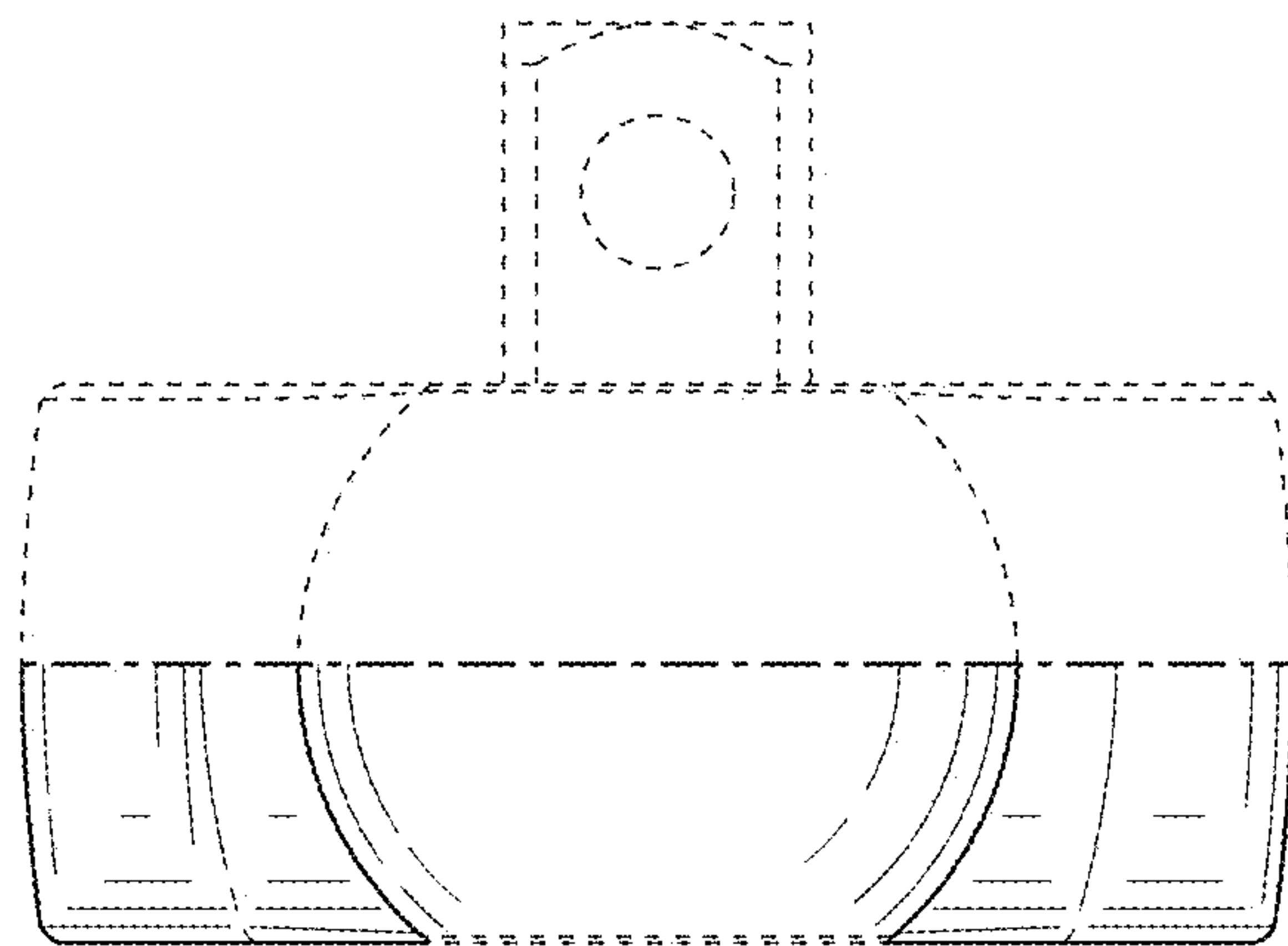


FIG. 9

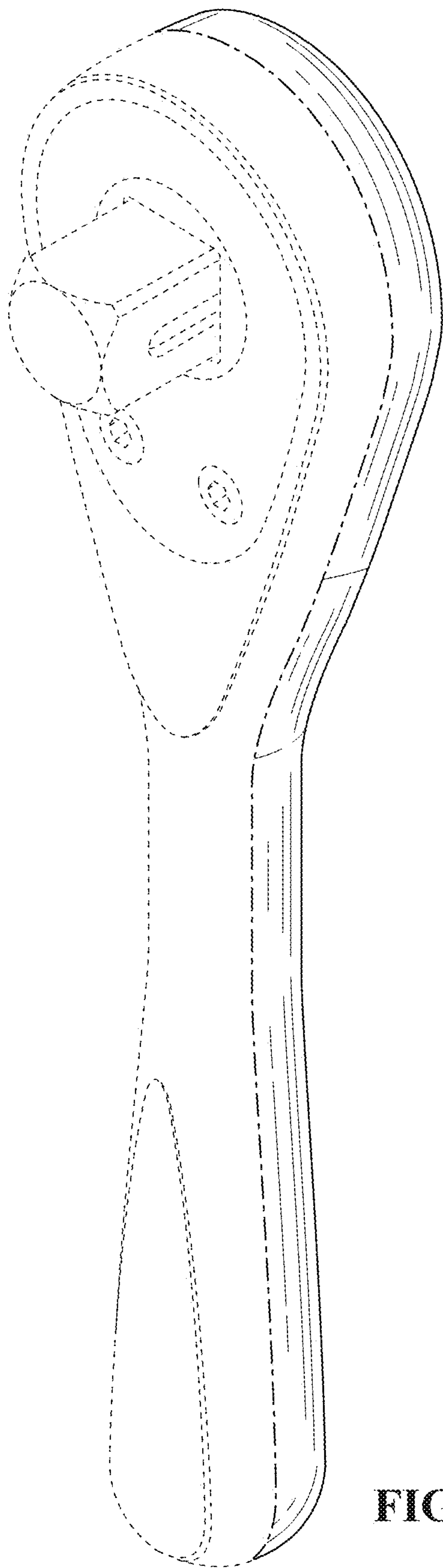


FIG. 10

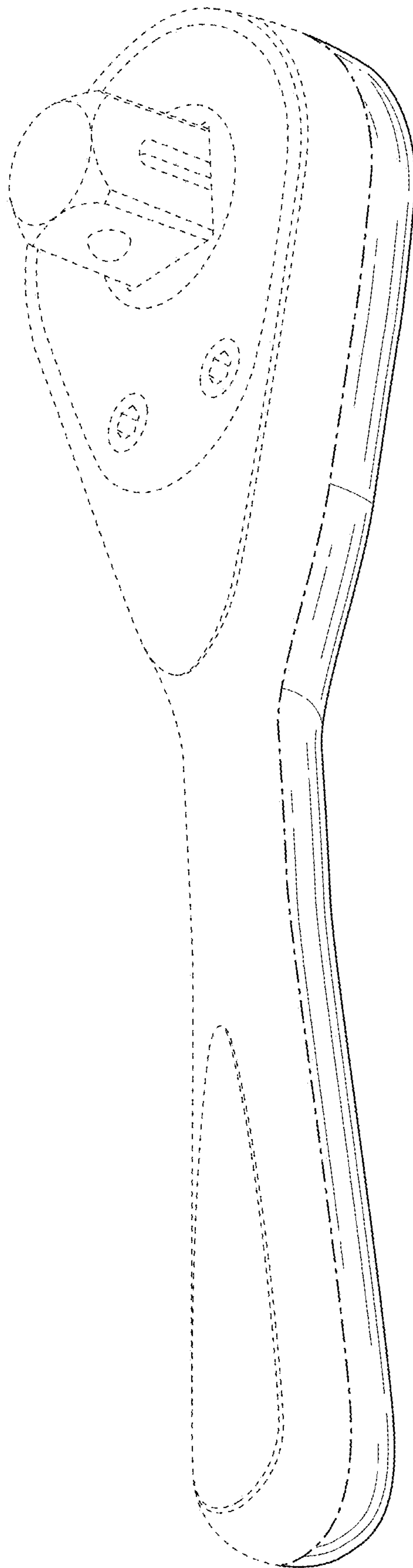


FIG. 11

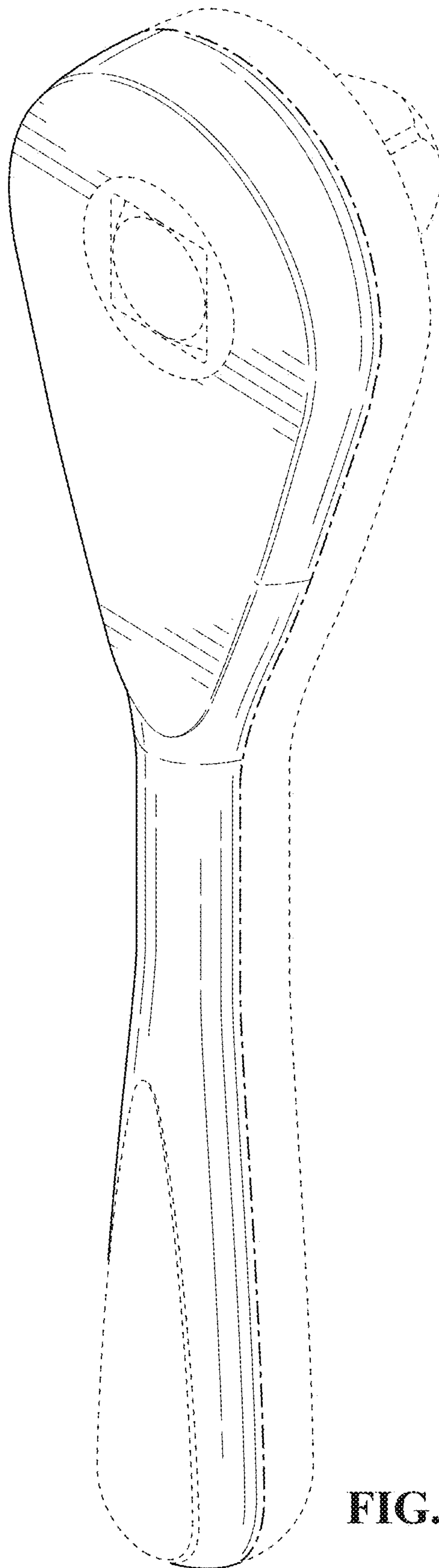


FIG. 12

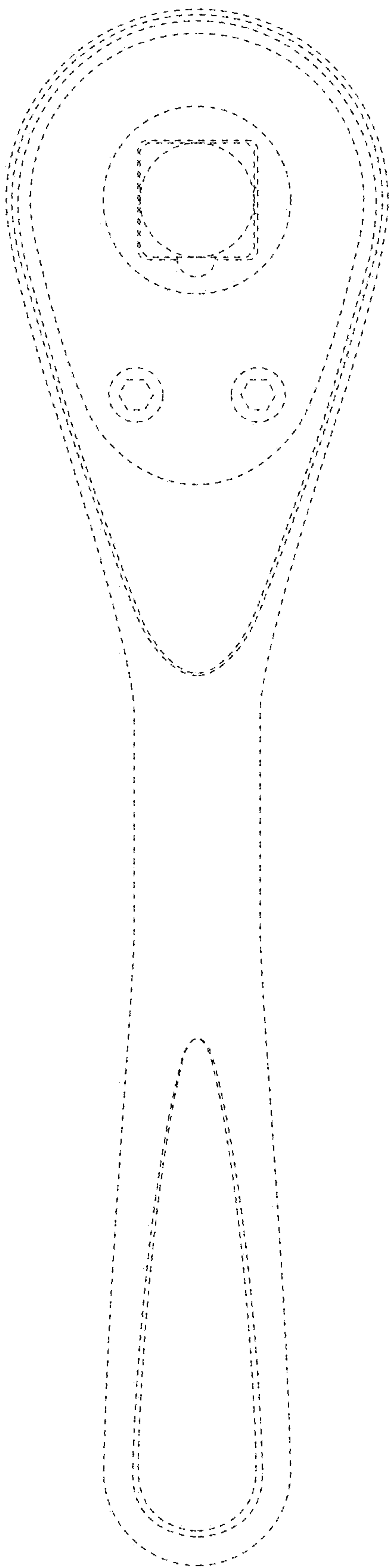


FIG. 13

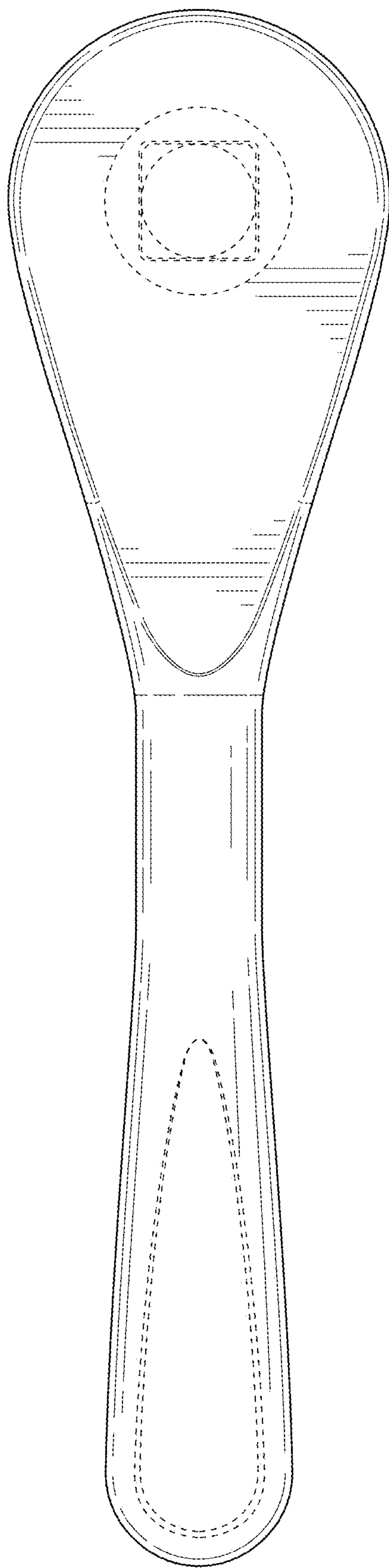


FIG. 14

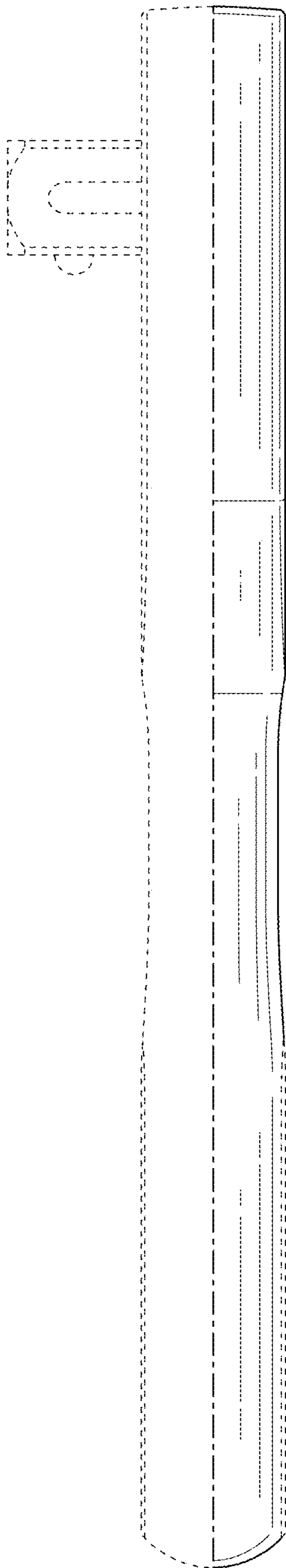


FIG. 15

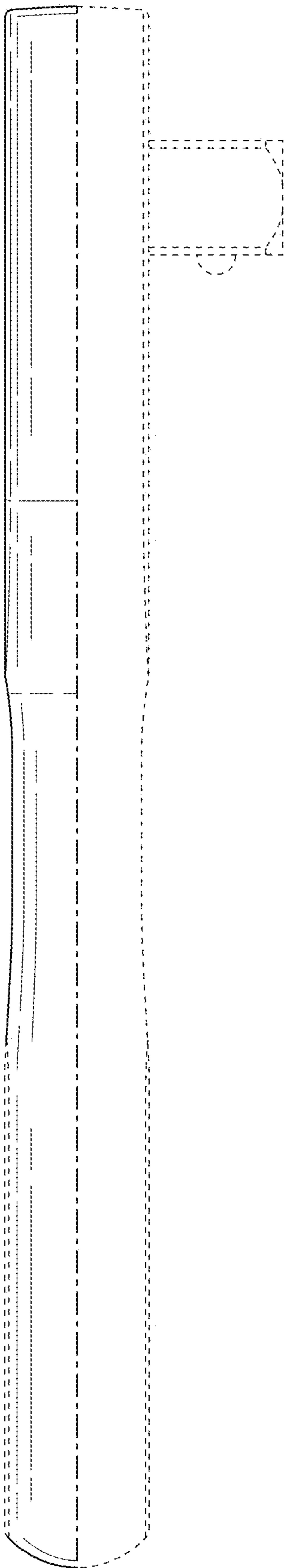


FIG. 16

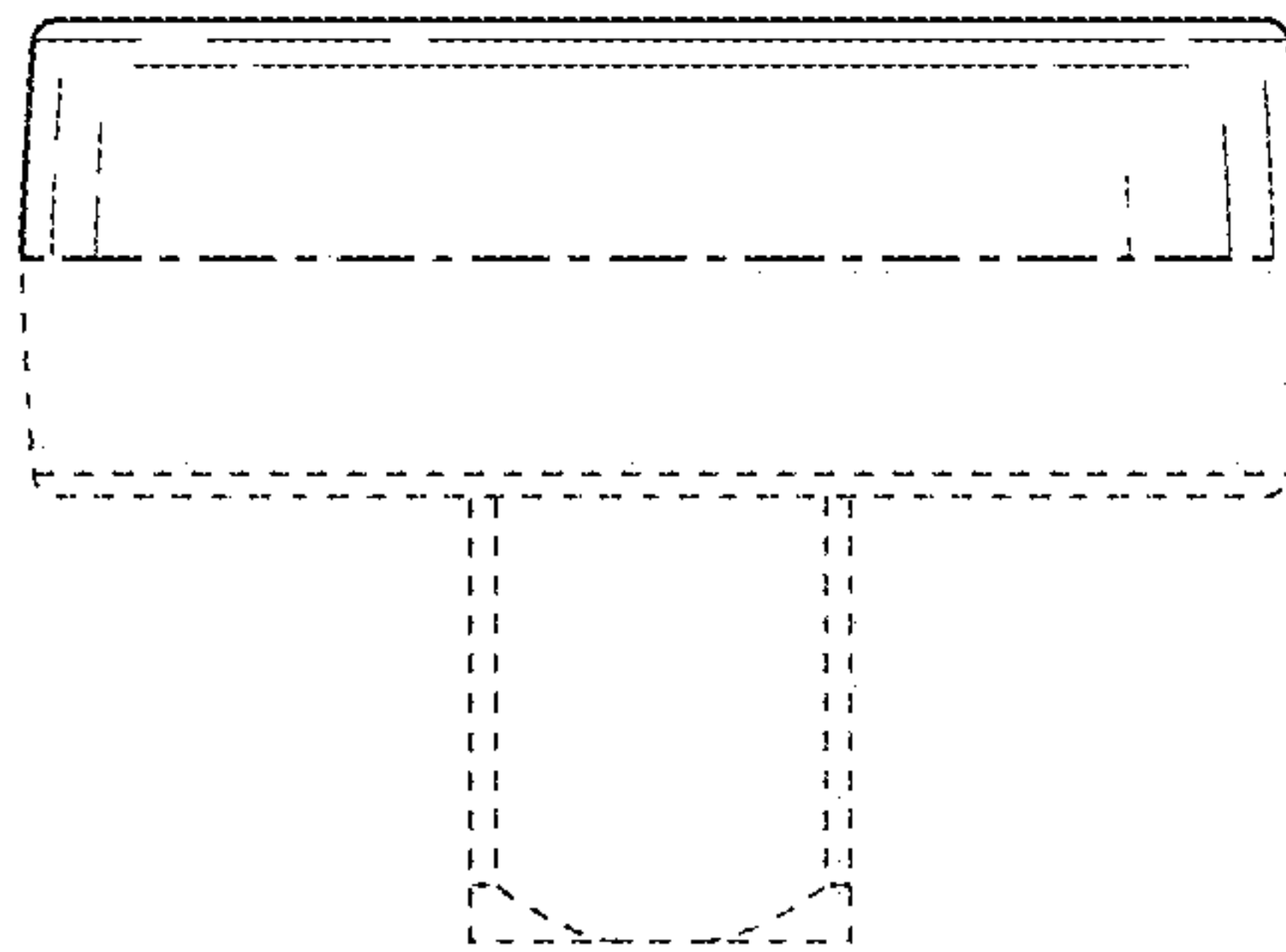


FIG. 17

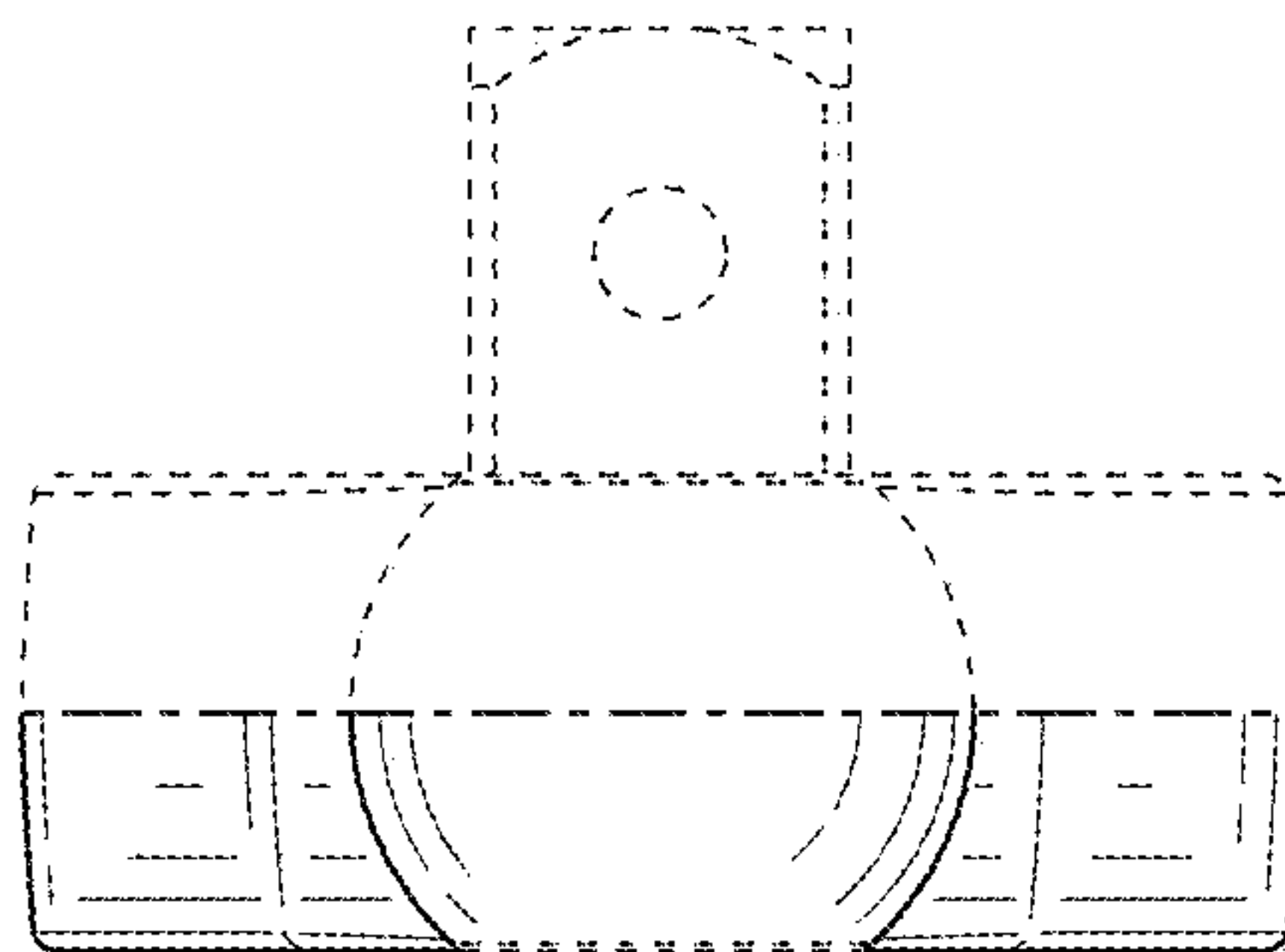


FIG. 18