



US00D978113S

(12) **United States Design Patent**  
**Lee**

(10) **Patent No.:** **US D978,113 S**

(45) **Date of Patent:** **\*\* Feb. 14, 2023**

(54) **EARPHONE**

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

(21) Appl. No.: **29/776,129**

(22) Filed: **Mar. 28, 2021**

(51) **LOC (14) Cl.** ..... **14-01**

(52) **U.S. Cl.**  
USPC ..... **D14/223**

(58) **Field of Classification Search**  
USPC ..... D14/223, 205; D24/174, 106;  
128/864–866; 381/380–381, 322, 328  
CPC ..... H04R 1/10; H04R 25/00; H04R 1/1066;  
H04R 1/1016; H04R 5/033; H04R  
5/0335; H04R 1/105; H04R 1/1091;  
A61B 7/02  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,614,987 A \* 1/1927 Langenbeck ..... H04R 25/65  
181/135

1,953,437 A \* 4/1934 Schier ..... H04R 1/1066  
63/14.7

3,041,856 A \* 7/1962 Neal ..... A44C 7/00  
181/129

D419,564 S \* 1/2000 McDonald ..... D14/240

D471,537 S \* 3/2003 Ham ..... D14/223

6,728,388 B1 \* 4/2004 Nageno ..... H04R 1/1066  
381/381

D514,094 S \* 1/2006 Griffin ..... D14/223

D518,816 S \* 4/2006 Naito ..... D14/205

7,050,598 B1 \* 5/2006 Ham ..... H04R 1/1058  
381/381

D532,110 S \* 11/2006 Bailey ..... D24/174

D585,429 S \* 1/2009 Dean ..... D14/223

D597,069 S \* 7/2009 Wengreen ..... D14/205

D618,219 S \* 6/2010 Burgett ..... D14/223

D628,990 S \* 12/2010 Pedersen ..... D14/223

D635,559 S \* 4/2011 Rye ..... D14/223

D647,514 S \* 10/2011 Wikel ..... D14/223

D653,244 S \* 1/2012 Birger ..... D14/223

D664,124 S \* 7/2012 Smith ..... D14/223

D672,044 S \* 12/2012 Larsen ..... D24/174

D710,333 S \* 8/2014 Davies ..... H04R 1/10  
D14/223

D711,356 S \* 8/2014 Yang ..... D14/223

D713,385 S \* 9/2014 Burgett ..... D14/223

D744,456 S \* 12/2015 Pedersen ..... D14/223

D753,626 S \* 4/2016 Tran ..... D14/206

(Continued)

**FOREIGN PATENT DOCUMENTS**

EM 008128748-0001 \* 8/2020

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(57) **CLAIM**

The ornamental design for an earphone, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of an earphone showing my new design;

FIG. 2 is a front elevational view thereof;

FIG. 3 is a rear elevational view thereof;

FIG. 4 is a left side elevational view thereof;

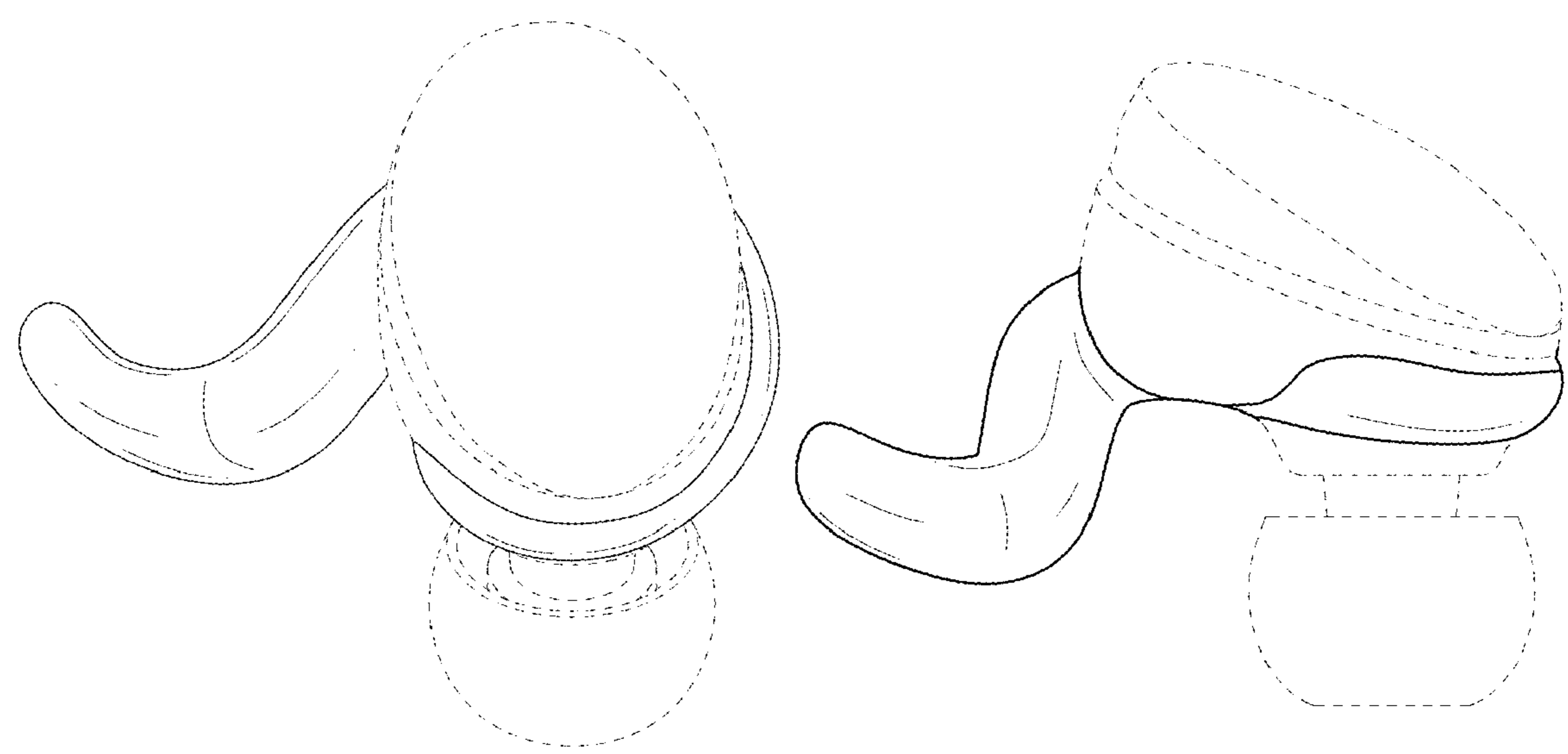
FIG. 5 is a right side elevational view thereof;

FIG. 6 is a top plan view thereof; and,

FIG. 7 is a bottom plan view thereof.

The broken lines depict portions of the earphone that form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D755,159 S \* 5/2016 Birger ..... D14/206  
 D761,770 S \* 7/2016 Kanou ..... D14/206  
 D773,437 S \* 12/2016 Lee ..... D14/223  
 D773,438 S \* 12/2016 Walker ..... D14/223  
 D793,360 S \* 8/2017 Birger ..... D14/206  
 D809,486 S \* 2/2018 Arimoto ..... D14/223  
 D809,487 S \* 2/2018 Lee ..... D14/223  
 D813,205 S \* 3/2018 Palmberg ..... D14/223  
 D816,637 S \* 5/2018 Hardi ..... D14/223  
 D819,594 S \* 6/2018 Hosoda ..... D14/205  
 D822,646 S \* 7/2018 Dang ..... D14/223  
 D828,825 S \* 9/2018 Samrelius ..... D14/223  
 D828,826 S \* 9/2018 Schaal ..... D14/223  
 D852,784 S \* 7/2019 Cramer ..... H04R 1/105  
 D853,992 S \* 7/2019 Kuh ..... D24/174  
 D853,993 S \* 7/2019 Kuh ..... D24/174  
 D855,037 S \* 7/2019 Lee ..... D14/223  
 D859,368 S \* 9/2019 Huang ..... D14/223  
 D863,265 S \* 10/2019 Hu ..... D14/223  
 D871,375 S \* 12/2019 Meyer ..... D14/223  
 D872,051 S \* 1/2020 Murdock ..... D14/206  
 D879,744 S \* 3/2020 Hu ..... D14/206  
 D879,748 S \* 3/2020 Lee ..... D14/223  
 D881,164 S \* 4/2020 Luo ..... D14/223  
 D882,545 S \* 4/2020 Li ..... D14/223

D890,726 S \* 7/2020 Park ..... D14/223  
 D894,874 S \* 9/2020 Fustino ..... D14/223  
 D896,204 S \* 9/2020 Brunner ..... D14/223  
 D899,399 S \* 10/2020 Jung ..... D14/223  
 D905,667 S \* 12/2020 Zhao ..... D14/223  
 D925,493 S \* 7/2021 Kirkpatrick ..... D14/223  
 2002/0041697 A1 \* 4/2002 MacDonald ..... H04R 1/105  
 381/381  
 2002/0102005 A1 \* 8/2002 Lin ..... H04R 1/1066  
 381/381  
 2003/0012396 A1 \* 1/2003 Smith ..... H04R 1/105  
 381/381  
 2003/0048916 A1 \* 3/2003 Chen ..... H04R 1/1058  
 381/322  
 2003/0072466 A1 \* 4/2003 Eisenbraun ..... H04R 1/083  
 381/381  
 2003/0156730 A1 \* 8/2003 Wu ..... H04R 1/1066  
 381/381  
 2003/0235321 A1 \* 12/2003 Lu ..... H04R 1/1066  
 381/381  
 2016/0014493 A1 \* 1/2016 Chen ..... H04R 1/1016  
 381/338  
 2016/0045373 A1 \* 2/2016 Williams ..... A61F 11/12  
 181/135  
 2018/0146280 A1 \* 5/2018 Tang ..... H04R 1/1091  
 2021/0409858 A1 \* 12/2021 Sandanger ..... H04R 25/652  
 2022/0312100 A1 \* 9/2022 Lee ..... H04R 1/1066

\* cited by examiner

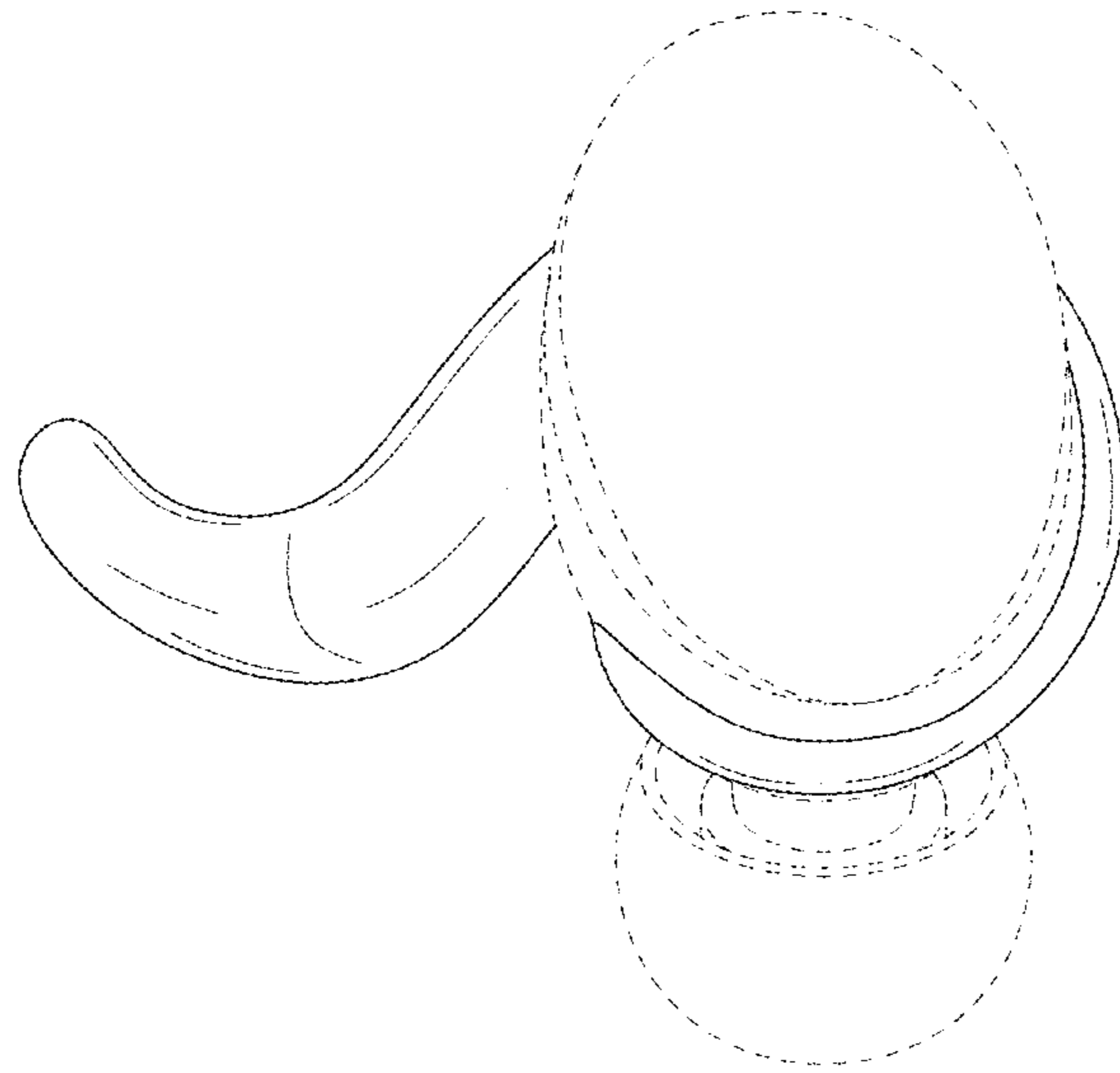


Fig. 1

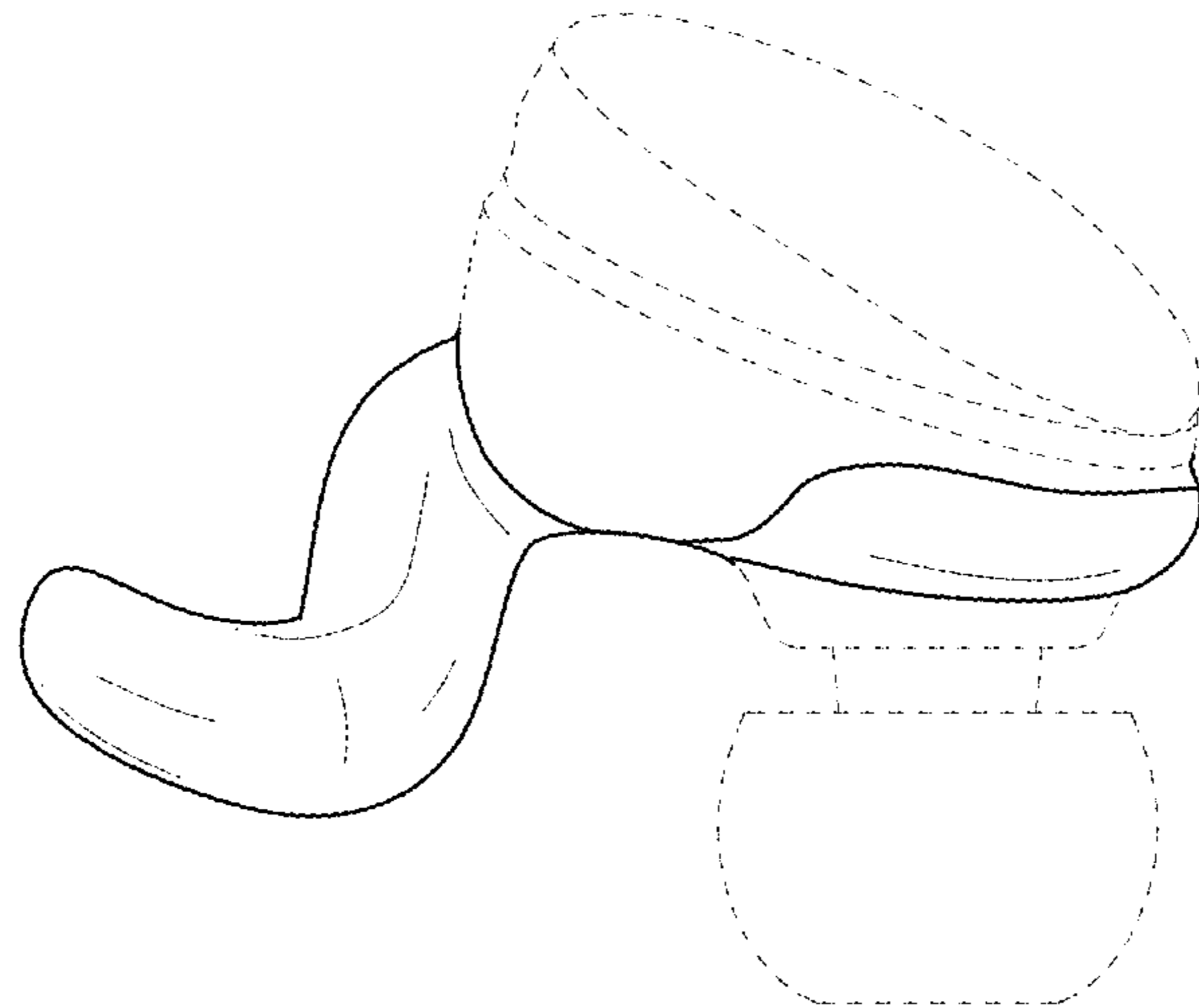


Fig. 2

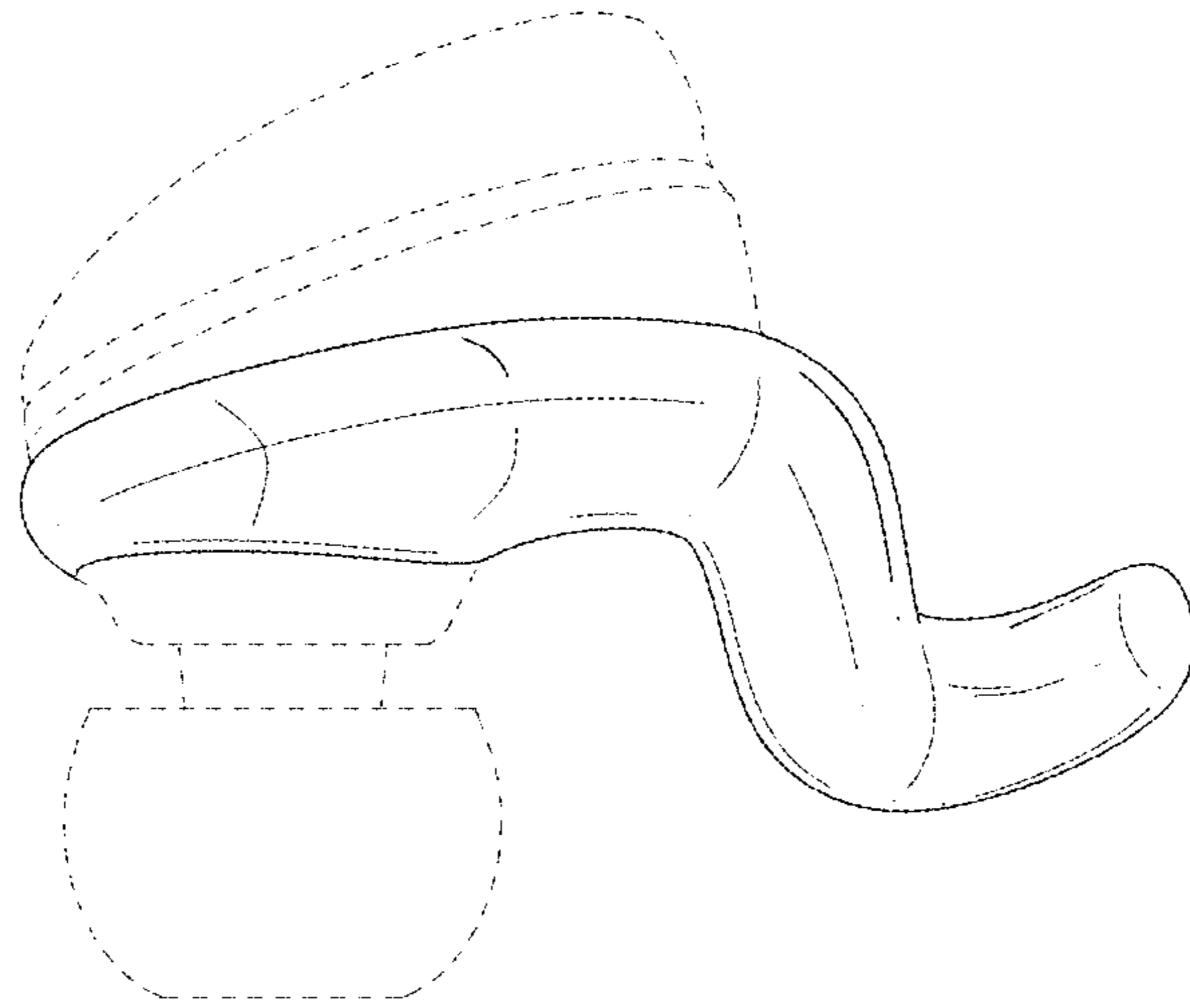


Fig. 3

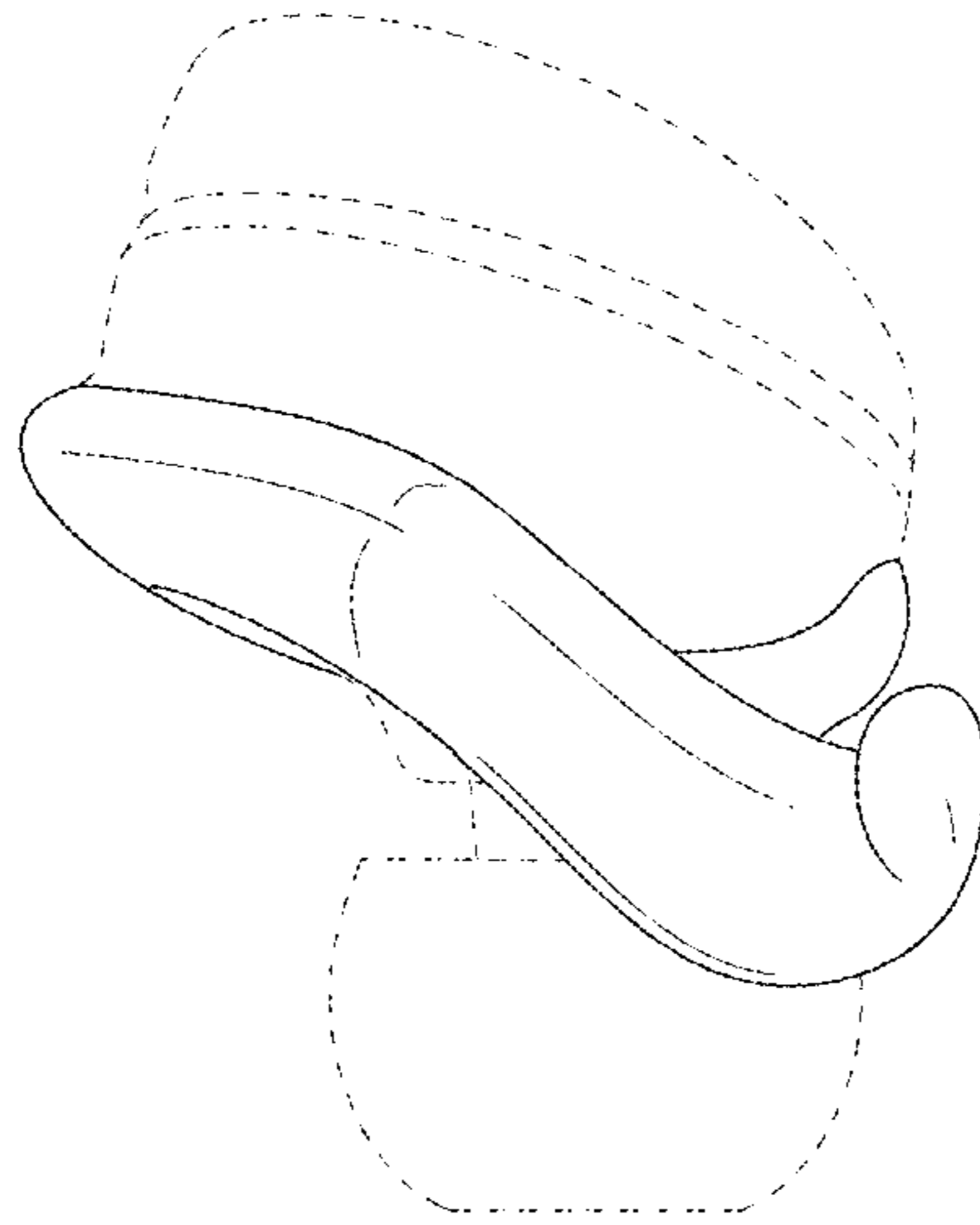


Fig. 4

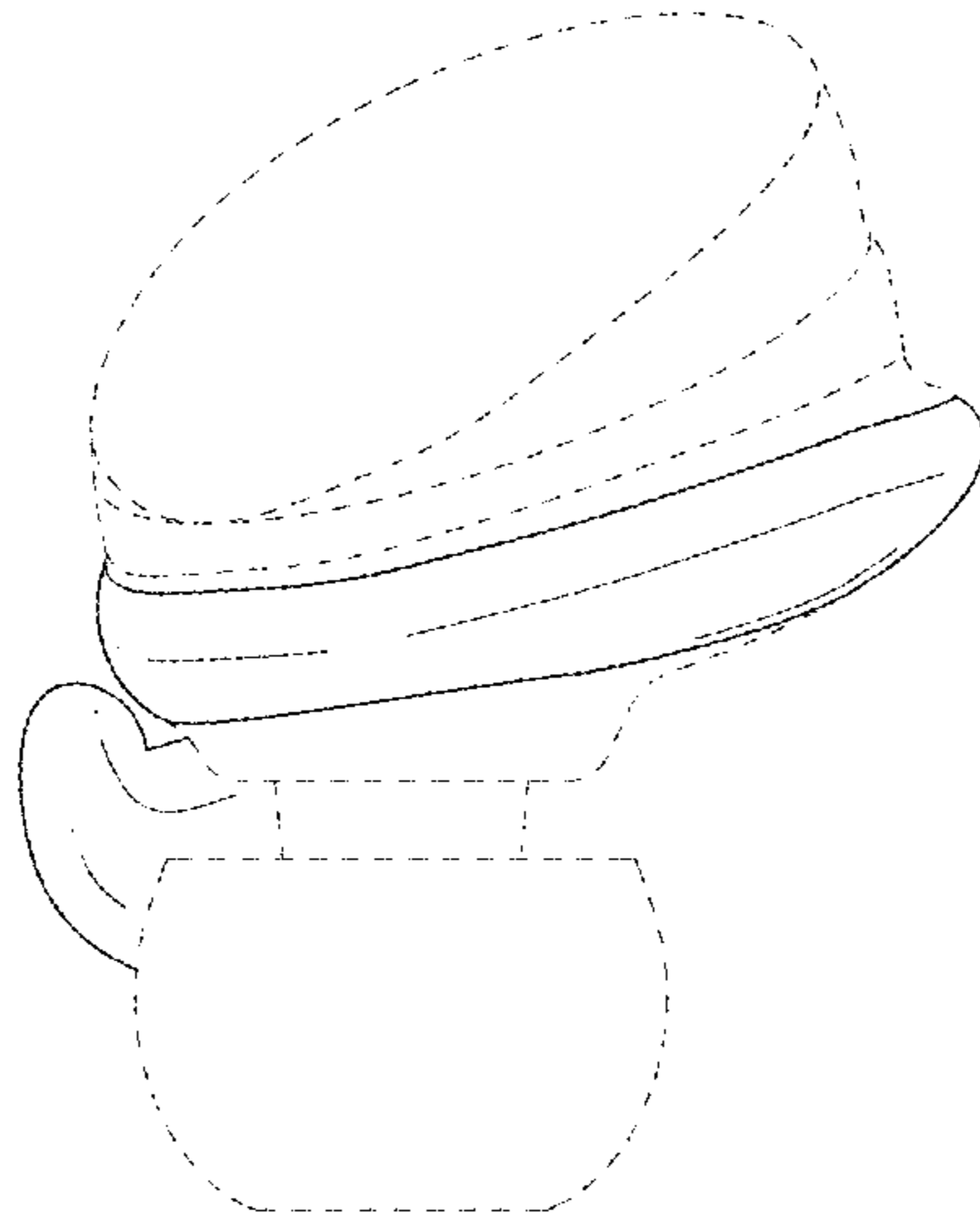


Fig. 5

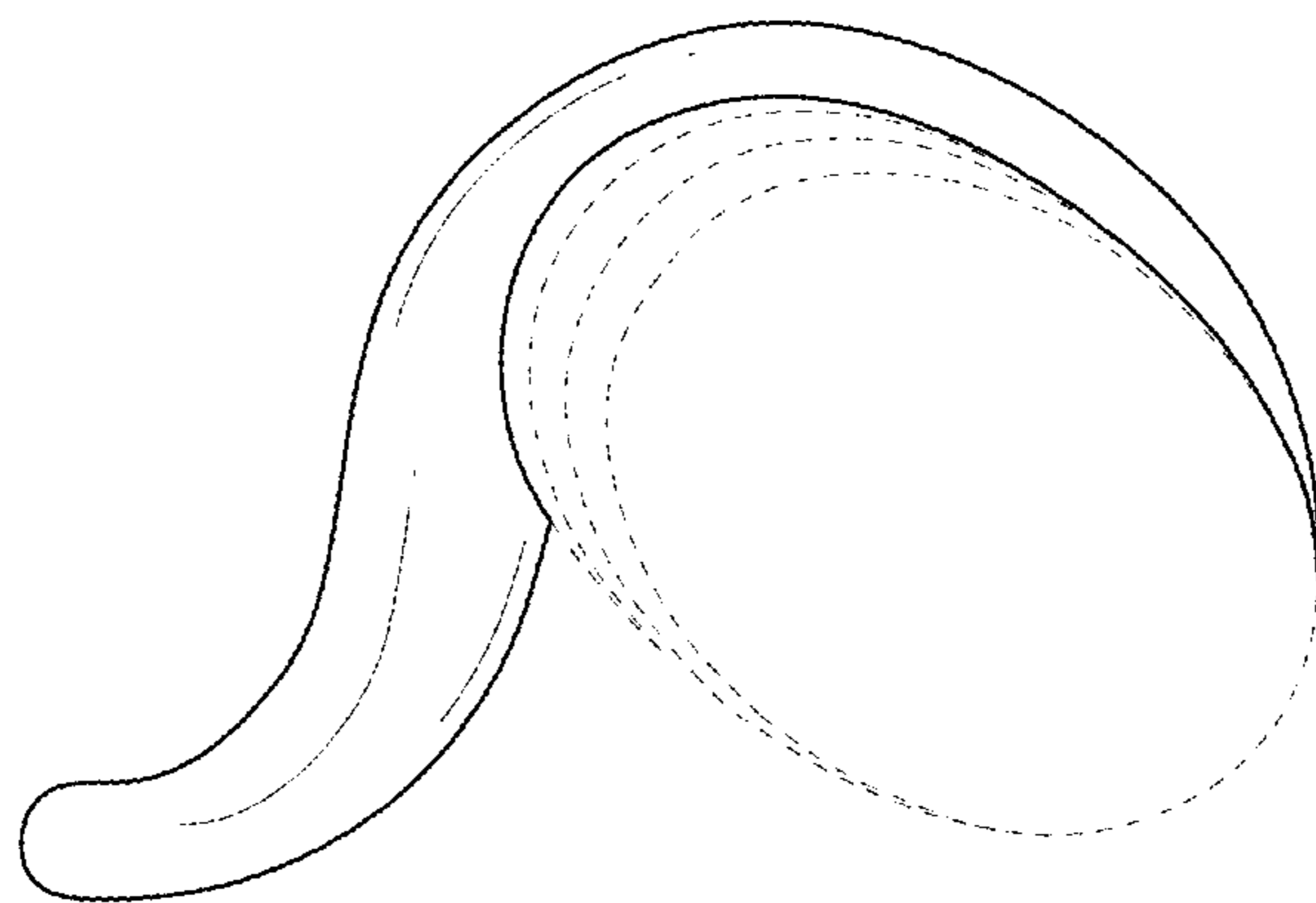


Fig. 6



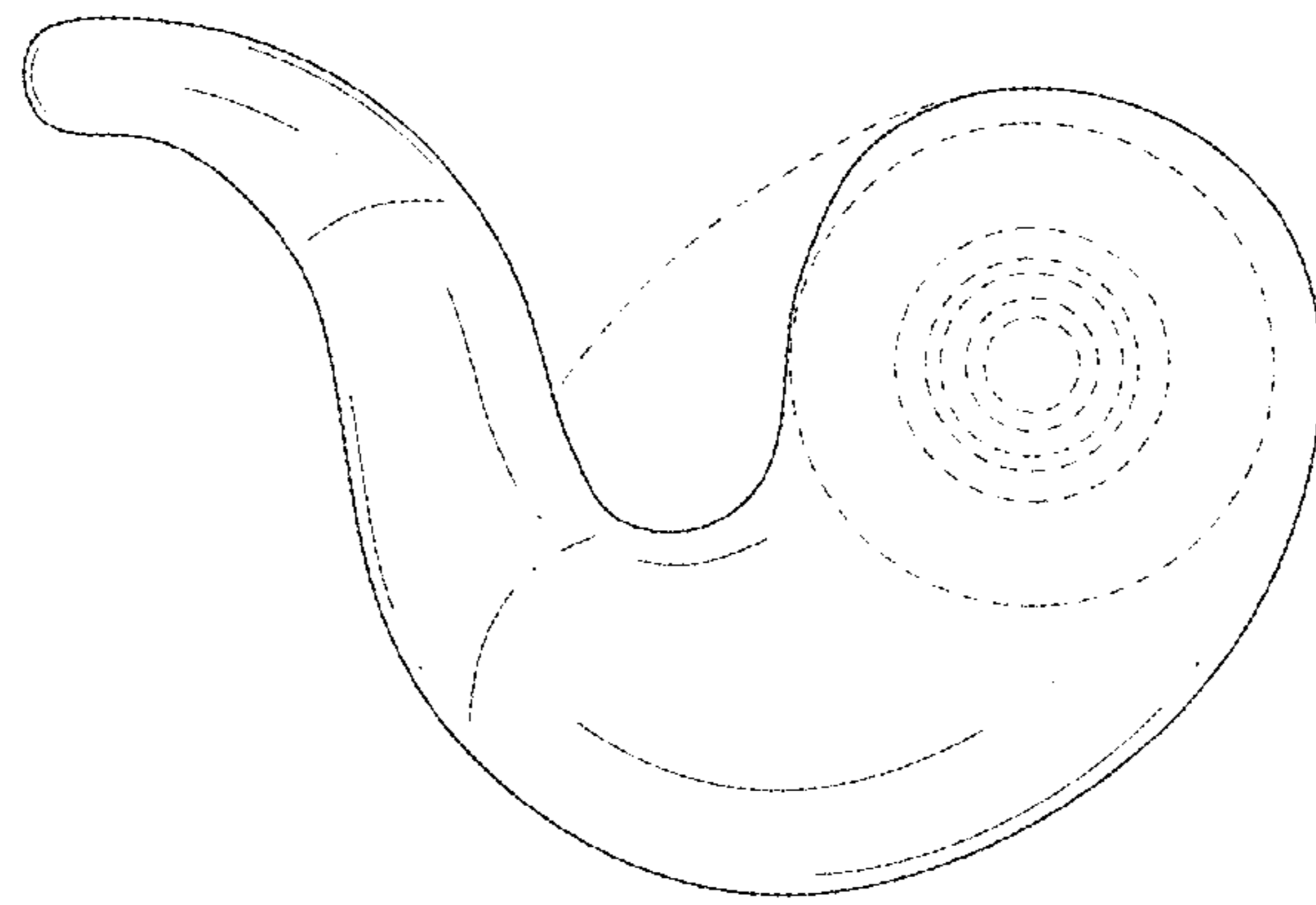


Fig. 7